Medical students' understanding of empathy: a phenomenological study

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CONTEXT Empathy towards patients is associated with improved health outcomes. However, quantitative studies using self-reported data have not provided an in-depth opportunity to explore the lived experiences of medical students concerning empathy.

OBJECTIVES This study was designed to investigate undergraduate medical students' experiences of the phenomenon of empathy during the course of their medical education and to explore the essence of their empathy.

METHODS This was a descriptive, phenomenological study of medical student interviews conducted using the method of Colaizzi and Giorgi. The sample (n = 10) was drawn from medical students in Years 4 and 5. In-depth interviews were used to obtain a clear understanding of their experiences of empathy in the context of patient care. Interviews continued until no new information could be identified from transcripts.

RESULTS Five themes were identified from analysis: the meaning of empathy; willingness to empathise; innate empathic ability; empathy decline or enhancement, and empathy education. Empathic ability was manifested through two factors: innate capacity for empathy, and barriers to displaying empathy. Different experiences and explanations concerning the decline or enhancement of empathy during medical education were explored.

CONCLUSIONS Empathic ability was identified as an important innate attribute which nevertheless can be enhanced by educational interventions. Barriers to the expression of empathy with patients were identified. Role-modelling by clinical teachers was seen as the most important influence on empathy education for students engaged in experiential learning.

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INTRODUCTION

There is a lack of consensus on the meaning of empathy in the medical education literature, but a number of attempts to define this important notion have been made.[1] One approach conceptualises empathy as a two-dimensional model, comprising both cognitive and affective components.[2] According to Gladstein,[2] the cognitive component refers to 'intellectually taking the role or perspective of another person', whereas the affective component consists of 'responding with the same emotion to another person's emotion'. It has been argued, however, that the affective element is an integral component of sympathy rather than empathy. Hojat *et al.*[1] differentiate these two concepts by asserting that: '…sympathy is the act, or the capacity of entering into or joining the feelings of another person. Empathy is described as a capacity to understand but without joining the feeling of the patient.' This latter statement can serve as a working definition, but one of the goals of this study is to describe the lived experiences and interpretations of empathy of medical students.

The General Medical Council (GMC), which oversees the medical education curriculum in the UK, has emphasised that demonstrating empathy represents a professional skill that makes 'a good doctor'.[3–5] In addition, it is recognised as a central element in achieving positive health care outcomes; empathy towards patients helps doctors improve the 'lifeworld' experiences of their patients.[6–11] Nevertheless, the demonstration of empathy is not in agreement with the Oslerian paradigm of equanimity (detached concern), which has been considered as a model of behaviour by many doctors.[12]

A large body of research from different countries has used explanatory factor analysis to develop a three-factor model of empathy in the context of medical education.[13,15,18,23,28] The components of this model include 'perspective taking', 'compassionate care' and 'standing in the patient's shoes'.[13,15,18,23,28] These cross-sectional studies also showed that the empathic responses of medical students can be influenced by a number of factors, such as gender, medical school year, future career ambitions and the individual's understanding of empathy. However, a 5-year longitudinal study of 456 medical students showed that mean empathy scores declined at the end of Year 3.[21] An explanation suggested for this decline is that the focus on a biomedical model undermines the biopyschosocial model, which includes the patient's psychological and emotional needs.[12] One way to preserve and enhance empathy among medical students is to teach and role-model it during medical school.[22]

Most empirical studies of empathy have taken a quantitative approach using self-report instruments.[6,13–20] However, these approaches have not provided any opportunity for the in-depth inquiry that is essential for exploring the views and attitudes of medical students and doctors concerning the development of empathy in patient care and the meanings they attribute to this concept.[23] Furthermore, the nature of an individual's social reality in the clinical, patient-oriented environment cannot be understood from statistical procedures. Empathy is a psychosocial phenomenon which, in principle, should be investigated in a natural setting in order to capture the complexities of human experience.[24] It has also been argued that the accuracy of data identified by self-reported empathy instruments is poor.[25] An alternative approach to studying empathy using an inductive and qualitative approach has therefore been taken.[23,26] We initiated a phenomenological study of the empathy experiences of undergraduates including, when available, their experiences of the phenomenon as patients. We interviewed medical students in Years 4 and 5 who were engaged in largely experiential learning on clinical rotations and who had accumulated significant amounts of patient contact. All these students had previously undertaken basic communication skills courses earlier in medical school. The research question that guided the study was: What do medical students experience to be the essence or essential structure of empathy?

METHODS

The phenomenological approach

Phenomenology was used as the research method in order to gain an understanding of empathy from medical students' experiences, which are grounded in their 'lifeworld' or lived, subjective experience. We capture lifeworld experiences rather than objective data as we gather themes from student accounts. Phenomenology as a research method allows us to uncover 'common essences' or the 'essential structure of phenomena'.[27] Phenomenological inquiry is grounded in the tacit knowledge and subjectivity of individuals who construct meanings from their lived

experiences. Individuals experience empathy differently in various patient care contexts and therefore they construct different personal models of the nature of empathy. However, in Husserlian phenomenological studies, the researcher is required to put his or her own ideas in 'brackets'[29] and to withhold explicit knowledge, judgements and experiences about the phenomenon during interviews in order to allow students to describe their experiences without contamination from the interviewer. This reductive process continues throughout the study in order to elicit a pure and rich description of the phenomenon.

Setting

The study was carried out at the University of Nottingham. Ethical approval was granted by the University of Nottingham Medical School Ethics Committee and written consent was obtained. Each interview participant received GBP10.00. It was decided to recruit Year 4 and 5 medical students, who had had experiences with patients and were well prepared to talk about their everyday experiences of empathy. A recruitment message posted on the medical school's virtual learning environment described the aim of the study and assured medical students that anonymity would be a top priority.

Sample

Sample size was directed by the research question.[30] This meant that we recruited medical students until we attained information redundancy or saturation, at which point no new experiences were emerging and nothing new was being added to the data already elicited during previous interviews. A purposive sample[31] of participants in Years 4 and 5 was used and comprised a total of 10 medical students. These included five men and five women aged 22–30 years. This sample size is considered satisfactory for qualitative research. Seven participants were in Year 4 and had experienced rotations in introductory medicine, surgery, child health, obstetrics and gynaecology, psychiatry, dermatology and otorhinolaryngology. Three participants were in Year 5 and had additionally experienced advanced medicine and surgery, musculoskeletal disabilities and disorders, and general practice rotations. All of these clinical rotations had included extensive opportunities for participants to interact with a wide variety of patients and to experience the working practices of doctors and other health care professionals.

Data collection

In order to elicit experiential descriptions from participants, we used an in-depth interview guide to ensure consistent coverage. MT and ST conducted the interviews, which lasted 50–70 minutes. Neither of the interviewers were involved in the participants' medical education. The interviews were conducted in private rooms at the medical education unit. All participants agreed to allow the interview to be audiotaped and transcribed verbatim. Spot checking of transcripts was carried out in order to verify their accuracy.[32]

The participants were asked broad questions and encouraged to respond in a conversational way. Example questions are: 'Can you tell me how you see empathy in the context of patient care?' 'Can you tell me how you deal with the emotional state of a patient?' 'Can you tell me how empathy can be enhanced during medical education?' Additional questions were asked to elicit more detailed explanations.

Analysis

The analysis of participants' experiences is typically reductive in nature as we convert a large mass of expressed experiences into smaller categories. To this end, the analysis of transcripts was grounded in the procedures developed by Colaizzi[33] and Giorgi.[34] NVivo Version 9.0 (QSR International Pty Ltd, Doncaster, Vic, Australia) was used in this study as the main analytical tool. The process of analysis included the following steps.

1 The authors listened to the tapes, read and re-read the transcripts and immersed themselves in the texts in order to acquire a feeling for them.
2 The authors coded the transcripts by identifying passages, or 'units of meaning', that exemplified students' essential meanings and experiences of empathy. NVivo 9.0 was used to connect each meaning unit to a named 'node' indicating an idea or concept shared by the units. A total of 373 significant meaning units were extracted from the 10 transcripts during coding and connected to 18 nodes. An attempt was made to eliminate those passages in which the experience was not inherent.
3 The authors re-reviewed the transcripts with an emphasis on identifying the themes emerging from the nodes. To enhance the credibility of the themes, the authors independently analysed the transcripts and reviewed one another's findings in

order to reach agreement on the classification of the themes. The final themes were then synthesised to elucidate the essential structure of the phenomenon of empathy.

RESULTS

The extracted meaning units were categorised into clusters according to five central themes: the meaning of empathy; willingness to empathise; innate empathic ability; empathy decline or enhancement, and empathy education. Each theme will be discussed; quotations from participants are used to support the authors' claims, illustrate ideas and illuminate experience.

The meaning of empathy

Participants had different interpretations of the concept of empathy. More than half of them mentioned differences between sympathy and empathy. One of the participants reflected:

'It differs from sympathy because you're not feeling sorry for someone, you're considering their perspective, taking that onboard, and using that to augment your relationship with them in whatever context it may be.' (Participant 1, Year 4, female)

The majority of participants believed they should be able to imagine and to try to understand someone else's feelings and experiences and, without losing objectivity, see the world through that person's eyes. For example, one participant stated:

'Put yourself in their place and see it as they would see it or try and see it as they would see it, in the best way that you can. So if they're going through something hard, you'd say okay, what would it be like for me if I was going through something like that?' (Participant 2, Year 5, male)

One participant commented, however, that it is not always possible to understand a patient's feelings and emotions if one has not experienced such feelings oneself. Another participant described empathy as a 'useful tool' with which to acknowledge patients' feelings and experiences.

Willingness to empathise

Willingness to display empathetic behaviour towards patients was the most prominent theme identified in participants' accounts of their experiences. Participants showed positive attitudes towards the importance of demonstrating empathy in the context of patient care. They felt that empathising with patients resulted in better communication and rapport building, which leads to better patient outcomes:

'So if you don't empathise with them, you're going to seem like a robot who just writes out prescriptions and listens to their heart. So they're not going to tell you everything that you need to know as a doctor in order to be able to treat them to the best of your abilities.' (Participant 2, Year 5, male)

Many participants believed that students did not need to have experienced the same feelings and emotions as patients in order to empathise with them, although they considered that sharing experiences with patients contributes to kindness and compassion, which ultimately improves patient care. Some further reflections of participants include:

'You're aware of the stereotypes, the stigma, how difficult it is to talk about things. You realise what things you would have wanted your daughter to have done differently, you realise what things went well for you. So you have all those experiences, you know, you have all those useful experiences to work with.' (Participant 4, Year 4, female)

'As humans we have the ability to empathise without having actually lived the exact same experience, otherwise we wouldn't enjoy literature, we wouldn't enjoy films, you know, you can empathise with a character even though you've never been to the country they're in and experienced what they are going through.' (Participant 7, Year 4, male)

However, a Year 5 male participant valued the importance of vicariously experiencing a patient's emotions. He felt that students needed to have experienced something that they could use as a reference point for how they would feel if a similar event was to take place for them. In this regard, a Year 4 female participant commented: 'It's difficult to feel something when you don't have anything to ground it on.' This may illustrate why some participants had difficulty in differentiating between sympathy and empathy. One of the aims of empathy is to recognise a patient's inner feelings in order to elicit a better clinical understanding, whereas the aim of sympathy is to feel congruent with a patient's emotions.

Innate empathic ability

Most of the participants interviewed stated that the capacity for empathy arises from a natural attribute and is governed by a person's temperament and early upbringing. In this regard, one participant explained that if empathy does not come from compassion, it can be cold and may not make sense. She continued:

'It comes from a heart that is in the right place… and a mindset towards medicine that's in the right place rather than a learnt skill, because otherwise if it's a learnt skill, I don't think it's very useful empathy.' (Participant 9, Year 4, female)

However, a few participants described the importance of education for enhancing natural empathy. The following comment illustrates this point:

'If someone has these certain characteristics then I'd say yes definitely it does come a lot more naturally, but there is definitely some kind of learning process as well that's required.' (Participant 3, Year 4, male)

Conversely, one participant had a negative attitude towards educating medical students who are not natural communicators. He suggested:

'You can improve somebody's communication through training, but if they're not a natural communicator to start off with, if they don't naturally relate with people or if they don't naturally communicate well, I think starting from that kind of basis [it] is very difficult to teach people to communicate effectively. And that's obvious in this cohort of medical students.' (Participant 5, Year 5, male)

These comments draw attention to the fact that students have insight into the qualities that make a good empathiser and that need to be recognised and developed by training:

'…because we're only 18 when we start medical school I don't think everyone's going to have all the life experience and things to make them a good empathiser. So I think it is important that we learn about it.' (Participant 6, Year 4, female)

Barriers to displaying empathy

Participants raised several issues with respect to barriers to displaying empathy with patients. These included: constraints on doctors' time with patients; negative feelings about seeking the patient's view; the doctor's personality, and the patient's personality. Clearly, students gain such views by observing the role modelling of doctors in clinical environments. For example, one participant expressed a cynical view, alleging that some doctors do not like engaging with patients' emotions owing to a lack of empathic communication skills:

'…there might be a barrier in so much as they don't want to have anything to do with their patients, they'd just rather treat them and get on with it, which I don't think is conducive to the best patient care that you can give someone, but a lot of doctors personally just don't have great empathy skills or don't have great communications skills in order to communicate their empathy.' (Participant 5, Year 5, male)

One participant argued that surgery is a significant barrier to expressing empathy. He felt that surgery follows the biomedical model and it is unrealistic to expect a surgeon to empathise with a patient:

'Cut them with steel, take out the bad bit, sew them back up, congratulations, job done, and send them on their way.' (Participant 10, Year 5, male)

This may be because patients are more comfortable in discussing physical signs and symptoms than emotional issues. Alternatively, some students considered that certain doctors, especially surgeons, believe that their job is to cure patients rather than to pay attention to psychosocial issues:

'They're looking to be cured. They're coming in: ''I've got these physical symptoms, I want to get rid of them…'' You're trying to be empathetic but not actually managing to empathise, because you're not engaging with the patient on what they actually want.' (Participant 5, Year 5, male)

However, some participants argued that understanding emotional interactions and the physical signs of illness help the doctor to be more effective. They also agreed that patients seek medical help and want effective treatment *with* empathy. Typical comments included:

'The patient does come to a doctor to be cured, but I think a patient definitely does want to be empathised with because if a doctor doesn't see what the patient's pain is, see what the patient's problem is, then a patient's going to assume that that doctor therefore doesn't know the best course of treatment for them or doesn't best kind of understand how to cope with their problems.' (Participant 7, Year 4, male)

'Well, preferably they want both, yeah. So good treatment with empathy. I don't think anybody would want, you know, a really blunt, rude doctor, even if their treatment was good, then that would be pretty crap.' (Participant 2, Year 5, male)

Not all difficult clinical situations were seen as barriers to empathic behaviour with patients. For example, one participant reflected:

'The negative emotional states are alright, I think. We've all been anxious. We've all been worried. And you may not know exactly how this is impacting on them, but you can empathise with the fact that you've also been anxious and worried at various different points. So yeah, I don't find that too difficult.' (Participant 8, Year 4, female)

Another participant reflected:

'…the personality of the patient shouldn't be a barrier. Sometimes it could be, especially if they're a particularly odd person.' (Participant 5, Year 5, male)

However, another interesting issue identified by participants refers to whether it is possible for them to display empathy in the consulting room or when working with the team when doctors themselves do not display empathy. One student asserted:

'If you've got a team with a doctor who doesn't like that kind of thing, then the rest of the team tend to follow suit. And I think it's difficult for medical students to express or to take into account the emotions of a patient if they're in an unsupportive environment.' (Participant 3, Year 4, male)

Empathy decline or enhancement

Participants had different experiences of and explanations for the decline or enhancement of empathy during the course of medical education. Those who had experienced a decline in empathy believed that their ability to empathise had not been reduced by passing through medical school, but had been caused by 'the pressure of the job'. One participant stated:

'I think now that I've come to the end of medical school, it affects me less emotionally. Certainly at the beginning of my medical school career, particularly at the beginning of my clinical attachments, I felt exhausted by the whole thing all the time. I felt very emotional a lot of the time dealing with breaking bad news, watching people die, watching people go through horrible operations, watching people get sick, dealing with their families. That used to affect me and it affects me less now, but it's not because I don't feel it, it's because I don't let it affect my emotions as much.' (Participant 6, Year 4, female)

One participant argued that a large number of medical students become less empathetic because they treat patients as 'intellectual cases rather than people'. Another participant put it another way:

'When starting off you will let the empathy affect the way that you are, whereas that happens less as you go through medical school. So I suppose the personal effects of empathy decrease through medical school is what I'm trying to say. So I think the variation in the way different people experience empathy changes and I think the outward expression of experiencing empathy decreases.' (Participant 10, Year 5, male)

However, some participants felt that empathy did not decline among medical students. They believed that as students obtained more experience of the clinical setting and experienced more patients, they developed strategies to enhance empathic responses towards patients. A Year 4 participant felt that her ability to empathise had increased because:

'I understand a bit more about the conditions and I know how they affect patients… I think it is to do with education as well, because once you've understood the different ways patients can be affected and you've seen patients being affected. Because obviously in the first year we didn't see many patients anyway.' (Participant 8, Year 4, female)

These comments show that participants had contrasting experiences with respect to the decline or enhancement of empathy as they went through medical school. Perhaps these comments also demonstrate that whereas students may experience a more affective or emotional type of empathy at the beginning of their studies, their focus tends to shift towards a more intellectual or cognitive version of empathy as training progresses.

Empathy education

Participants had differing experiences concerning the teaching of empathy, but few participants felt that empathy should not be taught. Most participants valued the critical role of education in empathy enhancement, but had reservations about particular approaches to learning, teaching and assessment. For example, one participant explained that didactic

lectures and a communication skills objective structured clinical examination (OSCE) did not provide an in-depth opportunity to develop empathy skills. He explained his experience:

'I always find the communication skills OSCE a bit strange because you have 6 minutes to display your communication skills with this patient who isn't a patient at all. They're an actor and you know they're an actor and it's suspending your disbelief rather than communicating. Because you can't communicate in 6 minutes with an actor in the same way as you communicate in a clinic with a patient. So it's almost a bit false and it's kind of [about] passing the exam rather than being a good communicator.' (Participant 10, Year 5, male)

Another Year 5 participant experienced 'box-ticking exercise empathy' when he received communication skills training. He stated:

'…it's made it more like I have a box to tick, and sometimes I tick that box and sometimes I don't. Whereas I don't think empathy is a box-ticking exercise… The reason I see a patient is because I want to care about them, I want to make them better and the whole of them better. I think it's made me look at it more like ticking a box. I don't look at it as positively as I should do. But some things have helped.' (Participant 5, Year 5, male)

With regard to educational interventions, some participants valued role-play activities, cooperative learning about patients, experiencing practice in consultation rooms, and watching doctors and the way that they deal with patients. However, one participant argued that medical students need more experience in dealing with patients themselves. One participant discussed the importance of teaching empathy in secondary care. He reflected:

'In secondary care the clinical empathic process is very bad overall. I think a lot of students will go into secondary care without a clear way of using their empathy in a clinical context. It's not explicitly taught for secondary care. In primary care it's explicitly taught: how to deal with an angry patient, how to break bad news. And some of it relates to secondary care, but the context of secondary care is very, very different. Particularly there's a lot more people involved. Using empathy in a clinical setting when there's a lot of people involved, a big team, is much more challenging than when it's just you and a patient or you and a patient and a GP.' (Participant 2, Year 5, male)

However, participants had different experiences regarding the timing of basic empathic communication skills teaching. Some participants stated that empathy should be taught in pre-clinical courses and some argued that students should receive empathy teaching in clinical clerkships. One participant argued that teaching empathy needs to continue as students do not receive formal communication skills teaching between starting clinical practice and undertaking primary care training in the final year. Typical reasons included:

'…it is good that they do it in the first and second year because we're new and we've not had that sort of training before. Maybe like just before we start clinical [training]. So if we just had 1 day just sort of recapping things and I think that would be quite useful.' (Participant 7, Year 4, male)

Another participant reflected:

'I felt that we got loads of it in pre-clinical [training] but I think it does seem to get a bit forgotten. So I suppose, maybe slightly less emphasis pre-clinical and a bit more emphasis in the clinical phase. Because I felt like all the sort of empathy and communication skill stuff just got thrown out the window, because they were like well alright yeah, sod all that stuff, actually you've got to be a doctor now and you've got to learn…' (Participant 5, Year 5, male)

Taken together, participants' comments regarding the teaching and assessing of empathy showed they had difficulties with the methods and timing of some of the learning opportunities in the curriculum. Participants preferred to improve their empathy skills by observing the role modelling of teachers and through clinical experiential learning.

DISCUSSION

The aim of this study was to investigate undergraduate medical students' experiences of the phenomenon of empathy during the course of their medical education and to explore the essence of their understanding of empathy. Our analysis of their lived experiences identified five themes.

In terms of the essence of empathy, this study reveals that students feel that empathy is fundamental to medical care. They believe empathy to be a combination of understanding, experience and imagination that helps an individual deal with the internal feelings and emotions of a patient. An innate capacity

for empathy, which can be enhanced by learning experiences, is essential for showing appropriate responses to patients. In addition, if students overcome barriers to expressing empathy, their ability to demonstrate it may not decline, particularly if learning from role modelling is used as a learning method. Therefore, students' ability to put themselves in their patients' 'mental shoes' may grow during medical education as they gradually amass experiences with patients in clinical settings grounded by their teachers in the biopsychosocial model.

Although participants provided evidence of their emotional and affective responses to their patient experiences, it was clear that the need to maintain cognitive and intellectual control of these feelings was a major feature of their understanding of empathy. However, some participants did not distinguish between empathy and sympathy in a manner that defines empathy as a 'value-neutral mode of observation' or an affect-free perception, and sympathy as an affect-laden phenomenon.[35] Given that empathy is a key factor in the effective treatment of patients and contains a major cognitive component, students should learn to empathise with their patients rather than just sympathise.[35] They need to learn that the emotional nature of sympathy may inhibit the process of treatment and thus influence patient outcomes. It is well recognised that affective responses can inhibit the objectivity of medical treatment.[36] It has been argued that some students may demonstrate sympathy rather than empathy and may deal with this emotion by adopting distancing strategies such as depersonalisation and intellectualising (a defence mechanism that employs reasoning to inhibit emotional stress) in order to reduce the negative feelings associated with stressful situations.[48]

Although the origins of empathy are not clear,[37] some participants believed that empathy is a personality trait that can be activated by training programmes. It has been documented that empathy, compassion and pro-social behaviour are interrelated and have been considered as representative of a particular personality disposition.[38,39] Although the natural qualities of a person's character may contribute to their ability to demonstrate empathy, our findings show that participants believed that factors exist that inhibit empathic behaviour among medical students, in particular in those who do not have well developed natural empathic skills. Studies have shown that such behaviours result in a decline in empathic behaviour and have a negative impact on patient care.[38,40] Although we did not address the association between empathy and personality, a study that found evidence in support of this association concluded that 'emotional empathy appeared to be related to differences in automatic somatic reactions to facial stimuli rather than to differences in their conscious interpretation of the emotional situation'.[41] It is of note that the perception of empathy as a trait rather than as a 'situation-specific state' is of great interest to social neuroscientists.[42]

As in previous studies, participants were keen to relate their experiences of clinical environments. For example, some studies have found that, in the context of a busy clinic, participants believed that some patients' personalities were associated with reduced provision of empathy.[8,43,44] Surgery was also seen as a barrier to the display of empathy. It is of note that although five participants in the present study had not yet chosen a specialty, the rest of the students were interested in 'people-oriented' specialties. Previous studies have shown that medical students who prefer people-oriented specialties (e.g. psychiatry) show higher levels of empathy than students who choose technology-oriented specialties (e.g. surgery).[16,19,20] Although communication skills teaching within the medical curriculum has improved and many students gain excellent results on their clinical courses, these findings show that the practice of empathy can be lost in the doctor–patient relationship. It could be argued that the methods used to select medical students need to be improved so that individuals who demonstrate inappropriate behaviour and attitudes can be screened out. School-leavers may have successfully studied humanistic subjects, but they do not necessarily have enough experience with patients or vulnerable people. Therefore, it has been suggested that older applicants who have experienced humanistic issues in their lives may perform better in this area than keen 18-year-olds.[45] However, further research comparing findings on undergraduate and graduate programmes is required to promote better understanding of whether greater life experience leads to higher levels of empathy in medical school.

Quantitative studies have found that empathy scale scores decline during medical training, especially in Year 3.[20,21] Nevertheless, a recent quantitative study did not support a decline in empathy among Year 3 students.[46] In addition, a study conducted in Japan showed that empathy was enhanced during medical education[13] and an analysis of a number of quantitative studies did not provide strong evidence that empathy declines during medical training.[25] Clearly, there does not appear to be any consensus on

whether empathy declines or is enhanced during medical school. In our study, participants had differing perceptions of the issue of declining empathy in the course of their progress through medical school. Some believed that their empathy had not declined, but that a high workload and exposure to the suffering of patients and their relatives resulted in a less overt demonstration of empathy. The literature supports the observation that sadness at prolonged patient suffering, long working hours and lack of sleep are causes of a decline in empathy.[47] However, a 5-year longitudinal study of 204 medical students showed that high levels of burnout and psychological distress did not make students feel more detached from patients, although this finding was not true of consultants.[48] It has also been argued that students come to medical school with a 'cargo of empathy and genuine love', but that the medical curriculum causes them to shift their focus towards a scientific rather than a humanitarian approach, which, in turn, leads to a decline in empathy.[12] This idea supports the experience of some students in our study, who observed that empathy declined during medical school as students came to regard patients as cases rather than as people. Therefore, this is an important issue for future research.

Participants predominantly agreed that empathy needs to be taught as a skill. Although evidence is accumulating that empathy can be taught, the effects of such teaching on social and cognitive behaviours have been less studied.[37] A non-medical study showed that empathy training impacted on self-regulation and self-control, and that improving these attributes provided the educational means to deal with social problems.[49] In this review of empathy training, experiential learning methods, including role-play, case scenario-based activities, problem-based learning and simulation, were shown to improve empathic ability in nurses.[49]

Although participants valued the importance of role modelling by clinical teachers, it can be argued that role modelling is only effective if the role models themselves are competent in dealing with expressions of emotion and in responding with empathy. Postgraduate training may be necessary to ensure role models demonstrate and value the empathic qualities we expect from doctors.

Limitations of the study

The benefits of qualitative research, such as that conducted in the course of this phenomenological study, include its provision of in-depth understanding of experiences elicited from a small group of participants. This understanding can provide theoretical foundations for further mixed-method and quantitative studies. Clearly, the findings of this study are limited to the experience of a group of medical students at one medical school. For further understanding, qualitative studies, particularly those using ethnographic methods, involving students, doctors, patients and their relatives should be pursued. Quantitative studies using neuropsychological methods, such as functional magnetic resonance imaging (fMRI) techniques, could also be employed to explore the cerebral correlates of empathic behaviour and thought. Empathy is an important issue for future research as it represents the 'foundation of patient care… and has always been and will always be among a physician's most essential tools of practice'.[23]

CONCLUSIONS

The purpose of this study was to elicit knowledge regarding perceptions of the nature of empathy from the perspective of medical students. Our findings suggest that the ability to display empathy depends on the possession of innate empathic ability and the provision of empathy education for students. The importance that the participants placed on clinical experiential learning, such as exposure to role models, as a source of empathic skills may suggest ways of enhancing medical students' empathic ability during medical school. Nevertheless, some participants experience barriers to the practice of empathy imposed by clinical teachers and these can suppress students' motivation to display empathy. Clinical teacher role models should value the importance of empathy in the context of patient care and by their behaviour provide inspiration and encouragement to students acquiring empathic skills. This important element of experiential learning should be considered by medical educators who plan clinical experiences for students. Within the clinical learning environment, students should be given the time and space to observe, acquire and demonstrate empathic skills. It is hoped that the optimising of the acquisition of empathic skills by medical students will result in improved patient care.

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