

Empathy and competence

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With health care workforce and systemic issues prominent in the public arena, attention has recently been focused on the training (and availability) of medical practitioners. In an environment of resource shortages, a “culture of contempt” within the news media, declining trust and respect in medicine as a profession, and the rise of consumerist sentiments,¹ it is not surprising that there is a *cri de coeur* for more humane medical care. In light of this, Haslam argued recently in the *Journal* that empathy should be sought for and supported as a trait in doctors, by selecting medical students based on empathic traits and by further enhancing this empathy in medical training.²

Defining empathy

Empathy is a complex construct. It comprises the ability to understand the perspectives and emotions of others and to communicate that you understand these perspectives and emotions. Baron-Cohen, in studies of autism (considered to be fundamentally a disorder of empathy), refers to the concept of a “theory of mind” of other people as being central to empathy.³ This theory of mind, which continues to develop with maturation, is a working model used by an individual to understand other people’s emotions and behaviour, through understanding that they have independent minds of their own.

Neuroscience research shows that children with autism have deficient functioning in the neural circuits relating to empathy.⁴ These circuits comprise mirror neurones, which subserve motor and behavioural imitation.⁵ Carr et al have proposed that we understand how others feel through a mechanism that allows for an “action representation” of the other person; that is, through the experience of “acting” the role of the person, at least in our minds.⁵ Thus, empathising relates to an invocation of the actions (eg, facial expressions, gestures) associated with the emotion displayed by the other person.⁵

There is a need for more research into the mechanisms and measurement of such neurophysiological substrates of empathy, which can help us further define and contribute towards a sounder construct of empathy. However, it is acknowledged that neurobiological research investigates mechanisms at a distance — both conceptually and practically — from thoughts and behaviour. Thus, the complexity of empathy warrants use of parallel approaches, including phenotypic description by use of self-rating questionnaires or observer rating scales, in a manner analogous to studies of depression, a similarly difficult to define construct. We should view these studies as observational signposts towards further refining the concept of empathy, in the same way we use diagnostic scales in psychiatry as a framework for communication rather than as reified understandings. While there is no consensus yet on individual components of the construct of empathy, researchers seek convergence on commonalities in phenotypic characterisation of empathy by these methods.

Assessing empathy

Empathic behaviour is currently assessed by observational and self-rating scales, such as the Jefferson Scale of Physician Empathy — a self-report Likert scale consisting of 20 statements.^{6,7} One

ABSTRACT

- There has been a call to include empathy as a selection criterion in medical training.
- Empathy is a complex construct currently assessed by self-rating and observational scales, which may be complicated by the subjectivity of such measurements.
- Neuroscientific research into disorders of empathy such as autism should be encouraged to help further refine the evolving construct of empathy.
- Empathy may be more common in females, and selection for higher empathy may discriminate against males unless sex-specific adjustments are included in selection criteria.
- Physician empathy may lead to greater patient satisfaction and confidence in physicians, but more evidence is needed to support links to physician competence. In contrast, academic performance and conscientiousness have been clearly linked to physician competence.
- Competence and empathy may be independent qualities developed by different aspects of medical training.
- Provision of better work conditions and environments for physicians may forestall erosion of empathy, reducing the need to predict and enhance its development.
- Empathy should be valued in medical students and doctors, but more research is needed into the nature, assessment, and correlates of empathy before its adoption as a selection criterion for medical students.

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study defined empathy as “a capacity and motivation to take in patient/colleague perspective, and sense associated feelings — the ability to generate a safe/understanding atmosphere”, with participating patients and doctors rating the degree of empathy thus defined on a four-point Likert scale.⁸ Other studies have used the Interpersonal Reactivity Index,⁹ a 28-item scale with four subcategories measuring different dimensions of empathy, such as “perspective taking”, “empathic concern” and “personal distress”.¹⁰

There are necessarily value judgements, cultural considerations and cognitive styles that may impact upon observational or self-rated assessment of empathy. For example, one of the self-rating statements on the Jefferson Scale is: “Reading nonmedical literature and enjoying the arts can enhance the physician’s ability to render care”.⁶ Perhaps it may, but is this necessarily empathy, or is it an interest in life? Does this measure what we really mean by empathy, or are we instead assessing the *perception of empathy* by the physician, patient or the public? The perception of empathy is not solely determined by the physician’s characteristics, but equally may lie in the personal characteristics and expectations of patients; curiously, this aspect has not been much explored. Rather, the focus is on what patients consider to be the degree of empathy exhibited by a doctor, which may simply be based on a doctor’s more open and reassuring communication style.⁸ However, there is some evidence of convergence between physicians’ self-reported measures of empathy and their empathic behaviour as perceived by patients.⁷

Empathy and gender balance

What do we know about the distribution of empathy within the human population? Baron-Cohen has proposed, with increasing scientific support, that women are generally more empathic than men, and that this relates to differences in brain architecture and neural circuitry between the sexes.³ More controversially, he has proposed that men “systematise” — that is, men have a brain architecture that predisposes them to be better than women at the relatively unemotional “drive to understand a system and build/influence one”, be it natural, social or abstract.³ Such systematising skills are useful in understanding the complex systems of the human body and health care.

In their study of medical students, Hojat and colleagues found that women scored significantly higher on the empathy scale.⁷ Therefore, if we select students based on empathy, we may well accelerate the decline in the number of males being selected into medical school, with the associated loss of gender balance this would entail (current estimates indicate 60% of medical students are female¹¹). Sex-specific adjustment of empathy criteria may be required to avoid this gender bias. Maintaining gender balance may be important in ensuring continuity of medical care, due to the preference of women with families for part-time work (although, admittedly, this is also becoming a male preference), and for including skills such as systematising, arguably found more often in males, in medical care.

Empathy and physician competence

Does empathy correlate with competence? On this question, the literature is relatively scarce, and more research is needed to add to the building body of evidence cited by Haslam.² Empathic behaviour has been shown to relate to greater patient satisfaction and confidence in doctors.¹²⁻¹⁴ However, Hojat et al found empathy (as assessed by the Jefferson Scale of Physician Empathy) correlated with ratings of global clinical competence but not with objective measures of knowledge (the United States Medical Licensing Examination and the Medical College Admission Test).⁷ Silvester et al noted that medical assessors of physician empathy did not rate reassurance as necessarily being empathic,⁸ showing that physicians and patients may regard different behaviours as empathic.

This is interesting evidence, but currently not sufficient to justify medical student selection on the basis of empathy for competence reasons. There is a possibility that those *perceived as empathic* score more highly on clinical examinations, whether they are truly empathic or merely seem so, based upon the constructs used. Thus, assessors may be rating higher those who seem more personable or attractive, which is something entirely different — a response of the observer to a more favourable demeanour (which is well known in legal practice¹⁵).

There is also literature on other personality characteristics predicting success in medical school and in the early careers of physicians. Previous academic performance is a good predictor of achievement in medical training.¹⁶ Conscientiousness (being hard-working and organised) correlates with medical school performance,¹⁷ as it does with performance in other professions and life in general. A British study found a robust correlation of school academic achievement (A level grades) with career performance over a 20-year period, predicting the time taken to gain specialist qualifications, enter general practice, and leave medicine.¹⁸

So, should we value empathy in doctors? The evidence cited by Haslam² and above suggests we should. In seeking to link empathy to competence, the value of competence in physicians has been assumed. However, empathy and clinical competence may be independent qualities. West et al showed that medical resident competence, as assessed by a structured examination, increased over a year of training, while empathy declined.¹⁹ Based on these data, they proposed that empathy and competence may be independent, due to the development of each in different aspects of medical training.¹⁹ Indeed, empathy may be eroded with experience and thus impact upon competence.^{9,19} Burnout as a consequence of the turmoil in health care systems may also contribute to erosion of empathy.^{20,21} Better supervision, work conditions and environments may forestall the erosion of empathy, thus reducing the need to predict which medical students will be most empathic.^{22,23}

It is timely to address the need for empathy during a period of rapid change in the dynamics of health care provision. Rigorous neurobiological and neuropsychological research into the nature, measurement and outcomes of empathy should be encouraged. We need to be able to better assess the importance of empathy in our doctors, how it can be measured, and whether it relates to competence — and then, how and if it can be developed further. Both empathy and competence may be necessary, but they are not in themselves sufficient qualities for good clinical care. We should continue with current medical student selection policies until more evidence accrues to justify incorporation of empathy as a criterion — especially if we seek to relate it to competence.

Competing interests

None identified.

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