INTRODUCTION

Health inequalities are the unfair and preventable differences in health between groups within society.¹ Over the past decade in the United Kingdom (UK) health inequalities have widened overall, and life expectancy for the poorest 10% of women has actually declined.² At the very sharp end of health inequalities, inclusion health groups (see box 1) such as those experiencing homelessness, imprisonment,
substance misuse and sex work, have markedly higher morbidity and mortality than the general population.3

Previous literature has emphasised the importance of including health inequalities teaching in undergraduate medical curricula.4 However, despite calls for improvements in health inequalities education, an abundance of literature suggests that exposure to inclusion health groups in medical curricula is either limited, optional or student driven.

The teaching of health inequalities varies across UK medical schools,4 though lectures are a popular choice in the delivery of this content.5 Whilst lectures are time- and resource-efficient in delivering large amounts of content to large cohorts, research suggests that students are disenchanted with this method based on passive acquisition of knowledge.6 Students have reported they feel less engaged with lectures and lack understanding of the relevance of health inequalities lectures.7 If medical students are to provide equitable and compassionate care to future patients from inclusion health groups, it is critical to develop engaging inclusion health education that can improve rapport, patient care and patient outcomes.

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The disparity between educational recommendations and realities inspired us to explore health inequality education experiences at the University of Leeds as intercalated medical education research projects. (The intercalated degree is an additional year of study which allows medical students to study a subject related to medicine in further detail and normally includes a research project.) We conducted two linked studies exploring medical students’ experiences of health inequalities education and the perceived impact on their attitudes towards patients from inclusion health groups. Researcher AP explored students’ experiences of relevant student selected components (SSCs), addressing the following research questions:

1. What motivates second and third-year medical students to choose Student Selected Components (SSCs) which address the theme of health inequalities?
2. What do students expect to learn from health inequality related SSCs and to what extent are their expectations realised?
3. What effect, if any, do health inequality related SSCs have on students’ attitudes and behaviours towards patients from inclusion health groups whilst on subsequent clinical placements?

Researcher HD explored sources of influence on students’ attitudes towards inclusion health groups, addressing the following research questions:

1. What are medical students’ attitudes towards inclusion health groups?
2. What has influenced medical students’ attitudes towards inclusion health groups?

**Box 1 Inclusion health definition**

Inclusion health is a term used to describe people who are socially excluded and typically experience multiple overlapping risk factors for poor health (such as poverty, violence and complex trauma).3 This can include people who experience homelessness, drug and alcohol dependence, vulnerable migrants, Gypsy and Traveller communities, sex workers, people in contact with the justice system and victims of modern slavery but can also include other socially excluded groups. This population frequently experience stigma and discrimination and have poorer predicted health outcomes and a shorter life expectancy than the average population.3

**Table 1** Details of the two studies included in this paper

| Study 1 | Study 2 |
| --- | --- |
| **Methods** | Recruitment via email circulated by administrative staff; Semi-structured interviews; Thematic analysis within constructivist paradigm |
| **Inclusion criteria** | University of Leeds medical students who had completed one of six SSCs pertaining to health inequalities in their second or third year of study |
| **Inclusion criteria** | University of Leeds medical students from any year |
| **Total number of participants** | 6 (5 in person, 1 online) |
| **Year of study (number of participants)** | 3rd Year (6) |
| **Year of study (number of participants)** | 1st Year (1) |
| **Year of study (number of participants)** | 3rd Year (1) |
| **Year of study (number of participants)** | 5th Year (2) |
2 | METHODS

Both student researchers applied a constructivist approach to explore the richness of participants' learning experiences and recruited eligible students via email circulation lists for interview between March and April 2020. They chose semi-structured interviews to allow unanticipated insights to be explored and developed interview guides after reviewing relevant literature and undertaking pilot interviews with peers. In total, the student researchers interviewed 10 medical students at different stages of the five years of undergraduate medical training in Leeds (P1 to P10). The interviews from each study were audio-recorded, transcribed and thematically analysed, independent of the other study. Both studies received approval from the University of Leeds School of Medicine Research Ethics Committee (Applied Health sub-committee).

This paper brings together findings from both studies to emphasise how the type of exposure to inclusion health groups may influence medical students’ attitudes and behaviours (Table 1).

3 | FINDINGS

3.1 | Feelings of unpreparedness

Participants in both studies expressed concern about their lack of experience and skills working with inclusion health patients, with one student feeling completely useless (P1, fifth year) and another feeling helpless because I’d have no idea what to suggest or what to do... (P2, first year). Students anticipated that specialist skills were needed to communicate and meet the needs of inclusion health patients, with one participant expressing: I just feel that I don’t have the particular skillset... (P3, third year).

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3.2 | By chance or by choice?

Participants described their encounters with inclusion health groups as encounters 'by chance' (on placement) or 'by choice' (an encounter occurring through an optional initiative, such as an SSC, extracurricular activity or elective).

Chance encounters were often described as negative in nature:

[Discussing a patient who was in police custody on standard placement] I did notice a difference between how [the doctor] treated him and how she treated people on the wards...I just thought she was a lot harsher. (P2, first year)

In comparison, the 'choice' encounters were described as more pivotal to students’ attitudes and approach to future experiences. Participants reflected on the impact of choice encounters on their knowledge and attitudes:

[Reflecting on an extra-curricular encounter with a patient in police custody].

The doctor told us that the only time we discriminate is by clinical need. If I hadn't had that positive experience, I would have thought that the other [negative] experience was normal... Imagine if I never questioned that? You would probably go on to practice with that mindset. (P2, first year)

I think the SSC really changed my perspective [on the impact of health inequalities]. Before then, I was naïve to these issues... I’m so grateful that I had that opportunity, but it’s a shame that so many didn’t have that opportunity because they didn’t seek it out. (P1, fifth year)

Participants went on to explain how such positive experiences led them to seek out further inclusion health experiences by choice:

I think those experiences themselves have made me keen to seek out more experiences... the domino effect! (P3, third year)

I don’t think I’d have taken an active interest in seeking out learning about that [health inequalities] if I hadn’t had that SSP! (P1, fifth year)

and how they gained a sense of confidence and an ability to question others:

I feel more that I would challenge behaviour that I didn’t think was appropriate and maybe more in the way of encouraging people to think of the bigger picture. (P4, third year)
Our participants reported experiential opportunities were more engaging than traditional lecture-based teaching, recalling positive experiences of campus teaching involving people from inclusion health groups:

It’s a different way of learning and we all had the opportunity to ask the people that came in questions…it made the whole session more interactive and we learnt a lot more from it. (P5, third year)

It’s really easy to just sit through a lecture and not really engage but when there is someone standing at the front telling you what they have been through, you will remember that. (P6, third year)

Participants also valued placement activities as part of choice encounters:

I didn’t know we would get a placement... finding that out was really exciting… we don’t really have that much exposure during traditional placement. (P7, third year)

Students recognised the benefits of their choice encounters not only for learning, but also for their futures as professionals. One student highlighted:

It impacts you in a way that would probably make you a much better doctor, less judgemental, less discriminatory as well as just more empathetic. (P7, third year)

We identified that lecture-based health inequalities teaching may contribute to feelings of unpreparedness in caring for inclusion health groups.

Student-selected inclusion health components (‘choice encounters’) seemed to have more powerful impacts on attitudes and interest, particularly when there were opportunities to learn directly from individuals with lived experience of exclusion. Our study indicated that core medical curricula would benefit from incorporating learning experiences that are more typical in choice encounters, such as engaging with personal accounts through live conversations, documentaries, or films.

COVID-19 has posed new challenges in how to teach undergraduate medical students, but also created further impetus for developing graduates who can practice inclusive health care. Our research findings have contributed to the redesign of our population health module (see box 3). We have utilised technology and a flipped learning approach to reduce the number and duration of lectures whilst increasing opportunities for directed online learning and small group discussion. Experiential learning in community settings has been somewhat restricted due to the pandemic, but we have incorporated pre-recorded narratives from patients with lived experience of exclusion as part of our online offering to all students (currently these resources are from open access sources rather than created by the university, see box 2).
Exposure to the real-life impacts of health inequalities on individuals appears to enable students to challenge their own preconceptions. Our participants reported that they had even developed the confidence to challenge behaviour that they perceived to be prejudicial or discriminatory. This is an important finding in light of the potential for negative role models to perpetuate stigma and poor attitudes towards patients. When medical students question the actions of those they work with, there is potential for transformative learning for both students and professionals alike.

4.1 | Limitations

Participants’ sharing of positive choice encounters may have been influenced by their established interest in inclusion health, socially desirability bias and knowledge that one of the research supervisors was the lead for the tackling health inequalities SSC. We aimed to mitigate this by emphasising confidentiality and the voluntary nature of participation in recruitment materials and verbally prior to the interview commencing. It is also possible that an abrupt change to remote data collection due to the COVID-19 pandemic influenced the degree of rapport built with participants and the depth of data collected. However, our perception was that participants spoke candidly with the intercalating student interviewers, evidenced in their frank comments about their experiences of lectures and placement learning.

5 | CONCLUSION

Undergraduate medical students who had chosen to undertake additional inclusion health education perceived they had gained confidence in addressing the needs of inclusion health groups and challenging the actions of others and were inspired to seek out further opportunities to reduce health inequalities. Teachers of core medical curricula should apply methods that have been well-received in student-selected components, such as synchronous and asynchronous narratives and conversations with patients from inclusion health groups.

Teachers of core medical curricula should apply methods that have been well-received in student-selected components.

It is not possible to draw conclusions from our studies about how widespread negative placement experiences might be, but it is important for clinical educators to be aware of the risks of perpetuating stigma and discrimination. This is an important area for further future research.

ETHICAL APPROVAL

This study was granted ethical approval upon review by the University of Leeds School of Medicine Ethics Committee (SoMREC) Applied Heath Sub-committee. Permission to recruit participants was given by the appropriate gatekeeper. There was no potential harm to participants; anonymity of participants was guaranteed and informed consent of participants was obtained for data collection and publication.

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BOX 3  Changes to the health inequalities and inclusion health content at our institution as a result of the studies

We have reduced both the number and duration of lectures on this content and have instead utilised technology and a flipped learning approach to engage students with directed online learning in preparation for small group work discussions and self-reflective practice. This blended approach includes case studies from health care professionals working in inclusion health, as well as narratives from people with lived experience of social exclusion, such as patient stories from Fairhealth (https://fairhealth.org.uk/stories/) and the use of virtual consultations from Virtual Primary Care (https://vpc.medicalschoolcouncil.org.uk/).
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