Geo-sociocultural influences on empathy

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Since the turn of the century, there have been a growing number of studies of empathy among healthcare professionals,[1,2] with many reporting an associated improvement in objective and subjective health outcomes for patients.[3,4] It is not surprising then that medical educators have been concerned by early studies suggesting that empathy declines during medical training.[5] Some have attributed this apparent decline to measurement artefact.[6] More recently, others have suggested that empathy changes are in fact indiscriminate – with some studies showing a slight increase and some a decrease during undergraduate training.[7]

In this issue, Ponnamperuma et al. add a new perspective on this conundrum.[8] They examine empathy change during medical school by geographical region, concluding that it is not patternless but follows 'a discernible pattern or trend within similar geo-sociocultural locations or regions.'[8] Broadly speaking, empathy appears to decline among medical students in the Western world and increase among medical students in the Eastern world. The changes are small and at least one study in each region demonstrated a change in the opposite direction to the general trend for that area. The suggestion, however, that there may be geo-sociocultural influences on empathy change may help us to understand the conditions necessary to foster empathy during medical training and seems to be a fruitful area for future research. What could this mean for medical educators, and how should researchers tackle the challenge of exploring geo-sociocultural differences in such a complex construct as empathy?

It is difficult to know how strongly to adopt the conclusion that there are geo-sociocultural influences on empathy because there has been so little research into such effects, with most studies of empathy in health professionals focusing on North American populations. Of course, cultural context cannot by itself determine how an individual relates to others, because individuals within a culture adhere to shared values to differing extents.[9] That said, there is theoretical justification to propose that cognitive empathy scores would be higher in regions where holistic cognitive processes predominate. Holistic cognitive processes, common in the East, are characterised by much greater attention to context and

relationships than analytical cognitive processes, common in the West.[10] Cognitive empathy, however, as measured by the Jefferson Scale of Physician Empathy (JSPE), has been studied in more than 70 countries with relatively small differences observed and no obviously discernible pattern at present.[4,8,11] Given that a recent systematic review of medical literature found that 85% of articles described empathy as a cognitive ability,[7] further exploration of cross-cultural variation in cognitive empathy will be of particular interest to medical educators.

While this study is largely representative of the medical literature, given its focus on the cognitive dimension of empathy,[12] the construct of empathy is generally viewed in the broader psychological literature as being multidimensional, with four elements: cognitive (the ability to imagine oneself in another's place), affective (the ability to feel with another), behavioural (the ability to respond to another) and moral (the ability to attribute moral validity to another's views or actions).[13–15] It is this multidimensional view that might help one better understand geo-sociocultural associations with empathy since it has been proposed that more collectivist societies – in which members tend to value the needs of society above their own individual needs – exhibit higher levels of multidimensional empathy because it helps individuals adapt more closely to their society.[16,17] This is borne out by a recent study of over 100,000 individuals across 63 countries, which demonstrated that collectivist regions scored more highly in assessment of multidimensional empathy compared to individualist societies, in which members tend to value their own needs above those of the community.[18] However, the evidence is mixed, perhaps due to the use of different measurement tools.[19]

Such variability in measurement practices constitutes one of the major challenges in exploring cultural differences in empathy during training. Not all researchers are measuring the same thing, because of the use of different instrument. Therefore, aggregating results across studies that use different scales or sub-scales to measure empathy constitutes a significant methodological problem that impacts our ability to have confidence in Ponnamperuma et al.'s conclusions.[8] Investigators can

choose from an abundance of measurement tools. Two of the most widely used are the previously mentioned JSPE and the Interpersonal Reactivity Index (IRI).[20] The IRI was developed for the general population, and is built on the multidimensional conception of empathy,[21] while the JSPE was developed specifically for healthcare students and professionals, and is built on a predominantly cognitive construct of empathy.[22] Both scales have been used in a broad range of geo-sociocultural contexts.[20,23] There is an adapted version of the IRI which omits the domain "Personal Distress," arguably the least applicable to the healthcare setting due to its inclusion of items such 'When I see someone who badly needs help in an emergency, I go to pieces.'[21] This three domain scale has demonstrated cross-cultural validity.[20] Nevertheless, both the IRI and JSPE are self-report scales that only indirectly correlate with actual behaviours,[6] and may not reflect the inherently relational nature of empathy – arguably best measured by patients, although scores on the JSPE have been seen to correlate with assessment by patients and senior colleagues.[23]

In sum, Ponnamperuma et al.'s characterisation of empathy as a 'locally construed global construct' opens up some intriguing new avenues of enquiry, but it will be a difficult characterisation with which to grapple.[8] Current literature does indicate that multidimensional empathy varies across regions and cultures, although the evidence that cognitive empathy does so is less clear. Higher empathy scores in Eastern medical students is theoretically plausible and potentially attributable to collectivist societies. Nevertheless, such geo-sociocultural differences do not explain any dynamic change in empathy scores during training even if they do prove to help us understand why a static measurement in the Eastern world may be higher than in the Western world. Ponnamperuma et al. do not offer a convincing mechanism to explain such change, but do provide a spur to further investigation. As this issue is pursued, it will be critical to keep mind of a variety of cautions: (1) As with any other form of scientific enquiry, future research should rigorously define its construct, choose a scale that aligns with it, and use the scale to test theory-driven hypotheses. (2) Self-report scales carry the significant disadvantages of any form of self-assessment,[24] and their validity is questionable unless triangulated with third person assessments. (3) Studies that aggregate the results of different scales should interpret

their findings with caution. And, (4) Ultimately, while the global construct of empathy remains unclear both conceptually and operationally, we must remain conscious of the practical value inherent in clarifying this concept – since the infinite number of things that might have an impact on empathy will conceivably make the 'locally construed' versions of empathy very hard to tease out meaningfully.

Pull-out Points

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References