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BRIEF REPORT

Using the Skill of Noticing to Support Empathy for Third-Year Medical Students in Family Medicine

A. Emiko Blalock, PhD[a]; **Madison Tluczek, MA**[b]; **Stacey Pylman, PhD**[c]

AUTHOR AFFILIATIONS:

[a] Department of Family Medicine, College of Human Medicine, Michigan State University, East Lansing, MI

[b] College of Human Medicine, Michigan State University, East Lansing, MI

[c] Office of Medical Education Research and Development, College of Human Medicine, Michigan State University, East Lansing, MI

CORRESPONDING AUTHOR:

A. Emiko Blalock, Department of Family Medicine, College of Human Medicine, Michigan State University, East Lansing, MI, blalocka@msu.edu

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ABSTRACT

Background and Objectives: Previous research has described a waning interest among third-year students to employ empathetic practice along with decreased opportunity to develop empathic communication skills. In this study we sought to address this decline using the skill of noticing (ie, the capacity to attune to specific aspects of practice and interactions) as an intervention for third-year medical students.

Methods: We designed a qualitative study to address the following research question: How can a focused noticing tool encourage empathetic moments during the patient interview for third-year medical students? Eight third-year medical students used the Social Emotional Noticing Tool (SENT) during their 4-week family medicine rotation, then joined a focus group to share their experiences with SENT and articulate barriers and opportunities toward practicing empathy during clerkship.

Results: Student participants (a) described using the tool, including barriers and opportunities; (b) made connections between the practice of noticing using SENT and enacting empathy; and (c) emphasized how enacting empathy in their third year is largely influenced by interactions with clinical faculty.

Conclusions: The use of SENT helped students notice empathy or lack thereof. However, making connections between individual capacity for empathic interactions and the impact of positive or negative role models is necessary. Based on our findings, we encourage the need for shared responsibility among students, faculty and preceptors, and organizations.

INTRODUCTION

The reported empathy decline of third-year medical students underlines a critical issue in the clerkship years: a waning interest among third-year students to employ empathetic practice along with decreased opportunity to develop empathic communication skills.[1–4] In this study we sought to address this decline using the skill of noticing as an intervention for third-year medical students. "Noticing" in this context is defined as the capacity to attune to specific aspects of practice and interactions.[5,6] By noticing patient clues, doctors are more engaged with and better able to care for patients.[7] Other studies focused on empathy decline have largely been quantitative studies and self-reports.[8–10] This qualitative study addressed the following question: How can a focused noticing tool encourage empathetic moments during the patient interview for third-year medical students?

This study took place during family medicine rotations for 170 third-year clerkship students at Michigan State University's College of Human Medicine (MSUCHM). As a community-based medical school, students are assigned to campuses and clinical settings across the state of Michigan. Family medicine is one of the largest and most popular specialties at MSUCHM, providing an important and pivotal rotation for many students.

METHODS

After receiving Institutional Review Board approval from Michigan State University, we emailed 170 third-year students to participate in the study through two rounds of recruitment. Eight students accepted and participated in a focus group.[11] We developed a tool that could be used to support medical students' skill of noticing by reviewing 23 articles on patient-physician interactions and empathetic communication as well as incorporating some worksheets and resources from Michigan State University (Table 1). We piloted the Social Emotional Noticing Tool (SENT) with the second author (MT),

who was a second-year medical student at the time. SENT is intended to be used as a mechanism to support the skill of noticing and is not a measurement survey; therefore, we did not include a phase of validation for SENT.

After observing a patient-physician interaction, students accessed SENT on their phones via Desire2Learn to make notations (Figure 1). Eight student participants completed SENT a minimum of six times during their 4-week family medicine rotation.

After all participants completed their family medicine rotation, they joined a focus group on Zoom. The focus group lasted approximately 75 minutes. The focus group was transcribed and then analyzed using an inductive and deductive coding schema.[35,36] Twenty-six independent codes were applied to the full transcript and then combined into three larger themes to produce final findings (Table 2).

RESULTS

Our qualitative design offered students an opportunity to share more than just their experiences with SENT. It also offered them a chance to articulate barriers and opportunities.

Using the Tool

Participants described the benefits and barriers to using SENT. The benefits included increasing their ability to notice small moments and make noticing a habit. "The more I used it, I got to where I would notice. As time went on, I thought about it more just kind of naturally." Students also expressed barriers. "I think one of the things I struggled with was trying to be present and engaging in the encounter while also observing and trying to check off these different behaviors." Other participants noted the challenge of finding time to notice and use SENT.

Making Connections

Participants expressed how using SENT aided their ability to make connections between noticing and being empathetic. One participant shared, "I think I was trying to find more time to notice little things, things you might not pick up on . . . noticing those little subtle changes." Noticing subtle changes helped some students also take more notice of how they were feeling. "At the end of the day, I would collect my thoughts and reflect on all of those encounters." Taking these moments to reflect also exposed tensions—feeling the need to make change toward improving oneself. "I think it would be a good tool for students to use to recognize areas that they could improve, but that doesn't mean that they're going to put in the time." One participant commented how SENT made her feel more aware of her failures as she strove to have empathetic interactions.

Reflecting on Structural Challenges

SENT supported students in identifying how other people or organizational cultures shaped empathy. "I think they're [role models] critical. And I think that the lack of role models plays a huge part in it." Another participant expressed this same sentiment, sharing, "I 100% agree. If I had to pick one thing over and over again, the role of our preceptors is absolutely the biggest." All participants emphasized the power of seeing faculty demonstrate empathy, sharing that these enactments were perhaps the most valuable aspect in learning. "I just keep finding myself referring back to that positive role model and what they emulated during periods where I would struggle to empathize as much."

Other participants shared the larger structural challenges of enacting empathy. "In some rotations you're frowned upon for actually caring for the patient, and it almost like impacts you negatively with your reviews." Additionally, participants identified feeling burnout and the decline of their own empathy, but also feeling uncertain about how to address their perceived decline. "Is it [the tool] helpful? It's definitely helpful, but I'm not always hopeful about it. I'm not always hopeful that it's going to make a huge difference. And I think those positive patient interactions that stick with you are critical."

DISCUSSION

This study illuminated that teaching and learning in medical education is a dynamic process where both the learner and instructor play important roles.[37] Although we initially focused on the specific practice of noticing, use of SENT highlighted much larger structural challenges. SENT aided students in identifying what was missing during the patient-physician encounter but did not provide any recommendations on what to do to fill these missing components of empathy—as one student stated, "helpful, but not hopeful." This student's comment emphasizes the need to investigate the mutual relationships, mentorship, and faculty interactions of teaching in clinical settings to deepen empathy.

Limitations also were present in our study. First, we struggled to recruit participants. From a cohort of 170, only eight students engaged over the entire duration of their family medicine rotation and the final focus group. Second, SENT was limited as a reflective and qualitative tool to engage in empathy. The routine use of SENT may in future studies be modified to be more reflective for students. Future iterations could include reflections on peer learning as a facilitator or barrier to empathy. Finally, although the SENT tool was primarily developed to enhance the skill of noticing, it also risked becoming a burden for participants and just another task to complete.

Supporting medical students' display of empathy during clerkship years involves their own capacity and willingness to engage, and their capacity and willingness to demonstrate empathy toward those around them.[32,38] Based on our findings, we encourage the need for shared responsibility among students, faculty and preceptors, and organizations. Continued qualitative examinations of empathy in third-year medical students also may deepen insights into why changes in empathy occur and how other factors (eg, relationships and school culture) shape the increase or decline of empathy.

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PRESENTATIONS

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TABLE 1. Articles With Clues, Words, Behaviors

Research article/source	Clues, words, behaviors
Suchman, Markakis, Beckman, Frankel (1997)[12]	Praise opportunities Description of emotion Expression of emotion
Levinson, Gorawara-Bhat, Lamb (2000)[13]	Mention of family Seeking acknowledgment Cries for help
Matthews, Suchman, Branch (1993)[14]	Changes in voice quality Sigh Pauses Brimming of the eyes
Fortin (2019)[15]	Patient-centered interviewing Silence Mirror patient body language NURS (naming, understanding, respecting, supporting)
Shapiro (2002)[16]	Deep listening "Stay closer to the patient's heart than to their face" Physician posture Being fully present Respect Nonjudgment Taking patient seriously
Roter, Hall (2006)[17]	Gazing at patient Nonverbal emotion expressions
Arwheiler, Neumann, Goldblatt, Hahn, Scheffer (2014)[18]	Recognizing psychosocial dimensions of care
Batt-Rawden, Chisolm, Flickinger (2013)[19]	Patient-centered interviewing
Benbasset, Baumal (2004)[20]	Patient-centered interviewing
Epstein (2003)[21]	Habits of mind Mindful practices
Hale, Freed, Ricotta, Farris, Smith (2017)[22]	Body language
Ishikawa, Hashimoto, Kinoshita, Yano (2010)[23]	Nonverbal communication
Hsu, Saha, Korthuis et al (2012)[24]	Dismissive Elicit more information Expressions of annoyance Talk about personal life
Larson (2005)[25]	Parallel emotions
Levine, Ambady (2013)[26]	Sitting close Nodding Making eye contact Open or closed body posture Exhibiting facial expressions
Lim, Moriarty, Huthwaite (2011)[27]	Role modeling
Lorie, Reinero, Phillips, Zhang, Riess (2017)[28]	Culture-based nonverbal expressions
Mast (2007)[29]	Nonverbal
Molinuevo, Escorihuela, Fernández-Teruel, Tobeña, Torrubia (2011)[30]	Patient-centered perspective Nonverbal emotion or expressions
Riess, Kraft-Todd (2014)[31]	E.M.P.A.T.H.Y. (eye contact, muscles of facial expression, posture, affect, tone of voice, hearing the whole patient, your response)
Silvester, Patterson, Koczwara, Ferguson (2007)[32]	Trust Open communication
Squier (1990)[33]	Helping behaviors Facial expressions Tone of voice
Weissmann, Branch, Gracey, Haidet, Frankel (2006)[34]	Role modeling
4-Cs*	Character, competence, connection, culture
SHARE*	Seek, help, assess, reach, evaluate

*Worksheets and resources from Michigan State University

TABLE 2. Frequency of Themed Codes

Major theme	Number of responses,n (%)
Using the tool	11 (26)
Making connections	14 (34)
Reflecting on structural challenges	16 (39)

FIGURE 1. **Noticing Tool Checklist**

Patient: Observation of any of the following SOCIAL cues

- ☐ Mentioned Family
- ☐ Mentioned Friends
- ☐ Mentioned a significant interaction with another person

Patient: Observation of any of the following EMOTIONAL cues

- ☐ Described Emotion
- ☐ Sought Acknowledgment
- ☐ Sought Praise

Patient: Observation of any of the following NON-VERBAL cues

- ☐ Laughing
- ☐ Crying
- ☐ Eyes Welling with Tears
- ☐ Changed voice quality
- ☐ Sighed
- ☐ Looked down
- ☐ Paused during speaking
- ☐ Brimmed around eyes
- ☐ Others not listed

Any other observations you made of the PATIENT not listed:

Physician: Observation of any of the following SOCIAL responses

- ☐ Asked questions about family
- ☐ Asked questions about friends
- ☐ Asked questions about significant interractions

Physician: Observation of any of the following EMOTIONAL responses

- ☐ Asked clarifying questions
- ☐ Paraphrased
- ☐ Acknowledged patient
- ☐ Used normalizing language
- ☐ Avoided interrupting

Physician: Observation of any of the following NON-VERBAL responses

- ☐ Made eye-contact
- ☐ Was silent
- ☐ Mirrored patient's body language
- ☐ Used appropriate or comforting touch
- ☐ Changed tone of voice
- ☐ Other non-verbal not listed

Any other observations you made of the PHYSICIAN not listed: