OPEN ACCESS

Social justice in undergraduate medical education: a meta-synthesis of learners' perspectives

Nagina Khan ,[1,2] Anne Rogers,[3] Alex Serafimov ,[4] Simran Sehdev,[5] Marie Hickman,[6] Anna Sri,[7] Subodh Dave[8,9]

► Additional supplemental material is published online only. To view, please visit the journal online (http://dx.doi.org/10.1136/leader-2023-000786).

For numbered affiliations see end of article.

Correspondence to
Dr Nagina Khan, Senior Clinical Research Fellow in Primary Care, Division of Law, Society and Social Justice, Centre for Health Services Studies (CHSS), School of Social Policy, Sociology and Social Research, University of Kent, Canterbury, Kent, United Kingdom;
N.Khan-523@kent.ac.uk

Received 9 March 2023
Accepted 7 July 2023

To cite: Khan N, Rogers A, Serafimov A, *et al*. *BMJ Leader* 2023;**7**:1–9. doi:10.1136/leader-2023-000786

ABSTRACT

Introduction The COVID-19 pandemic has illuminated disparities and inequities in healthcare globally, making it a necessity to identify, and address social and structural determinants of people's everyday lives. Medical schools and education need to respond to and address social justice in undergraduate education. Social justice in medical education has the potential to be a foundational block to support the initiatives that have or are being implemented in our health systems.

Methods We carried out a meta-synthesis and used an interpretative approach for the analysis. Searches were conducted of three databases: PsycINFO, Embase and Medline and were carried out in May 2021. We excluded articles that were not related to undergraduate medical students. The aim of this review was to explore literature on SJ teaching to elicit the experiences of learners to inform future SJ teaching and curriculum.

Results Using meta-synthesis methodology, four themes emerged: personal growth of learners and professional identities; developing commitment to working with marginalised populations in their environments; integrating traditional clinical skills with advocacy, interests in human rights and SJ work; learning processes and methods.

Conclusions Findings confirm that SJ in undergraduate medical education has an essential role. However, social justice in medical education was understood as a non-essential piece of professionalism, or as something to be learnt in the abstract method rather than as a part of everyday practice realities. Our findings suggest that creating globally competent doctors through a globally equivalent curriculum, which is balanced and with a locally invested training programme could lead to a supply or workforce that is fit for purpose for local populations.

WHAT IS ALREADY KNOWN ON THIS TOPIC

⇒ Social determinants of health are embedded in medical education. However, discussions of social justice are often seen as too political or elicit discomfort. Therefore, discussions about social justice remain marginalised in medical education.

WHAT THIS STUDY ADDS

⇒ The core medical school curriculum should include compulsory training to enable students to recognise and redress adverse medically relevant social factors leading to health inequities. Findings confirm that social justice in undergraduate medical education has an essential role in reducing inequalities and is something that is learnt in the abstract method rather than as a part of everyday practice realities embedded in the reality of the individuals everyday challenges.

HOW THIS STUDY MIGHT AFFECT RESEARCH, PRACTICE OR POLICY

⇒ Addressing health disparities requires medical students to attain skills in 'assessing and intervening in the social and structural determinants of the individuals' daily lives' beyond the clinical setting and patient–doctor interface. Creating globally competent doctors using a globally equivalent curriculum with a locally invested training programme could lead to a supply or workforce that is fit for purpose for local populations.

INTRODUCTION

The primary purpose of medical schools is to educate future doctors who can care for the national population.[1] However, doctors and healthcare professionals work in communities where many individuals live below the poverty line; face discrimination based on their race, gender, sexuality and class; have a significant amount of chronic health problems and medical disabilities; reside in geographically isolated areas; and lack a sufficient number of healthcare providers to meet their needs. These forms of discrimination often intersect, magnifying their negative effects even further. In this way, a single individual can be stigmatised and carry multiple disadvantages.[2] Such patients have been historically underserved.[3]

Definitions of social justice

In medicine, social justice (SJ) is defined as equal access to quality healthcare and the universal right to health.[4] This definition recognises, along with the Declaration of Alma-Ata, identified more than 30 years ago that gross inequalities in health status are politically, socially and economically unacceptable, and that health is a fundamental human right.[5] The modern concept of social justice in health is derived from the 19th-century social medicine. For example, Virchow said that 'The physician is the natural advocate of the poor', adding that 'medicine has imperceptibly led us into the social field and placed us in a position of confronting directly the great problems of our time'.[6] The WHO defines the social determinants of health as the conditions in which people are born, grow, live, work and age, including the health system.[7] These circumstances are shaped by the distribution of money, power and

resources at global, national and local levels,[7] which are themselves influenced by policy choices. The WHO states, 'The social determinants of health are mostly responsible for health inequities—the unfair and avoidable differences in health status seen within and between countries'.[7]

Biases against discussing social justice

Social determinants of health have long been embedded in medical education. For example, medical schools' commitment to neutrality and objectivity, which are important values, nonetheless, discussions of social justice are often seen as 'too political' or elicit discomfort.[8–10] Therefore, despite being increasingly recognised, discussions about social justice remain marginalised in medical education.[8] These negative reactions should be resisted because educating doctors who can help reduce health disparities requires medical students to confront the social, political and economic realities which adversely impact health. As Virchow said, "Do we not always find the diseases of the populace traceable to defects in society?"[9] Indeed, the ability to have discussions about social justice may necessitate a change in the culture of medical schools, and not just their curricula. To this end, there must be a recognition that medicine, like any other field, is political and that discussions about social justice are therefore entirely appropriate in medical school settings. As Virchow continues, "Medicine is a social science, and politics, nothing but medicine on a grand scale."[8]

Teaching social justice

Hage and Kenny have describe one way of integrating social justice into education. Their 'Social Justice approach to prevention' has focused on empowering trainees and engaging them in community conditions through education, research, interventions and political processes.[11] Curricular change often involves improving the structure of the teaching/learning environment (for example, seminars or problem-based learning groups instead of lectures), the content of courses and clerkships (the core set of knowledge, skills and attitudes that should be learnt), and how student learning of knowledge and skills is evaluated (in the sense that evaluation can help 'drive' the curriculum). These include self-reflection pieces, peer presentations, working with mentors and community members, community engagement, advocacy work, as well as direct action to redress the social conditions adversely affecting health. Accordingly, teaching the social determinants of health and health disparities in medical curricula require complementary and more innovative evaluation instruments. Thus, we wanted to systematically discover why and how social justice integration could be possible as part of the curriculum in undergraduate medical education. The aims of this review is to a) explore social justice literature on teaching assessments, b) report the experiences of undergraduate medical learners in the data, and c) to elicit how medical education leaders can integrate social justice into the undergraduate medical curriculum using the checklist generated by this research.

METHODS

The proposed systematic review was conducted using a meta-synthesis methodology, using a line of argument synthesis.[12] We used a meta-synthesis approach because it was an interpretative method of analysis used in broadening understanding of a particular phenomenon.[13]

Review objective/questions

The objective of our research was a) to identify the experiences of learners on social justice programmes and b) identify learning strategies that may act as the key methods to teaching a social justice curriculum.

Inclusion criteria

Participants

The populations of interest in this review were undergraduate medical students, educators and lecturers, and patient-experts, providing insights into their lived experiences. However, due to the retrieval of limited papers on this topic, we extended our search to the international literature for inclusion.

Phenomena of interest

The phenomena of interest included social justice, medical curriculum, with a focus on both assessment and teaching. We also included core curriculum, formative and summative assessments, incorporating the social sciences and experiences of the population of interest who are currently integrating aspects of social justice in the medical curriculum. Papers on postgraduate education and quantitative studies were excluded.

Context and setting

Studies were considered for inclusion if they comprised the population of interest for this research, who worked as educators within universities, hospitals, medical settings and community clinics where teaching, assessment and mentoring of undergraduate students take place.

Types of studies

The included papers were published in English and reported on qualitative studies including (but not limited to) ethnography, phenomenology, grounded theory, and action and feminist methodologies. We also included qualitative findings, from mixed-methods studies, case studies and case series.

Search strategy

The search strategy for this research aimed to locate both published and unpublished papers. Papers that were found in the grey literature and hand searched, were also used to identify text words contained in the titles, abstracts of relevant articles, and the index terms used to describe the articles. These were used to develop a full search strategy for our selected databases (see search strategy in the online supplemental material).

Information sources

The following databases were searched: Embase, PubMed and PsycINFO.

Study selection

Following our searches, the results were imported into Mendeley, and duplicate citations removed. Two independent reviewers reviewed the titles and abstracts (SS and AS) to identify studies for full-text retrieval. In instances where reviewers did not agree, a third reviewer (NK) adjudicated on whether the study was retrieved. The two reviewers (AS and AS) then independently reviewed the full-text studies for inclusion with a third (NK) reviewer acting as an adjudicator in cases where the reviewers disagreed. Studies were considered for inclusion if they included undergraduate students or are those involved in teaching and assessment.

Assessment of methodological quality

The full-text papers were assessed by two independent reviewers (AS and AS) for methodological validity prior to inclusion in the review, using the British Sociological Association Criteria.[14] Any disagreements that arose between the reviewers were resolved through discussion and with a third reviewer (NK).

Data extraction

Customised tables were created that were used to produce themes from the extracted data. All coded data from each included study, including details about the population, phenomena of interest, context, findings and illustrations, were extracted using NVivo, qualitative data analysis computer software. Data extraction and analysis were conducted by our research team. Themes were coded, extracted and tabulated for all papers rated as eligible for the review.

Data synthesis

Qualitative research findings were analysed using the meta-synthesis approach,[13] using a line of argument synthesis.[15] Meta-synthesis assists knowledge synthesis through a process of reconceptualisation of themes across a number of published qualitative studies.[12 16 17] The analysis was undertaken in three stages: (1) creating a primary data synthesis, (2) exploring themes from studies and (3) evaluating the learners' perspectives.

RESULTS

The meta-synthesis included 36 studies (online supplemental table 1). Characteristics of the studies and contextual information on the included studies are presented in the online supplemental table 2.

The preliminary conceptual lens was developed for coding and analysis. We focused on generating social justice concepts which comprised 19 superordinate categories. These were used for the coding and analysis of emerging themes. The categories of social justice and their vote counts, indicating frequency of the concept being identified, are shown in table 1.

Table 1 Social justice concepts

	Code	Appears in	Number of times the term appeared
1	"reflective"	30 papers	326 times
2	reflective practice"	3 papers	4 times
3	global health	13 papers	109 times
4	social determinants	22 papers	174 times
5	health inequalities	4 papers	18 times
6	health disparities	22 papers	127 times
7	self-selected	5 papers	5 times
8	service learning	15 papers	150 times
9	underserved communities	10 papers	28 times
10	underserved	19 papers	240 times
11	community service	10 papers	40 times
12	voluntary	3 papers	4 times
13	social justice	13 papers	100 times
14	social accountability	10 papers	60 times
15	experiential learning	10 papers	28 times
16	experiential	17 papers	51 times
17	social responsibility	9 papers	26 times
18	cultural understanding	2 papers	5 times
19	advocacy	19 papers	231 times

The Preferred Reporting Items for Systematic Reviews and Meta-Analyses diagram for the 36 papers is shown in figure 1. The 36 papers comprised qualitative studies (n=17) and mixed-methods studies (n=19). Most of the papers were mixed-methods evaluations of teaching programmes or interventions. The qualitative studies were mostly evaluations using qualitative methodology. The 36 papers described studies which were conducted in 10 countries: the USA (n=24), the UK (n=2), Australia (n=2), New Zealand n=1, Taiwan n=1, Scotland/UK n=1 and Canada (n=4). Two studies were conducted in collaboration of two countries: Israel/UK (n=1) and Colombia/Spain (n=1). The participants recruited were in various years of their medical education. Teaching and learning programmes were designed to deliver a few hours of core material through various methods (see Box 1).

The four themes that emerged from the learners' perspective were as follows:

a. Personal growth of learners and professional development.
b. Developing commitment to working with marginalised populations in their local environments.
c. Integrating traditional clinical skills with advocacy, interests in human rights and social justice work.
d. Learning processes and methods.

Table 2 shows the main results from the meta-synthesis; level-one analysis included the primary quotes, level-two analysis included the synthesis of those findings from the learners' perspectives and the level-three analysis includes the application of the synthesis of the social justice themes.

Personal growth of learners and professional development

Our findings highlighted that along with professional development, personal growth as a skilled doctor was important to undergraduate medical learners. Personal development included the requirement to acknowledge the challenges existed for students at not only an academic level but also at an emotional personal growth level.

Emotion

> The third year of medical school can be incredibly challenging on both an academic and emotional level. The de facto attitude on the wards is one of cynicism and exhaustion. HRSJ (Human Rights and Social Justice Scholars Program) has helped to demonstrate that medicine can be practiced according to a higher ideal.[18] (p. 296)

There were also data in the papers that highlighted examples of complex learning and understanding related to the fact that individuals could encounter adverse experiences in what appeared to be obvious or safe choices for them. Knowing the full facts and context from individuals' lived experience was an eye opener and led to better interactions and learning processes.

Complex learning

> [The patient] taught me a lot about the conditions in SROs (single room occupancies). It is easy to assume that any housing is better than no housing, but I learned that people can feel even more unsafe in a building than they do outside. [The patient] experienced sexual violence in her SRO and genuinely fears the drug-related activity that occurs in her hallways.[19] (p. 4)

The importance of experiential learning was a process, which linked students' thoughts, feelings, concerns, and acted as a reflective tools as, a mechanism part self-selective teaching methods and programmes.

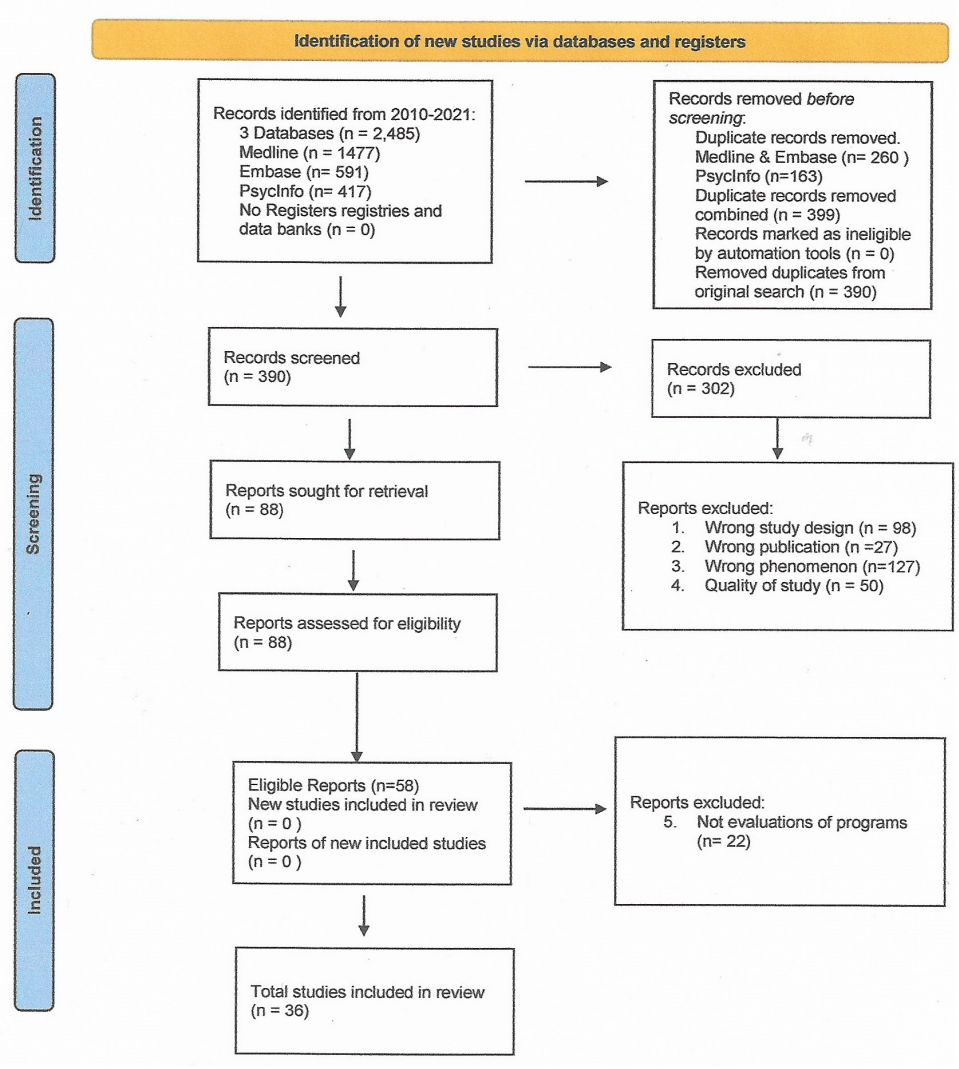

Figure 1 Preferred Reporting Items for Systematic Reviews and Meta-Analyses 2020 flow diagram,[40] which included searches of three databases.

Experiential and service learning

> I have volunteered both locally and internationally. What was different for me this time is that I kept a reflective journal to record my experiences, thoughts, feelings and concerns. At first, I felt that keeping a journal would be a burden. I soon realized that journaling during service-learning is the key to learning. I used the critical incident technique to explore how various events and experiences influenced my professional and personal growth. I learned how cultural views impact perceptions of health and illness, the struggles of poverty, and observed first-hand the necessity for health promotion. I learned more than I ever could have from lectures or from a textbook.[20] (p. 979)

Developing commitment to working with marginalised populations in their environments

Developing commitment and eliminating apathy towards difficult situations and topics were highlighted in the data. Students reported feeling frustrated and powerless when there was little engagement or enthusiasm from peers, or colleagues. For topics that had far-reaching health, social and welfare concerns for certain groups with protected characteristics in the population.

Race and healthcare disparities

> As another student, apparently frustrated by his/her own powerlessness to engage some of his/her reluctant colleagues in this topic put it: We dutifully learn about rare cancers which we will likely never see and genetic disorders only described in a handful of patients, which we will certainly never see and yet race, which we will see every day for the rest of our careers is a topic that only manages to draw a small group of students. I can't help but feel that the apathy towards the subject of race … is a part of what has wrought the shocking disparities we are faced with today in healthcare.[21] (p. 7)

There were also examples of positivity and enthusiasm from students, in ways of working that transformed what seemed to appear as a problem (for people with severe intellectual disability). Students worked through the real-life difficulties through a programme initiative, creating positive outcomes for individuals in the community.

> The manager was excited by the conclusions we drew and the possibility of implementing the program (for people with severe intellectual disability),… she reported the next day that she had made a recommendation to the Chairman of Akim to promote the program nationwide. The fact that the program was received with such enthusiasm is exciting, and we are pleased we were able to take a real difficulty and translate it into practical program which

Box 1 Teaching methods

- ⇒ Provided through reading texts
- ⇒ Didactic methods
- ⇒ Case discussions
- ⇒ Site visits
- ⇒ Several hours of experiential non-core activities applying core competencies
- ⇒ Individualised learning plan
- ⇒ Faculty advisor input
- ⇒ Non-core activities including community-engaged research
- ⇒ Service-learning activities
- ⇒ Other relevant experiences
- ⇒ Submission of a synthesis paper addressing pathway competencies
- ⇒ Students assigned to a community organisation for several days over a few weeks
- ⇒ Completing a minimum number of placement hours
- ⇒ Leadership-development activities
- ⇒ Specific lectures and
- ⇒ Large group discussions
- ⇒ Participation in small-group
- ⇒ Community projects
- ⇒ Guest lecturers' perspectives on their experience
- ⇒ Reflective essay assignments
- ⇒ Technology and media
- ⇒ Film and role-play
- ⇒ Using games as a teaching activity
- ⇒ Assessment tools that provides assessment and instant feedback required in the learning process

> can contribute deeply to the health of residents of the hostel and to the mentally disabled community in Israel.[22] (p. 1448)

Furthermore, we found that educational programmes in our data that focused on service, reflection, led to inspiring learners, through a sense of encouragment and motivated students to work and make a commitment with underserved communities and their 'real' needs, reflecting a deeper understanding of context and background of individuals using healthcare.

> SERVE [Service, Education, Reflection, Volunteerism Elective] inspired me to dedicate my future practice to underserved communities.[23] (p. 300)

Integrating traditional clinical skills with advocacy, global health, human rights and social justice work

Moving teaching from singular lectures to more diverse methods of learning was reported to be an eye opener for students in highlighting the relevance of advocacy for vulnerable populations. This insight was important to understanding the social determinants of health as they were more real when seen in plain sight.

> My experience broadened my understanding … concepts such as patient advocacy, vulnerable populations and the social determinants of health had seemed obscure in lectures, but were immediately relevant in this new environment … I have become more aware of the interaction between social issues and health care … that will direct my future learning and my approach to a career in medicine.[20] (p. 979)

As important as local context was, we found that global health was also an important encounter for future work in the developing and ever-changing world of healthcare.

> The evaluations have revealed that undertaking IPHC [International Primary Health Care] supports students because it: [provides the] opportunity to learn about diseases specific to 3rd world medicine. To gain an idea of the type of work I could do in the developing world in the future. …addresses many issues of healthcare that should be covered [sic] are not covered in the standard curriculum. In my opinion, IPHC should be made compulsory in [sic] as a 3-week component in 4th year.[24] (p. 4)

Additionally, projects that lead to creation or finding resources for vulnerable populations and ways of working and advocating for positive outcomes, were a valuable learning process and led to a new understanding of concepts related to social justice.

> My health care disparities project of mapping the Laotian population in Elgin showed me the importance of identifying health care resources for vulnerable populations and increasing access to these resources. Prior to this course, I thought much less about some aspects of increasing access to resources such as adequate public transportation as a part of advocacy. … Thus, I believe this course has expanded my definition of medical advocacy in quite a profound way.[25] (p. 3)

Learning processes and methods

Findings reflected how students observed the importance of both the micro-lens and macro-lens of an individual's problem and then understood them in the context of all the factors that could impact a wider scale, moving from individual local need to a wider public health focus.

> When asked what they had learned students identified two key themes: the bigger picture of public health; and person-centered or individualized care. Participants recognized that 'an individual's health is multifactorial and public health can have a huge impact'. Furthermore, one stated: how small an impact medicine and direct biological intervention has upon someone's overall wellbeing – there's so many other factors on so many levels to consider.[26] (p. 4)

There was an understanding that social problems, health and disease processes required multidisciplinary communication to make a significant or critical leap for positive outcomes.

> It [Universidad de La Sabana] favours a dialogue of various disciplines: anthropology, sociology, public health and communication, seeking to understand and comprehend both the health process and disease… and to generate, from the discourse, critical thinking about social problems.[27] (p. 271)

Inclusivity and diversity of professionals did not mean training more individuals to conform to the host population lens, but to allow room for professional identity formation to include the link to traditional medicine as well as Western practices and adapt to other more diverse contexts.

> Personally, instead of just training more Native [medical] students to be fluent in Western medicine, I'd prefer to see the university reform itself and its systems of knowledge production to cultivate the emergence of an identity as an Indigenous doctor/health worker, skilled in both Western and traditional.[28] (pp. 645–6)

Findings also showed that a mix of methods were preferred by learners, that a balance in information giving/receiving, via classroom and real-life work with individuals, was the best process for learning complexity.

> The balance between interaction/participation, small group and lecture style teaching. The most valuable part of the content was the workshops and the skills they instilled in us for conducting history taking with a Māori patient.[29] (p. 6)
> This session was extremely useful to my learning/understanding of cultural considerations during medical interviewing - especially

Table 2 Main results from the meta-synthesis

Primary quotes from the studies included	Synthesis of the findings from the learners' perspective	Application of the themes to social justice
'So I think I developed a sense of compassion for a group of people that I didn't previously understand as well. Hopefully that makes me a better physician for that.'[41] (p. 940) 'The writing assignment that asked us to remember one moment where we noticed implicit bias in ourselves was really helpful. It made me reflect on something that I hadn't thought about in a while. I didn't realize that I could make progress thinking about it the way that I did.'[42] (p. S153)	*Personal growth:* understanding one's own emotional self and biases for personal growth was important to learners and was linked to their well-being, belonging and reduced stress.	Learners acquire skills that could be used in the clinical settings and with those accessing services and treatment.
'I learned to communicate with team members such as social workers, in finding the best possible resources for our patients. While these services are not available at every hospital, I know have knowledge about community resources available for my future patients and can contact them on my own.'[19] (p. 4)	*Professional development:* requires medical students, residents and academic faculty to acknowledge softer concepts in medicine and to work to address them. A major facilitator to this effort within medical schools would require structured curricula.	Learners build confidence to elicit resources and look beyond the confines of the hospital or clinical lens.
'I believe that as physicians we have a responsibility towards the public good and the health of the population and I think that part of this purview is working to undo the injustices that have become established in our society.'[21] (p. 6)	*Developing commitment to working with marginalised populations:* intentional awareness of the individual and group challenges was understood in relation to the level of resources and opportunities that did not exist for individuals with far less than originally thought by learners.	Emerging understanding of health disparities and social justice work with the identity formation of the learner was seen as an eye opener and led to compassionate ways of working in local communities.
'I gained some insight into the fact that, I take a lot of … my own health knowledge for granted … and … someone like the Marshallese population who's in a foreign culture and in a foreign land and even foreign to our language may need more assistance as a community. As one participant said, 'You're not going to understand all the other cultures, but when something happens that's really off, you can take a step back and say, 'Am I missing something?,' 'Do I need to learn more about this culture before I get frustrated at this patient for being this way?"[43] (pp. 217–8) 'I used to think: 'Well, it's their [Marshallese people] fault for not going to the doctor.' When you actually learn about a culture … it really puts it into perspective as far as … most of [the Marshallese] health issues are due to all the radiation we dumped on their islands. I feel much more sympathetic, empathetic, and responsible. I'm sure our country told them that it would be fine. I'm sure we misled them. They're probably still being misled a lot of times.'[43] (p. 218)	*Local environments:* looking at social, economic and political contributions to the conception of health disparities that lead to social justice in biological explanations and health.	Local visits of neighbourhoods and non-profits for learners were linked to a better understanding of local health disparities and the accessible resources.
'Absolutely. It was a useful experience to dive into more detail on a social and cultural history with the patient and make that the focus of the interview to understand more about how it affects them and their potential treatment.'[30] (p. 5) 'I do believe that this was a very useful way to integrate the medical and cultural aspects of the medical interview. As well, it allowed us to begin to investigate how the social/belief systems can impact health, healing mechanisms and perspectives of wellbeing. I do believe it will help me in the future when I am presented with an Indigenous patient and how to allow the topics of religion and belief systems into the interview.'[30] (p. 7)	*Integrating traditional clinical skills:* allowing differences and diversity in knowledge to form as part of the professional identity and feel comfortable with it in the Western practice of medicine.	Using a collective approach to understanding individual differences in health and medicine, incorporating the individual's perspective into treatment and care.
'Motivation to serve…. It is not enough to observe the injustice, but we must do what we can to take action to start impacting the people around us.'[44] (p. 4)	*Importance of advocacy:* advocacy was linked to learners' motivation to help and have a goal to make an impactful change for individuals.	Requires learners to have goals to act on for positive outcomes.
Scholar's experience with the East Harlem Community Health Committee: 'Over the next few months I worked with the committee to device a project. The committee has, for a long time, needed a better understanding of the landscape of pediatric mental health resources in the East Harlem community. Through many meetings and conversations, we decided to investigate how children and adolescents enter the mental health system in East Harlem and what this experience looks like. In order to answer these questions, we decided that I would do field research – mainly structured interviews – to create a map of the process…. Luckily, the structure of the HRSJ program, with new students entering each year is that these projects can be passed on, creating sustainability and continuity with the community partners. There have now been three additional years of students working on this same project.'[45] (p. 295)	*Human rights and social justice:* stereotyping, cultural insensitivity, stigma, health insurance coverage and access to health and housing were important factors that lead to injustice in society and gaps in healthcare outcomes for minority groups.	Interest in human rights: increasing learners' awareness of factors that contribute to health disparities in minority populations.

Continued

Table 2 Continued

Primary quotes from the studies included	Synthesis of the findings from the learners' perspective	Application of the themes to social justice
'I felt that the public isn't aware of the problems other areas of the world is facing, and the impact they're going to make in a global situation. I want to be the educator to the public and hopefully, be able to make a small difference if possible.'[24] (p. 4)	*Global health:* as an option is often self-selected and not compulsory and is therefore aimed at learners who already are aware of the concepts related to global health.	Global health—to be a compulsory component of social justice and social determinants that impact health.
… 'I oversee & co-founded a program in which we implement community organizing principles into the PCMH [patient centered medical home] … Over the last 2 years, we worked on the community-identified issue of affordable housing and developed three campaigns… the greatest impact to me is flattening the hierarchy in the clinic so that patients are empowered to created change with the clinic's support.'[46] (p. 589)	*Health systems reform and public health initiatives:* social justice work requires learners to develop and apply knowledge outside of the confines of the clinical setting and lived experiences provided a foundation for this.	Learners understood social justice from experiential learning.
'My experience was an extremely valuable source of learning which broadened my understanding of social responsibility in medicine beyond what I could have achieved in a classroom or local community setting. It was different, for instance, from structured office visits to the underserved Downtown Eastside [in Vancouver] because rather than just being exposed to such a population, I was [living with them] for two months.'[20] (p. 980)	*Teaching process and method:* important methods that were non-traditional were included.	Learning process: non-core activities include community-engaged research, service learning activities, guest lecturers' perspectives on their experience, an assessment tool that provided the assessment and instant feedback required in the learning process.

HRSJ, human rights and social justice.

> for students about to embark on their [Indigenous community] placements. It was indefinitely more useful than any pre-readings we could have gotten. Please keep this in the curriculum for next year![30] (p. 7)

The programme, teaching methods and evaluation from the studies included can be seen in the online supplemental table 3.

DISCUSSION

The WHO has defined the 'social accountability of medical schools' as 'the obligation to direct education, research, and service activities towards addressing the priority health concerns of the community, region and the nation that they have a mandate to serve.'[31] According to the WHO, social justice begins by recognising that health is a fundamental human right, and gross inequalities in healthcare are politically, socially and economically unacceptable.[32] Social justice education, incorporating interdisciplinary knowledge and encouraging social, political and biomedical collaboration, will help medical students to become socially conscious and acquire the skills to deliver competent healthcare to all in the community.[33 34]

Our findings from the meta-synthesis suggest that, the core medical school curriculum should include training that enables students to recognise and redress adverse medically relevant social factors.[3] This is because social issues such as poverty, illiteracy and discrimination deeply affect human health.[35] Addressing these health disparities would require medical students to become skilled in 'assessing and intervening in the social and structural determinants of the patients' daily lives' outside of the clinical setting[35] and 'looking beyond the patient–doctor interaction' alone.[9]

This analysis also points to adopting a multifactorial lens as the best ways to impact positive outcomes were: (1) working in multidisciplinary, interprofessional teams; (2) understanding the role of doctors in health promotion, assessing health policy and health systems, providing culturally safe care, 'thinking upstream prevention' to develop a social justice programme; and (3) understanding that social determinants of health, include education, employment, culture, gender, housing, income, class and social status, and how these affect patients and communities.[36] To accomplish this, our data indicates that medical students condsider professional identity that incorporated a 'physicians-health advocates' role to combat the propensity to see ill health as purely the outcome of poor lifestyle choices. As this belief 'ignores the fact that social and economic status shapes a person's ability to make healthy choices regarding housing, available food, safe neighbourhoods and the like.'[9]

Examples, such as the Social Justice Vertical Integration Group at the Geisel School of Medicine at Dartmouth, identified core social justice competencies with linked objectives[3] and developed key topics in order to facilitate student achievement of these competencies and objectives. They also reviewed other medical schools' diverse approaches to social justice teaching, examining ways by which both the classroom and the experiential components of the social justice curriculum can be integrated with important basic science and clinical curricular components. Creating multifaceted written and verbal student evaluation would be a critical component of the medical school social justice curriculum, as would adequate infrastructure support and ongoing assessment of the impact of students' hands-on work with the communities they serve.[3]

Therefore, the goal of educating future doctors to care for the national population requires an adequate number of doctors who are properly distributed to underserved areas, and enough minority physicians in the workforce trained to allow for diversity and link both traditional and Western medicine with the needs of the local population served. The importance of this mission is underscored by an ever-increasing body of evidence of a wide range of health disparities affecting ethnic minority populations.[37] These disparities often go unnoticed[38] and reflect historical deep rooted inequalities in education, housing, employment and the related policies.[39] Therefore, without discounting other potential causal factors, medical school curricula need to engage with the rich literature and evidence base which show that the conditions of life, with its various privileges and oppression, are strongly correlated with health or illness.

LIMITATIONS

The main criticisms of conducting a meta-analysis are that it blends various types of literature, disparate articles therefore the concluding result may overlook critical distinctions between studies. We have tried to minimise this by narrowing our focus, to look at learning interventions and programmes of social justice.

CONCLUSION

Our analysis suggests that the core medical school curriculum should include compulsory training, which enables students to recognise and redress adverse medically relevant social factors.[3] Social justice in medical education should not be understood as a non-essential piece of professionalism. This is because social issues such as poverty, illiteracy and discrimination deeply affect human health.[35] Addressing these health disparities would require medical students to become skilled in 'assessing and intervening in the social and structural determinants of the individuals' daily lives' outside of the clinical setting[35] and 'looking beyond the patient–doctor interaction' alone.[9] Creating globally competent doctors through a globally equivalent curriculum which can be balanced and with a locally invested training programme could lead to a supply or workforce that is fit for purpose for local populations. To accomplish this, students must become 'physician-health advocates' and combat the propensity to see ill health as the outcome of poor lifestyle choices.[9] Findings confirm that social justice in undergraduate medical education is an essential component and has a role in the work of doctors, impacting healthcare and can be taught using various methods outlined in this research. In conclusion, social justice can be learned as a part of everyday practice realities and should include the contemporary context of healthcare inequalities improvement focus and a social justice lens.

Author affiliations
[1]Division of Law, Society and Social Justice, School of Social Policy, Centre for Health Services Studies (CHSS), School of Social Policy, Sociology & Social Research, University of Kent, George Allen Wing, Canterbury Kent, CT2 7NF, Canterbury, Kent, UK
[2]CHiMES Collaborative, Department of Psychiatry, University of Oxford, Warneford Hospital, Oxford, UK
[3]Fellow of the Academy of Social Sciences, Emeritus NIHR Senior Investigator, University of Southampton, Southampton, UK
[4]International Relations, Politics and History, School of Social Sciences and Humanities, Loughborough University, Loughborough, UK
[5]University Hospitals Coventry and Warwickshire NHS Trust, Coventry, UK
[6]Derbyshire Healthcare NHS Foundation Trust, Derby, UK
[7]West London Mental Health NHS Trust, Southall, UK
[8]Psychiatry Clinical Education, Derbyshire Healthcare NHS Foundation Trust, Derby, UK
[9]Royal College of Psychiatrists, London, UK

Correction notice This article has been corrected since it was first published. Affiliation 1 has been updated.

X Nagina Khan @DrKhan_do

Contributors Conception and design—NK, AR and SD. Screening—NK, ASe, SS and ASr. Extraction—NK, AS and SD. Analysis and interpretation of the data—NK and AR. Drafting of the article—NK. Critical revision of the article for important intellectual content—NK and AR. Final approval of the article—NK, ASe, SS, ASr, AR and SD. Specialist medical librarian support—MH. Guarantor—SD.

Funding The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests None declared.

Patient consent for publication Not required.

Ethics approval Not applicable.

Provenance and peer review Not commissioned; externally peer reviewed.

Data availability statement Data are available on reasonable request.

ORCID iDs
Nagina Khan http://orcid.org/0000-0003-3870-2609
Alex Serafimov http://orcid.org/0000-0001-9390-003X

REFERENCES

1 Mullan F, Chen C, Petterson S, *et al*. The social mission of medical education: ranking the schools. *Ann Intern Med* 2010;152:804–11.
2 Pilgrim D, Rogers A. *A Sociology of Mental Health and Illness*. Disability & Society. Open University Press, 1995: 117–36.
3 Coria A, McKelvey TG, Charlton P, *et al*. The design of a medical school social justice curriculum. *Acad Med* 2013;88:1442–9.
4 RG W. *Unhealthy societies: the afflictions of inequality*. London: Routledge, 1996.
5 Hixon AL, Maskarinec GG. The Declaration of Alma ATA on its 30th anniversary: relevance for family medicine today. *Fam Med* 2008;40:585–8.
6 Virchow RC. Report on the typhus epidemic in upper Silesia. 1848. *Am J Public Health* 2006;96:2102–5.
7 World Health Organisation. World health organization - social determinants of health. 2014. Available: http://www.who.int/social_determinants/en/
8 DasGupta S, Fornari A, Geer K, *et al*. Medical education for social justice: Paulo Freire Revisited. *J Med Humanit* 2006;27:245–51.
9 Wear D, Zarconi J, Aultman JM, *et al*. Remembering Freddie gray: medical education for social justice. *Acad Med* 2017;92:312–7.
10 Hixon AL, Yamada S, Farmer PE, *et al*. Social justice: the heart of medical education. *Soc Med* 2013;7:161–8.
11 Hage SM, Kenny ME. Promoting a social justice approach to prevention: future directions for training. *J Primary Prevent* 2009;30:75–87.
12 Noblit GW, Hare RD. *Meta-Ethnography: Synthesizing Qualitative Studies (Qualitative Research Methods)*. Counterpoints. Peter Lang AG, 1988.
13 Grant MJ, Booth A. A typology of reviews: an analysis of 14 review types and associated Methodologies. *Health Info Libr J* 2009;26:91–108.
14 British Sociological Association. Criteria for the evaluation of qualitative research papers. *Med Sociol News* 1996;22:34–7.
15 Coventry PA, Small N, Panagioti M, *et al*. Living with complexity; marshalling resources: a systematic review and qualitative meta-synthesis of lived experience of mental and physical Multimorbidity. *BMC Fam Pract* 2015;16:171.
16 Khan N, Bower P, Rogers A. Guided self-help in primary care mental health. *Br J Psychiatry* 2007;191:206–11.
17 Khan N, Rudoler D, McDiarmid M, *et al*. A pay for performance scheme in primary care: meta-synthesis of qualitative studies on the provider experiences of the quality and outcomes framework in the UK. *BMC Fam Pract* 2020;21:142.
18 Bakshi S, James A, Hennelly MO, *et al*. The human rights and social justice scholars program: A collaborative model for Preclinical training in social medicine. *Ann Glob Health* 2015;81:290–7.
19 Daya S, Choi N, Harrison JD, *et al*. Advocacy in action: medical student reflections of an experiential curriculum. *Clin Teach* 2021;18:168–73.
20 Dharamsi S, Richards M, Louie D, *et al*. Enhancing medical students' conceptions of the Canmeds health advocate role through international service-learning and critical reflection: A phenomenological study. *Med Teach* 2010;32:977–82.
21 Motzkus C, Wells RJ, Wang X, *et al*. Pre-clinical medical student reflections on implicit bias: implications for learning and teaching. *PLoS One* 2019;14:e0225058.
22 Essa-Hadad J, Murdoch-Eaton D, Rudolf MCJ. What impact does community service learning have on medical students' appreciation of population health? *Public Health* 2015;129:1444–51.
23 Jones K, Blinkhorn LM, Schumann SA, *et al*. Promoting sustainable community service in the 4th year of medical school: A longitudinal service-learning elective. *Teach Learn Med* 2014;26:296–303.
24 Laven G, Newbury JW. Global health education for medical undergraduates. *Rural Remote Health* 2011;11:1705.
25 Press VG, Fritz CDL, Vela MB. First year medical student attitudes about advocacy in medicine across multiple fields of discipline: analysis of reflective essays. *J Racial Ethn Health Disparities* 2015;2:556–64.
26 Gostelow N, Barber J, Gishen F, *et al*. Flipping social determinants on its head: medical student perspectives on the flipped classroom and simulated patients to teach social determinants of health. *Med Teach* 2018;40:728–35.
27 Hernández-Rincón EH, Pimentel-González JP, Orozco-Beltrán D, *et al*. Inclusion of the equity focus and social determinants of health in health care education programmes in Colombia: A qualitative approach. *Fam Pract* 2016;33:268–73.

28 Lewis M, Prunuske A. The development of an indigenous health curriculum for medical students. *Acad Med* 2017;92:641–8.
29 Huria T, Palmer S, Beckert L, *et al*. Indigenous health: designing a clinical orientation program valued by learners. *BMC Med Educ* 2017;17:180:180.:.
30 Maar M, Bessette N, McGregor L, *et al*. Co-creating simulated cultural communication scenarios with indigenous Animators: an evaluation of innovative clinical cultural safety curriculum. *J Med Educ Curric Dev* 2020;7:2382120520980488.
31 Boelen C. Prospects for change in medical education in the twenty-first century. *Acad Med* 1995;70(7 Suppl):S21–8.
32 WHO. *Primary Health Care: Alma-Ata Report*. World Health Organization and United Nations Children's Fund, 1978.
33 Schiff T, Rieth K. "Projects in medical education: "social justice in medicine" a rationale for an elective program as part of the medical education curriculum at John A. burns school of medicine". *Hawaii J Med Public Health* 2012;71(4 Suppl 1):64–7.
34 Ambrose AJH, Andaya JM, Yamada S, *et al*. Social justice in medical education: strengths and challenges of a student-driven social justice curriculum. *Hawaii J Med Public Health* 2014;73:244–50.
35 Adler NE, Newman K. Socioeconomic disparities in health: pathways and policies. *Health Affairs* 2002;21:60–76.
36 The Association of Faculites of Medicine of Canada. *A collective vision for postgraduate medical education in Canada*. 2012: 22–3.
37 Nelson A. Unequal treatment: confronting racial and ethnic disparities in health care. *J Natl Med Assoc* 2002;94:666–8.
38 Lillie-Blanton M, Brodie M, Rowland D, *et al*. Ethnicity, and the health care system: public perceptions and experiences. *Med Care Res Rev* 2000;57 Suppl 1(4 suppl):218–35.
39 Byrd WM. Racial and ethnic disparities in health care: A background and history. In: Smedley BD, Stith AY, eds. *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*. Washington, DC: National Academy Press, 2003.
40 Page MJ, McKenzie JE, Bossuyt PM, *et al*. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *PLoS Med* 2021;18:e1003583.
41 Filek H, Harris J, Koehn J, *et al*. Students' experience of prison health education during medical school. *Med Teach* 2013;35:938–43.
42 Gonzalez CM, Walker SA, Rodriguez N, *et al*. It can be done! A skills-based elective in implicit bias recognition and management for Preclinical medical students. *Acad Med* 2020;95(12S):S150–5.
43 McElfish PA, Moore R, Buron B, *et al*. Integrating Interprofessional education and cultural competency training to address health disparities. *Teach Learn Med* 2018;30:213–22.
44 Brooks EM, Magee ML, Ryan M. Fostering Transformative learning, self-Reflexivity and medical citizenship through guided tours of disadvantaged neighborhoods. *Med Educ Online* 2018;23:1537431.
45 Bakshi S, James A, Hennelly MO, *et al*. The human rights and social justice scholars program: A collaborative model for Preclinical training in social medicine; 26088098. *Ann Glob Health* 2015;81:290–7.
46 Baker NJ, Cutler M, Sopdie E. Perceived influence of medical students' community health assessment projects. *Fam Med* 2020;52:586–91.