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Beyond words: What can help first year medical students practice effective empathic communication?

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ABSTRACT

Objective: To gain insight into first year medical students' experiences of practicing empathic communication and how patients that train students perceive such communication, in order to inform early communication skills training.
Methods: Our study consisted of four focus groups, two of year one students who completed a first semester clinical skills course, one of standardized patients, and one of volunteer outpatients. Focus group transcripts were independently coded and iteratively reviewed to identify major themes. Course evaluation data was collected and analyzed.
Results: Themes from student focus groups described significant challenges in striving to convey empathy: coping with anxiety due to multitasking, "buying-in" to learning empathy, and managing vulnerability when engaging emotionally. Patients appreciated students' expression of vulnerability and nonverbal communication.
Conclusion: First year medical students encounter challenges in learning empathic communication, and patients may perceive empathy from students in ways other than verbal responses. Early communications curricula should focus on assisting students with anxiety of multi-tasking, sense of vulnerability, buy-in to communications training, and the importance of non-verbal communication.
Practice implications: A deliberate focus on empathetic responsiveness, especially non-verbal, might lessen anxiety, improve attentional switching, and build confidence in managing vulnerability for early medical students learning communication skills.

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1. Introduction

Teaching medical students in empathic communication is a core objective of clinical skills training in medical school, as it is well documented that a positive relationship exists between empathy and enhanced patient outcomes, including satisfaction with and trust in their healthcare provider [1–4]. In addition, displaying compassion is perceived by nurses, patients and physicians alike as a central component of professional behavior [5].

Empathy can be described as the capacity of an individual to recognize and respond to the emotion or unique experience of another individual, and falls into two distinct categories: affective and cognitive empathy [6,7]. While affective or emotional empathy is described as one's ability to construct within themselves another's emotional experience, cognitive empathy refers to a more conscious and multi-phased effort of recognizing and responding to another's distress or experience. Unlike affective empathy, it is believed that cognitive empathy can be developed by targeted training and systematic practice. In the context of a clinical encounter, empathic communication refers to cognitive empathy and involves several discrete steps, including: sensitively recognizing a patient's verbal and non-verbal cues of distress or difficulty, mindfully imagining this unique experience, and offering a verbal as well as non-verbal expression of this understanding [8–10].

Empathy training is a cornerstone component of early foundational clinical skills courses in many U.S. medical schools. Over the past decade, clinical skills training shifted from its spot in the second year- while students were learning pathophysiology and gaining contextual understanding of disease- to where it now rests in the early phase of medical school, as students are just beginning to transition to their roles as medical students [11]. At Johns Hopkins School of Medicine, students begin communications training in the second week of medical school, often having little prior contact with patients, understanding of medical

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terminology or disease states, nor socialization into medical practice.

Studies suggest that beginning medical students frequently struggle with conveying empathy. In a study of undergraduate medical students in the UK, students identified weak communication skills in which they could benefit from additional instruction. Managing the emotional aspects of the interaction was the most commonly cited skill [12]. Another study asked first year medical students to complete self-assessments after watching a videotape of an interview with a standardized patient. Though 51% of students identified building rapport as a strength of their interview, only 14.4% of students identified showing care, concern, empathy and sensitivity as a strength [13]. A variety of learning strategies are employed to teach clinical empathy including classroom exercises such as lectures, workshops, and recordings. Other programs encourage students to tap into the perspective of the patient through narrative reflection, drama training, or experiential learning exercises where students simulate receiving medical care as patients [14]. Finally, self-care techniques have been taught, as personal stress is a hypothesized barrier to empathy. Despite the widespread use of these techniques, few have been assessed with objective measures, control groups, or a large sample size [15,16].

Over years of coaching early medical students to identify empathic opportunities and deliver empathic responses to patients, we wanted to improve our teaching approach by learning what aspects were most challenging for entry level students. As most communication training models arise from the perspectives of educators, we were curious to explore perspectives of other stakeholders, in particular medical students and patients, to develop greater clarity on how to best coach beginning students in empathic expression [17,18]. Using qualitative methods, we sought to gain insight into first year medical students' challenges and successes in conveying empathy, as well as how patients who assist in training these students perceive effective empathy, in order to inform and enhance communication skills teaching.

2. Methods

2.1. Clinical skills course structure

At Johns Hopkins University School of Medicine, clinical skills training takes place in the fall semester of first year in the Clinical Foundations of Medicine course. This course has communication skills objectives and consists of 50 hours of small group learning, half of which is devoted to communication skills and history taking, with students practicing weekly over the course's 16 weeks. At the outset of the course, students are introduced to paradigms of patient-centered and relationship-centered care, along with a framework for empathic communication in a clinical setting, and they are asked to practice core skills of active listening and reflection [9,19,20]. Initially, the medical history is introduced as narrative rather than as a heuristic construct, in order to simplify interviewing tasks for the beginning student and encourage attention to communication skills and relationship-building. Learning resources include an introductory lecture, an interview demonstration video, communication readings including a skills primer, communications checklist and empathy mnemonics such as PEARLS© and NURSE. Real time learning includes practice interviews initially in role-play, followed by live interviews with standardized patients, volunteer outpatients and inpatients. Each interview practice occurs in the context of small groups and includes personalized feedback by faculty and peers. Small groups consisting of five students with one faculty instructor maintain continuity throughout the course and reflect the relational structure of the student learning community at the Johns Hopkins School of Medicine. These learning community faculty serve as advisors and academic coaches to their students throughout the years of medical school, providing opportunities to reinforce communication principles taught in the subsequent clinical curriculum.

To inform focus group exploration of student and patient perspectives on empathic communication, we reviewed course and instructor evaluations completed by the Johns Hopkins School of Medicine Class of 2019 at the end of their Clinical Foundations of Medicine course in December 2015, which revealed high levels of satisfaction with teaching, learning and sense of accomplishment with communications objectives. The E-value© online software system was used for these surveys, and student participation was voluntary and anonymous. One-hundred and three of 119 students (87%) completed the 54-question end of course evaluation, and 99% of those responding indicated that they accomplished course objectives in interpersonal communication skills. One-hundred and thirteen (95%) completed the 12-question instructor evaluation. On a 5-point likert scale (1=not at all; 2=a little; 3=somewhat; 4=very much; 5=tremendously), mean student ratings of instructor effectiveness in demonstrating and teaching communication skills was 4.8 and of providing essential feedback to develop students' skills was 4.67.

2.2. Study design

As the quantitative end of course surveys failed to capture students' struggles in expressing empathy that we've witnessed in teaching this course, we chose a qualitative approach for our study to see if we could shed light on the nature of these learning struggles. We conducted four focus groups in June and July of 2016. To preserve anonymity, we did not collect demographics on focus group participants. Two focus groups consisted of first year Johns Hopkins School of Medicine students from the class of 2019, six months following their completion of the Clinical Foundations of Medicine course. Of the 119 students in this class, 13 students participated in focus groups. The participants included 8 males and 5 females. Two focus groups were comprised of standardized patients and volunteer outpatients who participated in this course. Volunteer outpatients are Johns Hopkins Hospital patients who volunteer to participate in the Clinical Foundations of Medicine course by inviting students to interview them about an actual prior illness episode. From a pool of 48 standardized patients, 7 participated in a focus group. From a pool of 76 volunteer outpatients, 7 participated in a focus group. Focus groups were used in this study design to encourage iterative discussion among participants, in order to stimulate a variety of perspectives in the experience of conveying and receiving empathy [21]. Participants were recruited via group emails. However, to ensure that we recruited participants with a diversity of perspectives, we subsequently sent personal invitations to a small number of students in the class that we thought might enhance the discussions. Two participants per student focus group were recruited in this fashion. [21]. All participants provided written informed consent and received dinner as compensation for their time. This study received approval from a Johns Hopkins Medicine Institutional Review Board.

2.3. Data collection

Focus group questions were developed through end of course data and discussion between the investigators with a goal of encouraging critical reflection (Table 1). The student focus group question set was designed to explore students' journey throughout the Clinical Foundations of Medicine course in learning empathy, identify times in which the student conveyed empathy particularly

Table 1
Student and Patient Focus Group Questions.

Student Questions
What does empathy mean to you?
What attitudes or beliefs did you start with learning empathy coming into medical school
Think back to your first memories of trying to learn empathy in the Clinical Foundations of Medicine course. What was that like for you?
Now consider how you progressed in learning empathy during the course from start to finish. Did anything change from start to finish?
Can you recall during the course or in your longitudinal outpatient clinic experience when you felt successful in communicating with empathy?
Can you recall a time during the course or in your longitudinal outpatient clinic experience where you felt you were not successful in communicating empathy?
What feedback was/would have been most helpful to you?
In what ways do you feel like your individual learning needs were met or not met during the course in regards to empathy?
Patient Questions
What does empathy mean to you?
What attitudes or beliefs did you start with about empathy before becoming a standardized patient / volunteer outpatient?
To what degree is the role that you're playing as an actor or actress impacting the way you personally sense empathy?
Now consider how students progress in empathy during the Clinical Foundations of Medicine course. Did you notice a difference in students' ability to convey empathy in the beginning vs. the end of the course?
What memory sticks out to you of a time a student conveyed empathy well?
What memory sticks out to you of a time a student conveyed empathy poorly?
How comfortable to you feel giving feedback to students?
What about communicating with empathy was not taught as successfully?
How do you determine whether a student interviewer has conveyed empathy to you well or not?

successfully or poorly, and identify tools that helped them grow this skill. The standardized patient and volunteer outpatient question set explored how patients perceive empathic communication from students, how they observe students to progress through the course, and instances of successful or unsuccessful attempts at empathy. The focus groups were 90 min in duration, conducted in English, and audio taped. Groups were moderated by JP, a student in the Johns Hopkins School of Medicine class of 2019.

2.4. Data analysis

Audio recordings of the focus groups were transcribed verbatim. Participants' names were not transcribed to preserve confidentiality. Transcripts were independently coded and iteratively reviewed by both authors (JP and RS). The investigators met in person to compare coded passages, mediate any discrepancies, and identify major themes. Analysis methods were informed by qualitative research standards for medical educators [21].

3. Results

3.1. Focus group data overview

First year students described early challenges to learning empathic communication in patient interviews. Chief among them included anxiety with multi-tasking, resistance to being taught how to communicate, and managing one's sense of vulnerability while connecting to a patient's expression of distress. Patients highlighted the importance of students taking on their perspective. Overall, students emphasized verbal communication strategies while patients prioritized nonverbal communication.

3.2. Student learning struggles: anxiety due to multi-tasking

Students described an intense sense of struggle in their early interview attempts with managing the flow and direction of an interview, tracking the content of patient responses, and processing at a meta-level their understanding of messages conveyed, particularly in the emotional realm. Students reflected that they felt overwhelmed performing these multiple functions simultaneously and described anxiety that interfered with their ability to recognize and respond to empathic opportunities. When students focused on attaining the 'right kind' of medical data, they struggled to stay in the moment to convey empathy in a genuine way. One student stated:

> "I was walking on eggshells, worried I was going to say something wrong or something that wasn't relevant to getting all the things . . . that I needed to get or not knowing where to go next with the conversation."

Students reported that as they felt more relaxed over the course of an interview with a patient, their responses seemed more natural to them. One student described:

> "At the beginning, I was saying the right empathetic things, but [the patient] wasn't buying it at the time. After three or four minutes . . . it was more natural and I was less nervous. Things started to come through."

3.3. Student learning struggles: "buy-in"

Another theme was students' initial disbelief that they would benefit from empathy training; becoming open to receiving instruction marked a turning point in their learning experience. Students believed that their intrinsic compassion precluded the need for formal instruction in expressing empathy. As the course progressed, students' thoughts evolved, and they became more open to actively practicing empathic communication. Students credited the perspectives of peers and faculty within their learning group with inspiring this transformation. After this turning point, students were more willing to consciously work, in earnest, on conveying empathy. One student described such a moment:

> "I thought that I knew how to talk to people decently well and relate to them . . . [However] seeing my preceptor and honestly my peers . . . relate to and reflect [a] patient's emotions . . . has taught me that it really is something worthwhile to buy in to . . . "

3.4. Managing vulnerability

Although students expressed that connecting with their sense of vulnerability is key to developing a meaningful patient relationship, they voiced concerns about finding the right balance between feeling too vulnerable and too removed. Students worried that engagement with strong emotions could compromise their ability to think clearly enough to maintain goal-directed cognitive engagement. One student stated:

"Maybe there are times when it is nice to have a boundary between a patient and provider on something like empathy . . . . [you shouldn't] feel too strongly because you need to keep it together."

At the same time, students expressed the need to connect in an authentic way with a patient's sense of distress as a prerequisite to convey empathy in a way that feels genuine, believing that without this sense of connection an empathic statement would seem disingenuous or scripted.

Faced with competing needs to create a sense of boundary between and connection with patients, students shared the experience of struggling to transform their internal reactions to patient stories in a way that might convey empathy. One student shared their struggle:

"I think earlier on in my experience I was like . . . this is the worst thing . . . I'm so sad . . . how can I actually express it in a way that is tangible for the person I'm talking to rather than just something that is within me?"

Another student described a successful experience in translating their emotional response into something that was communicated to the patient:

"the patient talked about her divorce and started tearing up . . . and I started tearing up because I just felt that so strongly and that caused me to reach out and put my arm on her . . . it didn't feel natural to me [before,] but in that moment, it did . . . my intrinsic feelings caused me to act in a different way . . . . I don't think I would've necessarily . . . displayed my empathy in the same way by tearing up if I hadn't really felt that way on the inside"

3.5. Patient perspectives on clinician vulnerability

Patients agreed that provider vulnerability is a crucial component of developing a therapeutic relationship. They want their provider to set aside his or her own concerns in order to fully step in to the patient's shoes. Volunteer outpatients shared that in the best encounters, students went one step further, extrapolating how the patient might feel beyond what the patient explicitly shared. The student's ability to draw such a conclusion signaled to the patient that the student thoroughly took on their perspective. One volunteer outpatient shared an example:

"When I presented . . . with chest pain and had been up a couple nights, and the student said 'you must be very tired?' Now that's putting a person in the [mind] space . . . I was tired, but I didn't say, 'I'm tired.'"

Standardized patients shared a similar idea: that the students that stood out found opportunities for empathy in unusual places. As one standardized patient stated:

" . . . those moments where somebody finds empathy in some part of the case that I've never heard before . . . a fact of our history is that our sister developed lupus last year, and I have . . . taken to specifically saying, 'yeah, a year ago my sister was diagnosed with lupus, and she's having a really hard time with that.' Interesting the number of students who whoosh past it. Some will go, 'oh yeah, that's a rough disease.' Or some will go, 'how are you doing with that?' . . . I listen for it."

3.6. Differing emphasis of students and patients: verbal vs. nonverbal communication

Students endorsed having a toolkit of phrases and strategies that worked well with patients, seeming to singularly focus on verbal communication. By having prepared phrases at the ready, students felt protected from not knowing what to say at an intensely emotional moment and less cognitive effort was needed to deliver an empathic statement effectively. One student described:

"I wanted to make sure I worded things correctly: that I said what I meant, that I didn't sound fake, that I didn't sound awkward . . . having a few phrases that you have in your back pocket that you know feel ok to you . . . I don't want to have to be stumbling over my words when I'm trying to be genuinely connecting to someone."

In contrast, patients emphasized that it was students' nonverbal communication that demonstrated authentic empathy. Patients noticed and appreciated when the student "leaned in", narrowing the physical space between them to create a greater sense of connection. One standardized patient described:

"this student who will pause, maybe put the clipboard down, come forward, and lean . . . just that motion tells me here's someone who . . . is putting themselves closer to your space, willing to hear more. That's when I will often feel a sense of here's someone who genuinely cares and wants to hear."

A volunteer outpatient shared:

" . . . [their] briefcase was sticking out on the floor, and he moved it right out of the way, immediately establishing an atmosphere of nothing's in my way . . . I just felt his presence."

Patients also described how a change in breath could be a powerful, connective force. One standardized patient said:

"I thought about this, the breath. I had a student and . . . he was talking and I didn't feel anything at first. And then when I mentioned a death, he took a deep breath as though he was totally shocked that was coming. And that's when we had a connection. That [breath said] . . . this is a little bit too much for me, so I can't imagine what it is for you."

4. Discussion and conclusion

4.1. Discussion

In this study, we describe the experience of first year medical students in their efforts to learn empathic communication in the context of their clinical skills course, as well as the perspectives of the standardized and actual patients who worked with them in this course. Despite end of course survey data in which students felt they accomplished communication skills objectives, the focus groups revealed that students experienced multiple challenges in learning empathic communication. These included handling anxiety, buying-in to learning communication skills, and staying emotionally open to a patient's perspective while maintaining both authenticity and decision-making capacity. Students endorsed preplanned phrases to use in patient encounters. Patients valued students with skilled perspective-taking and nonverbal communication. These findings have implications for how empathy training might be improved for beginning medical students.

Student-reported measures of attitudes and behaviors around empathy have been well documented, and student experiences with communication skills on the wards has been studied [12,13,22,23]; however, we were unable to find a qualitative study documenting the needs of first year medical students as they attempted to acquire these skills in the preclinical curriculum. Our study is unique in that it serves as a needs assessment for early medical students as they begin practicing empathic communication. It is the first to incorporate the perspectives of standardized patients and actual patients involved in teaching students. Furthermore, some of our findings have not been previously

described in the literature including the idea of student buy-in and the discordance between student focus on verbal communication and patient focus on nonverbal communication.

Three significant learning challenges for first year medical students were identified in our study which empathy curricula could address. Anxiety related to multi-tasking in the interview was cited as a significant early barrier to process a patient's emotional distress. It has previously been shown that medical students struggle to simultaneously integrate medical information and convey empathy [24]. Training in mindfulness, in particular related to the skill of attention switching, along with continued practice and observation of others performing interviews, may help students better manage these tasks in tandem [25–27]. Additionally, prepared communication strategies may help students feel more equipped to handle patients' emotional distress and as a result, feel less anxious [28]. Secondly, students reported that they were reluctant to "buy-in" to the notion that training in interpersonal communication is a necessary step to convey empathy effectively. In our study, students reported that resistance to learning to express empathy was effectively mediated by students learning together in longitudinal small groups, sharing vulnerabilities with each other as they took turns observing, practicing and discussing interviews. This finding aligns with Fortin *et al.* that use of small groups is an effective method for building skills in self-awareness, including managing emotion and practicing self-reflection [28].

Additionally, first year students expressed the struggle of reconciling their own sense of vulnerability, avoiding becoming emotionally compromised such that they would be unable to think rationally, or becoming too removed such that empathetic statements would seem disingenuous. Curtis found a similar concern for emotional vulnerability and uncertainty around boundaries while studying how early nursing students learn about compassionate practice, viewing the courage to confront the fear of emotional engagement as a moral virtue of compassion. [29] Students in our study described a sense of growth during the Clinical Foundations of Medicine course, in which they learned to harness their reflexive emotional response to deepen their understanding of the patient and respond in a useful way. Patients in our study felt that witnessing student vulnerability contributed to the relationship, particularly students who adopted the patient perspective so thoroughly that they could extrapolate how the patient was feeling. This reciprocity between patient and provider vulnerability is also described as an essential tenant of shared-decision making [30].

While medical students in our study focused on verbal communication strategies to convey empathy, standardized patients and volunteer outpatients emphasized the importance of receiving nonverbal communication of empathy. The idea that nonverbal cues carry the true message of an empathic statement to patients is consistent with prior research findings [10,31,32]. In a study from Hall *et al.*, better nonverbal sensitivity demonstrated by third year medical students predicted better outcomes in standardized patient interviews, as standardized patients were less distressed, more dominant, and more engaged when interviewed by students with higher nonverbal sensitivity scores [32]. Providing students with an awareness of the importance of nonverbal ways to express empathy, such as 'leaning in' or changes of breath, may diminish students' struggles with finding the right words and right level of vulnerability conveyed in those words.

Several limitations of this study should be considered. First, this study was from one institution, and it is possible that medical students, standardized patients and volunteer patients from different institutions may differ in their perspectives. The sample size for focus group input was relatively small, but we attempted to recruit students with a diversity of experiences in learning empathy. The small groups in the Johns Hopkins School of Medicine clinical skills course are situated within the school learning community, which might foster deeper connections between students and impact communications skills learning, and may make our study less generalizable to medical schools without learning communities [33]. However, clinical skills small groups could offer similar opportunities for trust and intimacy in learning, even if they do not exist within a learning community structure. Finally, standardized patients and volunteer outpatients may not be ideal proxies for all patients in actual medical interviews. However, we believe that their perspectives are valuable because they have first-hand exposure to medical students longitudinally throughout their clinical skills training, and volunteer patients and standardized patients are widely utilized in clinical skills courses.

4.2. Conclusion

The findings of this study afford new insights into how beginning medical students learn empathy and serve as a needs assessment for what challenges students despite a high level of satisfaction with a communications course. Students beginning their education to become physicians face unique challenges while learning to convey empathy to patients. However, with greater awareness of these challenges, educators are equipped to build supportive curricula that set the stage for transformative interactions, promoting enduring growth.

4.3. Practice implications

Our findings have implications for developing empathy curricula for first year medical students. Deliberate practice of empathic responsiveness might lessen anxiety, improve attentional switching, and build confidence in managing one's sense of vulnerability. Non-verbal communication should be prioritized as a component of this practice effort. A directed intervention, such as an "empathy lab" could accelerate student learning, and its effectiveness could be measured by randomizing students into a directed 'lab' experience compared to a more conventional approach.

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Conflict of interest

The authors have no conflicts of interest to report.

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