Original Research Paper

The Power of Kindness: A Cross Sectional Measurement of Medical Student Empathy

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ABSTRACT

Background: One of the most important factors in physician-patient relationship is empathy. Prior studies have suggested that there is decline in empathy with clinical training. The purpose of this study was to measure and examine student empathy among medical students.
Methodology: This was a cross sectional study at Father Muller medical college and hospital among undergraduate medical students. The Jefferson Scale of Physician Empathy-Student Version (JSPE-S), consisting of 20 questions with a total score ranging from 20 to 140 was administered to the subjects.
Results: 200 students participated in the study. The first-year medical student class had the highest empathy scores, whereas the fourth-year class had the lowest empathy scores. Measured empathy differed between second- and third-year classes, corresponding to the first year of clinical training. Empathy appears to decrease from the first-year to fourth year.
Conclusions: Empathy scores of students in the preclinical years were higher than in the clinical years. Future research is needed to confirm whether clinical training impacts empathy negatively, and, if so, whether interventions can be designed to mitigate this impact.

Key words: Empathy, Medical Students, Physician Empathy.

Introduction

Empathy is the cornerstone of the physician – patient relationship [1]. Empathy promotes patient and physician satisfaction, contributes to patient enabling and participation and also improves patient outcomes. It improves the quality of data obtained from the patient, improves physician's diagnostic ability and decreases rate of miscommunication [2]. The current study aimed to measure and examine student empathy among medical students.

Methodology

This is a cross sectional study conducted at Father Muller Medical College and ospital among undergraduate medical students in 2020.

Study participants: All incoming medical students and those completing first- through fourth-year medical school in 2020 were eligible to participate in the study.
Study design: One author distributed the self-administered, anonymous surveys to the medical students between March and July 2020.

The primary measure of empathy, the Jefferson scale of physician empathy-student (JSPE-S), is a 20-item questionnaire measuring components of empathy among health professionals in patient care situations [1]. Medical students were divided into 4 groups based on the year/phase of MBBS and were asked to complete the JSPE-S (Jefferson scale of physician empathy) questionnaire. This questionnaire consisted of 20 statements. Responses were scored using 7-point Likert scale (strongly agree:7, strongly disagree:1) [2]. Analysis was done under 3 components like component I-perspective taking, component II-compassionate care, component III-walking in patient shoes.

Components	**1st year**	**2nd year**	**3rd year**	**4th year**	**P value**
Perspective taking (PT)	5.9	5.8	5.76	5.72	0.72
Compassionate care (CC)	3.6	3.3	3.15	3.12	0.23
Walking in patient shoes (WS)	5.5	4.9	4.33	3.8	0.2

Table: Scores of all students on various sub scales of the Empathy scale

Results

Overall response rate was 75%. Out of the respondents, 75% (n=27) of them reported empathy as the important therapeutic skill for successful treatment. Analysis of 3 components showed highest average among 1st year MBBS students with PT of 5.9, CC of 3.6 and WS of 5.5 and lowest average among 4th year MBBS students with PT of 5.7, CC of 3.1 and WS of 3.8 as shown in the table.

Discussion

In our cross-sectional study, empathy was found to increase during the first year of medical school but falls after the third year (first clinical year) and remains down through the final year of medical school [5]. Our results were consistent with previous studies, suggesting that empathy decreases after clinical training in medical school.

Few studies offer conflicting results with respect to their impact on empathy. One group measured an increase in empathy in students who participated in role-playing and simulated patient scenarios. In contrary, an entire medical school class taking a 4-month patient-interviewing course designed to teach communication and emphasize empathy did not show an improvement in the latter. A recent review suggested that empathy may be amenable to a range of interventional strategies. Lastly, student course evaluations and feedback suggest that students respond positively to these educational interventions and perceive themselves to be more sensitive and empathic toward their patients from such activities despite a lack of more objective outcomes.

Another possible explanation for the observed decrease in empathy may be due an acculturation phenomenon [7-8]. Student and doctors experience a wide range of emotions and stresses and may struggle to maintain their empathy. This would suggest that to remain effective for patients, students and trainees become less empathic as they face emotionally challenging and draining situations. Outcome measures to assess such a hypothesis should be included in future research.

Limitations of our study were that our measurement of empathy, the JSPE-S, is self-reported, which measures medical students' orientation to empathy and is not correlated with behaviour. Studies of practicing physicians have noted that JSPE score difference is as great as 11 between practicing psychiatrists and anaesthesiologists [6].

Lastly, we acknowledge that attendance, survey participation, and possibly response may be influenced by the situations or events during which we obtained the data [9]. Although our study is limited to one medical school, we feel that our results can be generalized to medical schools that have a traditional structure similar to ours.

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Acknowledgements: Nil
Conflict of interest: Nil
Funding: Nil