Care and curriculum

Does clinical empathy decline during medical education?

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ABSTRACT

BACKGROUND: Clinical empathy has been repeatedly shown to increase patient satisfaction and improve clinical outcomes; therefore it forms an important cornerstone of the physician-patient therapeutic relationship. While some studies have shown that empathy in medical students decreases over the course of their education, other studies have contested these findings.

PURPOSE: This paper reviews studies and relevant literature in order to explore the relationship between medical education and clinical empathy, and in particular, the difference in results between those studies that demonstrated a decline in clinical empathy and those studies that did not.

CONCLUSION: Study design and methodology, differences in clinical culture, and differences in curriculum were identified as three possible influences that explain the lack of consensus in the literature. This paper recommends a twofold approach to further research in the field of clinical empathy development. First, future studies examining this phenomenon should focus on longitudinal designs that incorporate objective measures and patient factors rather than relying exclusively on cross-sectional studies utilising self-assessment. Second, medical schools should be encouraged to adopt or develop techniques to assess the clinical empathy of their students and implement solutions to mitigate a decline in empathy if required.

INTRODUCTION

Clinical empathy, or “the ability of the physician to understand a patient’s experience, to communicate and confirm the understanding with the patient and then to act in a helpful and/or therapeutic manner”,¹ is central to fostering therapeutic relationships with patients and their support network.² Literature reviews indicate that empathy positively impacts patient satisfaction,³⁻⁵ decreases perceived distress and ultimately leads to improved clinical outcomes.^{5,6} Moreover, empathetic physicians encourage patient disclosure of symptoms leading to enhanced diagnostics^{4,7} as well as improved adherence.³⁻⁵ Conversely, a lack of empathy has been shown to have negative effects on patient care.⁸

Unfortunately, several cross-sectional and longitudinal studies following medical students through their years of study demonstrate that medical students show a decline in self-reported empathy, most noticeably after their clerkship year and continuing through residency.^{6,7,9-11} On the other hand, studies confirming an empathy decline during medical education seem to be localised to the Americas, as cross-sectional studies conducted in Iran¹² and Pakistan⁴ find no variation in empathy based on student year, and studies in Japan,¹³ Korea¹⁴ and Portugal⁵ find an increase between

early and later year students. These studies may cast doubt on the notion that empathy declines over the course of medical education, but they also point to cultural or curriculum-based factors that may explain the difference in results.

Given the importance of empathy in physician-patient encounters, and given the uncertainty in the literature concerning the nature and severity of the alleged decline of empathy in medical students, this paper will evaluate the research to assess whether or not clinical empathy is at risk of decline in medical students.

EVALUATION OF THE RESEARCH

Analysis of the available literature revealed three main themes which may be contributing to the lack of consensus regarding empathy decline in medical students: study design and methodology, differences in clinical culture, and differences in curriculum. Lessons learned from these areas may strengthen study methodology and may be used to enhance medical curriculum where necessary.

Study Design and Methodology

Any discussion regarding empathy is complicated by the ambiguity of the term; this has made the relevant research difficult to navigate¹⁵ and created challenges when designing psychometric tools to measure it. In developing such measures, one must consider the threats to construct validity that can arise due to variations in how cultural communities define empathy.^{12-14,16}

For example, it has been suggested that Japanese social cues rely less on gestures and facial expressions when compared to their American counterparts,¹³ and as such, some standards of empathic communication may not be perfectly translatable cross-culturally. Great care must be taken in developing tools so that they account for such differences.

It is worth noting that the studies that did not demonstrate a decline were cross-sectional in nature, and could be subject to cohort effects; longitudinal studies following a class of medical students throughout their education would provide a more robust data set from which to draw further conclusions.^{4,5,13}

Finally, all of the studies in question utilised self-report questionnaires and many used a version of the Jefferson Scale of Physician Empathy (JSPE) to construct those questionnaires. Even though the JSPE was designed specifically to measure clinical empathy, and has been reported to correlate with patient/observer scores, one must consider the role of social desirability bias when interpreting self-reported results.^{4,14,17}

Differences in Clinical Culture

Both physician and patient expectations play an important role when measuring clinical empathy. For example, there is much in

the literature to suggest that patients acclimatized to an East Asian clinical context are more comfortable sharing a vertical relationship with their physician than their American counterparts, who may view such an arrangement as showing a lack of empathy.^{14,18} Behaviour in one cultural context may be seen as lacking empathy while the same behaviour in another may be considered satisfactory or laudable. More work needs to be done understanding the cultural differences in patient expectations before interventions can be designed; interventions that may increase a patient's feeling of physician empathy in a traditional American context might instead create the appearance of "uncertainty, lack of competence, and weakness"¹⁸ in a traditional Japanese or Korean context. This is of particular note when patients carry their expectations across borders, and physicians must be aware of their own cultural expectations, as well as those of their patient.

Interestingly, baseline empathy scores for medical students were lower in the Japanese and Korean studies, compared with American and Italian medical students.¹⁸ While the Japanese and Korean students showed an increase in clinical empathy throughout medical education, physicians from these populations scored lower on empathy measures overall than physicians from the American and Italian populations. Though outside the scope of this paper, it would be worth investigating the shift of both groups compared to their respective general populations to better understand the relationship between cultural factors and clinical empathy.

The clinical culture of subspecialties can also influence empathy decline. In the studies where a decline was noted, students that indicated a preference for people-oriented specialties (eg family medicine, internal medicine and psychiatry) had higher levels of empathy at admission and experienced less decline in empathy than those who gravitated towards technology-based specialties (eg radiology and surgery).^{10,17,19} This difference may be related to the emphasis that people-oriented specialties place on interpersonal communication, which may reduce patient objectification.²⁰ Another related factor may be the increased reliance on technology in certain fields, which shifts the focus from patients to test results.^{18,21}

Differences in Curriculum

Each of the aforementioned studies focused on a single school, and thus the results may not be generalisable to all schools of that country or region. It has also been suggested that the academic culture of a school itself may play a role in the results obtained. For example, a highly competitive school with an emphasis on research may attract certain types of students, thus skewing the baseline results. This may have been the case in the study conducted at Seoul-National University College of Medicine (SNUCM), which is one of the top-ranking medical schools in Korea.¹⁴

Curriculum itself may play a role in fostering clinical empathy. The second year students evaluated during the study conducted in Pakistan received more patient interaction, history-taking training and examinations designed to evaluate professionalism than their American counterparts,⁴ and professionalism has been shown to be positively correlated with clinical empathy.²² This is not an isolated effect: of the four studies that do not show a decline, all have similar curriculum profiles in regard to patient-centred and humanistic

training. For example, third year students at SNUCM are required to take psychiatric courses and higher empathy scores in the following year may be a result of techniques learned during these courses.¹⁴ The first and second year students surveyed at Okayama University in Japan spent only one day a week studying medical science while the rest of the curriculum was focused on other subjects from the arts and humanities; this early academic diversification may contribute to the eventual rise of their empathy scores later in their academic careers.¹³ Lastly, students surveyed in the Portuguese study were exposed to a curriculum emphasising patient-centred healthcare, humanities training, interpersonal communication skills, clerkships in urban, sub-urban and rural communities, and frequent assessments of professionalism.⁵

Based on their study of medical students at the University of the West Indies, Youssef et al (2014) theorised that a decline in empathy during later years may be attributable to an increase in stress caused by novel challenges that typically arise during this period of study.²³ This theory correlates well with a study by Brazeau et al (2010) that demonstrated a link between medical student burnout and lower empathy scores.²² This indicates a potential point of curricular intervention for schools noting a decline in the empathy of their students over time.

PRESCRIPTIONS AND CONCLUSIONS

Based on the evidence that we have presented here, whether or not a study demonstrates a decline in empathy appears to be influenced by the sampling/study methodology used as well as the clinical culture and curriculum to which students are exposed.

The first way to approach these findings is to focus on improving the tools and methodology underlying clinical empathy research. Some improvements could include using controlled or randomised controlled studies, utilising longitudinal designs, measuring patient factors or skills-based outcomes rather than relying solely on self-assessment, and incorporating objective measures from the patient perspective to assess whether results are reflective of future performance (eg 10-item Consultation and Relational Empathy questionnaire).^{3,6,24} Critically, psychometric tools such as the JSPE must continue to be validated cross-culturally and against other established measures to ensure the data collected is reliable and predictive.

The second way to approach these results is from an institutional perspective. Since few contest the value of clinical empathy, the goal should be using robust tools to: measure empathy at the institutional level, analyse potential weaknesses in the curriculum, and validate interventions designed to increase empathy. It is likely that curriculum and the wider clinical culture influence whether or not empathy declines, remains unchanged, or increases; therefore medical schools experiencing a decline should look to schools where such a decline is not present for methods to manage and enhance the clinical empathy of their students.

While the data on empathy change in medical students does not currently allow for definitive conclusions, further research will not only provide greater insight into this phenomenon, but also raise awareness of the importance of clinical empathy for future physicians.

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