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## BRIEF COMMUNICATION

# Medical Students' Perspectives on Clinical Empathy Training

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## A B S T R A C T

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**Context:** There is a need for studies specifically addressing the barriers to empathy training from the perspective of medical students. The objective of this study was to evaluate attitudes of 3<sup>rd</sup> and 4<sup>th</sup> year medical students regarding their training in clinical empathy at a public teaching hospital and medical school.

**Methods:** A questionnaire assessing students' satisfaction with, and opinions on, empathy training, as well as barriers to training, was distributed during the last quarter of the year.

**Results:** Of 188 eligible participants, 157 (84%) responded. Approximately one-half of the respondents said empathy could be taught. Eighty-one percent of respondents felt that their empathy had increased or stayed the same during their training. When asked about barriers for learning empathy, the majority of respondents chose time pressure and lack of good role models. Respondents rated breaking bad news, talking to patients about medical mistakes and taking care of dying or demanding patients as areas in need of more empathy-related training.

**Conclusions:** Although the majority of students were satisfied with their training of clinical empathy, our study highlights the need for innovative methods to address concerns regarding barriers to practicing empathy, as well as the need for more training in how to demonstrate empathy in challenging clinical situations.

**Keywords:** Barriers, empathy training, medical education, questionnaire

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## Context

Can empathy be taught and measured? Does empathy decline over the course of medical school? What are the barriers to training clinical empathy? The answers to these questions are unclear. What is clear, however, is that physician empathy significantly improves patient satisfaction and adherence to medical recommendations, and reduces medical-legal risks<sup>1,2</sup>. Practicing empathy may be beneficial to physicians as well. Resident physicians with higher psychological well-being also have higher empathy scores<sup>2</sup>, and it has been suggested that empathetic patient-doctor encounters can decrease physician distress and improve well-being and judgment<sup>3</sup>.

A decline in student empathy in medical school has been shown in several studies<sup>4,5</sup>. Although several educators have studied the effects of different strategies to enhance clinical empathy among medical students during pre-clinical and clinical years<sup>6,7</sup>, the inclusion of empathy training in the formal curriculum remains challenging. In this study, we wanted to examine students' perceptions about the effectiveness of our particular curriculum in training empathy.

*Program objectives and structure:* In the five years prior to the study period, our school developed a strong longitudinal curriculum emphasizing the patient-doctor relationship, communication skills training and empathy. Each of these areas had specific learning goals and objectives. Regarding empathy, the purpose of the curriculum was to ensure that all students became proficient in understanding four essential components of empathy: a) **emotive**, the ability to imagine patients' emotions and perspectives; b) **moral**, the physician's internal motivation to empathize; c) **cognitive**, the intellectual ability to identify and understand patients' emotions and problems; and d) **behavioral**, the ability to express understanding of those emotions and perspectives.

Across all four years of the curriculum, lectures, workshops and required course components were designed using methods of reflection, close observation of self and others (including role models) and case-based problem-solving to enhance attributes of empathy such as perspective-taking, appreciation for multiple points of view, cognitive understanding and emotional resonance<sup>7</sup>. These were linked to courses such as Anatomy in the first year and the Medicine, Obstetrics-Gynecology, Family Medicine and Pediatrics clerkships in the third year.

Examples of various curricular practices incorporated into this curriculum included personal writing about a family illness experience, point-of-view writing from a patient's perspective, role playing and creating original works using various artistic media as a means of reflecting on patient and physician experiences. Of particular importance was a systematic effort to help students translate abstract concepts and theory into concrete attitudes and behavior in clinical settings. This curriculum is summarized in Table 1.

In addition, a core group of outstanding teachers worked with students in small groups throughout their educational experience. This group included between 12 to 15 full-time physician faculty, primarily individuals from primary care specialties, who were selected by the Patient-Doctor course directors for their general clinical excellence, exceptional doctor-patient relationships and commitment to teaching. Faculty development sessions for these key clinical teachers encouraged them to consider how they modeled and reflected upon empathic interactions with patients<sup>6</sup>. This group of faculty was responsible for integrating issues of empathy into both small group activities, such as interviewing standardized patients and discussion of clinical experiences during the first two years of training, and also during attending and ward rounds in years three and four.


**Table 1: Empathy-related curriculum at the University of California Irvine School of Medicine, United States**

| Year   | Empathy-related course components/classes   |   |  |  |  |
|--------|---|---|--|--|--|
| Year 1 | Large-group didactic session focused on <b>patient/doctor relationship, communication skills and empathy</b> (2 hr/yr <b>R</b> *)                                   | Small group exercise to develop empathy for <b>cross-cultural views of illness</b> /expectations for treatment (1.5 hr/yr <b>R</b> )<br>Small group exercise to develop empathy through reflection on <b>personal/family illness experience</b> (1.5 hr/yr <b>R</b> ) | <b>Communications workshop</b> to develop specific interactive and behavioral skills (4 hr/yr <b>R</b> )                                       | <b>Literature and Medicine:</b> used writings by patients and physicians to enhance empathy for patients' and doctors' experiences around illness (10 hr/yr <b>E</b> *)                  | <b>Anatomy Creative Projects:</b> used creative projects to reflect on experience of dissection, especially developing empathy for cadaver (3 hr/yr <b>E</b> )<br>Enrolls 30% 1 <sup>st</sup> yr class |
| Year 2 | Large group session/breakout groups used <b>illness-related poetry</b> to focus on patients' experiences and explore various empathic responses (2 hr/yr <b>R</b> ) | <b>Reflective Reading and Writing</b> – continuation of Literature and Medicine elective (10 hr/yr <b>E</b> )   |  |  |  |
| Year 3 | <b>Introduction to Clerkships</b><br>Refresher mini-course on communication skills, doctor-patient relationship and empathy (2 hr/rotation <b>R</b> )               | <b>Medicine Clerkship</b><br>Students wrote first-person point-of-view essays from the perspective of a memorable or difficult patient; small group discussion (2 hr/rotation <b>R</b> )  | <b>Ob-Gyn Clerkship</b><br>Student essays examined moral basis for empathizing with patients; small group discussion (2 hr/rotation <b>R</b> ) | <b>Family Medicine Clerkship</b><br>Students wrote essays to explore developing empathy for different cross-cultural views of illness; small group discussion (2 hr/rotation. <b>R</b> ) | <b>Pediatrics Clerkship</b><br>Students used creative media to reflect on how to better connect with and understand patients/families; small group discussion (2 hr/rotation <b>R</b> )                |
| Year 4 | <b>Art of Doctoring</b><br>Addressed emotional, cognitive, moral and behavioral aspects of empathy (80 hr/yr <b>E</b> )<br>Enrolls 30% 4 <sup>th</sup> yr class     |   |  |  |  |

\*R = required; E=elective

## Methods

The study was conducted at the University of California, Irvine School of Medicine on the West coast of the United States. Class size is 94 students annually, with 50% women, 45% to 50% white, 30% to 40% Asian and 10% to 15% other ethnicities. Our questionnaire was designed based on interviews with several medical students who identified important topics in training clinical empathy. These students also completed variations of the questionnaire and provided verbal feedback.

The final questionnaire, consisting of twelve questions regarding the training of clinical empathy, was distributed to 3<sup>rd</sup> and 4<sup>th</sup> year medical students at the start of required classes for each group, after having obtained the instructor's permission. Clinical empathy, including the four components noted earlier, was defined in the questionnaire. In the first part of the survey, questions were asked about students' perceptions of their own empathy, whether their empathy had changed over the course of training and if they were satisfied with the empathy training they received. The last part of the survey asked about barriers to training of empathy and how



the training could be improved. Data were analyzed using JMP statistical software by non-parametric methods. A  $p$ -value of  $<0.05$  was considered statistically significant. This research was approved by our Institutional Review Board.

## Results

Of 188 eligible participants, 157 (84%) responded: 49% were women. Response rates for 3<sup>rd</sup> and 4<sup>th</sup> year medical students were 78% and 88%, respectively. Fifty-five percent of respondents felt empathy could be taught. Eighty percent were fairly or very satisfied with their training in clinical empathy. We found no statistically significant difference in level of satisfaction comparing empathy training in the first two years and last two years of medical school. Eighty-one percent of respondents felt that their empathy had increased or stayed the same during their training. The level of satisfaction and changes in empathy levels were not associated with either gender or specialty of interest.

When asked about the empathy component that needs to be more emphasized in training, students chose the behavioral component most frequently (42%), followed by moral (34%), cognitive (34%) and emotive (28%) components. The two most common barriers identified to successfully learning empathy were time pressure and lack of good role models, chosen by 64% and 34% of students, respectively. Of 150 students who responded to the question about areas in need of additional training, dealing with dying patients and breaking bad news were chosen by 44%, followed by dealing with demanding patients (37%) and disclosing medical errors (33%).

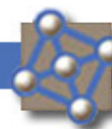
Suggestions that ranked highest for training of clinical empathy were sessions involving one-to-one (59%) or small groups (45%) with preceptors, accompanying patients to clinic visits (57%), being admitted to the hospital as patients (51%) and interpersonal skills workshops (50%).

## Conclusions

Our study demonstrates that the majority of 3<sup>rd</sup> and 4<sup>th</sup> year medical students enrolled at our medical center was satisfied with their training in clinical empathy and did not think that their empathy had decreased compared to when entering medical school. We attribute this finding, at least in part, to the inclusion and strength of empathy training in all four years of the formal curriculum, as studies at other institutions, using different self-report questionnaires, have found significant decline in medical student empathy, especially after students began their clinical rotations<sup>4,5</sup>.

Interestingly, although approximately one-half of our students responded that empathy could not be taught, the majority was satisfied with the training in this area provided in the curriculum. Students who thought empathy could be taught apparently valued the training they received; students who thought empathy could not be taught either liked the training anyway, or reported themselves satisfied because they did not think the training mattered much. Students may also have interpreted the question as only referring to didactic as opposed to experiential teaching.

Students also identified barriers to learning about empathy as well as ways to improve training. As reported in other studies, lack of having attending and resident role models<sup>8,9</sup> and time pressures<sup>3,10</sup> were described as major barriers to empathy. Available evidence suggests that positive role models exert a powerful influence on students. The largest number of our students expressed a need for more training with regard to the behavioral component of empathy, which we interpreted to mean the translational component from



theory to practice. Although our curriculum emphasized this aspect of training and provided faculty development in this area, this finding suggests that more attention needs to be paid in helping students move from passive understanding of the patient's experience to specific behavioral responses, especially in stressful situations.

Both 3<sup>rd</sup> and 4<sup>th</sup> year medical students chose discussions with preceptors, accompanying patients to clinic visits, being admitted as patients and interpersonal skills workshops as preferred methods of empathy training. The literature on comparing different teaching methods of empathy is scant, but there is consistent support for the effectiveness of role modeling<sup>11</sup> and debriefing sessions with preceptors<sup>12</sup> as ways of promoting interpersonal skills. These two approaches (as well as the use of interpersonal workshops) already existed in our curriculum. However, the high ranking of other innovative techniques, such as accompanying patients on medical visits, suggests that students wanted additional curricular opportunities to learn empathy.

In addition, students expressed the need for empathy training in special situations, such as giving bad news to patients, disclosure of medical errors and dealing with complicated or dying patients. A few reports have identified similar clinical situations as empathically challenging and have incorporated training techniques to address them<sup>13,14</sup>. Although our curriculum already included empathy teaching about specific stressful situations, clearly such topics deserve greater attention.

The results from our study should be interpreted within the context of several limitations. First, we relied on student self-assessment rather than using an objective means for measuring empathy. Like any other questionnaire study, the participants' answers may not be in accord with what they actually do, because they wish to represent themselves in a socially acceptable manner. Second, we did not correlate the direct effect of the empathy training offered in our curriculum with the levels of satisfaction or barriers. Third, we did not examine the effects of ethnicity and socioeconomic status on the students' attitudes toward empathy. Finally, our assessment was restricted to a single medical school. Our study population may not be representative of other medical schools with different curricula. Although different curricula may vary in effectiveness, a large proportion of medical schools worldwide face a similar challenge in terms of effectively incorporating empathy into their training.

In summary, our study suggests that the majority of the medical students were satisfied with their training in empathy which emphasizes reflection and small group discussions. However, our curriculum can be further strengthened by targeted interventions that include training in expressing empathy by effective role models, especially in stressful and challenging situations. Future directions for studies examining the longer term impact of empathy training should focus on longitudinal designs tracking both students' levels of empathy through residency and clinical practice and impact of empathy training on patient evaluation of clinical performance and patient health outcomes.

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