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Perspective: **Does Medical Education Promote Professional Alexithymia? A Call for Attending to the Emotions of Patients and Self in Medical Training**

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Abstract

Emotions—one's own and others'—play a large role in the lives of medical students. Students must deal with their emotional reactions to intellectual and physical stress, the demanding clinical situations to which they are witness, as well as patients' and patients' family members' often intense feelings. Yet, currently few components in formal medical training—in either direct curricular instruction or physician role modeling—focus on the emotional lives of students. In this article, the author examines patients', medical students', and physician role models' emotions in the clinical context, highlighting challenges in all three of these arenas. Next, the author asserts that the preponderance of medical education continues to address the emotional realm through ignoring, detaching from, and distancing from emotions. Finally, she presents not only possible theoretical and conceptual models for developing ways of understanding, attending to, and ultimately "working with" emotions in medical education but also examples of innovative curricular efforts to incorporate emotional awareness into medical student training. The author concludes with the hope that medical educators will consider making a concerted effort to acknowledge emotions and their importance in medicine and medical training.

> Alexithymia is a term used most commonly to describe people who have difficulties recognizing, processing, and regulating emotions.
>
> —Taylor GJ, Bagby RM, Parker JDA. *Disorders of Affect Regulation: Alexithymia in Medical and Psychiatric Illness*, 1997

> There can be no knowledge without emotion. We may be aware of a truth, yet until we have felt its force, it is not ours. To the cognition of the brain must be added the experience of the soul.
>
> —Arnold Bennett, British novelist and essayist, 1867–1931

Not surprisingly, medical students confront an array of intense emotions in both themselves and their patients over the course of their medical education. Students experience intellectual and cognitive pressures because of the vast quantities of knowledge they must assimilate. They undergo significant physical stress associated with long hours and lack of sleep. Perhaps most challenging, they have daily contact with, and increasing responsibility for, suffering patients and families who themselves are often experiencing intense emotions. All of these circumstances generate powerful feelings in learners. Issues of transference (a patient's unconscious tendency to attribute to the physician feelings and attitudes associated with significant others in his or her early life) and countertransference (the physician's feelings in reaction to the emotions, experiences, or problems of a patient) in clinical encounters exacerbate this emotional soup.[1] Further, students are routinely exposed to and internalize the various ways their role model physician teachers and supervisors recognize and address emotions in themselves and others.[2,3]

Research has firmly established that emotions influence the behavior of both patients and physicians in areas such as decision making, information processing, and interpersonal attitudes in the doctor–patient relationship.[4,5] Medical educators also recognize that students who are not able to examine and come to terms with their own psychological lives find connecting empathically with others to be difficult.[6,7] Surprisingly, given these findings, very little has been written about either cultivating emotional awareness in relation to self and others in medicine or about learning how to effectively manage the emotions that students confront on a daily basis during their clinical training.[8]

Indeed—although, of course, medical education does not literally promote professional alexithymia—much that occurs in medical education, especially through the action of the hidden curriculum,[9] seems to encourage students to separate and distance themselves from emotions. In this article, I provide an overview of emotions in medical education, highlight their potential value in clinical practice as well as the pitfalls of ignoring or reacting poorly to them, and conclude with preliminary recommendations for ways to skillfully educate future physicians in recognizing and dealing with their emotions. For clarity, I address patients' emotions, students' emotions, and physician emotional role modeling separately while recognizing that these three domains are inextricably related and continuously interacting. I am using the definition of "emotion" found in the Merriam-Webster online dictionary: "*a*: the affective aspect of consciousness; *b*: a state of feeling; *c*: a conscious mental reaction (as anger or fear) subjectively experienced as strong feeling usually directed toward a specific object and typically accompanied by physiological and behavioral changes in the body."[10] Further, I recognize the complex interplay of emotion, cognition,

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and metacognition[11] and posit the existence of this relationship when I refer, for simplicity's sake, to "emotion." Finally, I argue that working with emotions is both a general and a situation-specific skill. A general model for the skill set of working with emotions would include the process of identifying emotions, evaluating their appropriateness and usefulness in advancing the physician's patient-centered goals in any given clinical situation, and working to modulate or reformulate them as needed. However, different situations trigger different emotions in different people, so each situation must be assessed on an individual basis. On the other hand, if two different situations (e.g., breaking bad news and discussing death and dying) evoke a similar emotion (e.g., helplessness) in learners, then they may generalize *some* of what they have learned in one situation to the other situation.

In this article, I make the assumption that, for doctors, being aware of and subsequently being able to modulate and manage emotions in themselves and others is a necessary, indeed critical, element of good patient care. Whereas research has demonstrated that through some forms of psychotherapy (e.g., radical behaviorism[12]), individuals can achieve positive change by focusing exclusively on behavior (in contrast to emotions or, for that matter, cognition), most psychological theories concur that effective interpersonal communication depends on being able to read both one's own and others' emotional states. Therefore, I posit that a competent physician must be able not only to diagnose biological disease but also to distinguish and cope with the patient's (and his or her own) feelings about that disease in the context of the patient's life. In this regard, at times I employ valenced terms such as "positive" or "negative" in referring to emotions. I do not intend such language to imply a judgment of the emotion per se. Rather, my intention is to suggest that, in any specific clinical context, the individual physician or student–physician (and/or a humanism connoisseur,[13] supervisor, or colleague) can make the discernment that experiencing and/or expressing a particular emotion (1) does not advance patient-centered goals and/or (2) is distressing for the patient, the physician, or both. This awareness should then trigger a process of working with or modulating the emotion to ensure that patient care (and physician well-being) does not suffer.

Emotions in Patients, Medical Students, and Physician Role Models

Patients' emotions

Medical students must learn to respond effectively to the emotions of their patients: First, students should be aware of and able to identify the patient's feelings in any given situation; next, they should be able to convey that they hear and understand, yet do not judge, the patient's feelings; and finally, they should be able to help the patient work with his or her emotions in ways that advance, rather than impede, the best possible clinical outcome based on the patient's values and desires. Prior research suggests that patients' emotions may have a significant impact on their clinical outcomes. For example, emotions of anger and sadness are associated with amplified pain in women with fibromyalgia,[14] and depression and a sense of hopelessness can negatively affect compliance with diabetic regimens.[15,16] Evidence also shows that patients' mood states, *independent of* compliance, may influence clinical outcomes in medical conditions such as diabetes,[17,18] myocardial infarction,[19] and cancer.[20]

Patient's emotions can also influence the doctor–patient relationship. For example, one study showed that a poor emotional connection with the physician adversely influenced follow-up in patients with testicular cancer,[21] and another showed that in certain clinical populations, patients' emotions of vulnerability resulted in decreased trust in the physician.[22] Another study concluded that a physician's ability to acknowledge patient emotional distress is an essential first step in initiating a discussion of challenging clinical issues.[23] Still, medical students are often embarrassed and uncomfortable when confronted with patients' emotions.[24] In one study, students identified patients who expressed negative emotions such as anger, annoyance, fear, or dissatisfaction as a barrier, at least in part, to patient-centered care.[25]

Medical students' emotions

Not only must students learn to acknowledge and deal with patients' emotions, they must become aware of and address their own emotions as well. Emotional distress is common among medical students and residents.[26] In one study of students' first patient encounters, students reported feelings of helplessness and uncertainty when faced with serious illness and death, and they described their initial attempts at physical examination as anxiety-provoking and confusing.[27] Another study found that students in the third year of training experienced positive emotions such as gratitude, happiness, compassion, pride, and relief but that they also experienced emotions they found more distressing, such as anxiety, guilt, sadness, anger, and shame, triggered by uncertainty, powerlessness, responsibility, liability, lack of respect, and the conflict of values.[28] Confirming this range of emotions, a different study of third-year students concluded that although students found patient contact rewarding, they continued to feel anxious, stressed, and fearful of not being competent.[29] Students can also experience feelings of aggression and dislike toward patients, and one study concluded that students tended to rationalize or justify these negative feelings as appropriate because of patient behavior.[2]

Students seem to view their own emotions with some suspicion. For example, in one recent study,[30] only 19% of a randomized sample of learners' reflective clinical stories included any emotional content whatsoever. The authors speculated that the hidden curriculum[9] continues to reinforce norms against physicians' displaying or even allowing themselves to feel or acknowledge emotion. Another study found that a large majority of third-year students believed that crying in front of patients or colleagues is unprofessional.[31] Further, although students worry that as their training proceeds they will become less empathetic and more apathetic,[32] and although they want to establish emotional connections with patients,[33] they also are afraid that they will be overwhelmed by their feelings toward patients.[3,34]

How physician role models deal with emotions

Students pay careful attention to how residents and attendings express emotional responses in patient interactions.[3] Students are quick to notice the negative emotions of hostility, indifference, frustration, and impatience that supervisors express—as well as the

positive emotions of caring, compassion, and kindness shown toward patients. Studies suggest that physicians typically deal with anxiety by distancing themselves from their emotions and that they rely on cognitive and behavioral strategies to help them respond to patients.[35] In the study of attitudes toward crying referred to earlier, attending physicians who cried in front of trainees rarely discussed these displays of emotion; instead, they withdrew physically or simply ignored the tears.[31]

Some studies have shown that physicians may lack accuracy in identifying their patients' emotional states[36–38]; for example, one study showed that correlations between physician and patient ratings of patient emotions are only small to moderate.[36] Other studies show that physicians do not always even acknowledge patients' emotions. In one study, physicians acknowledged patients' emotions in only 38% of the surgical and 21% of the primary care cases.[39] Studies of cancer patients have found that oncologists seemed to have trouble recognizing, acknowledging, or responding to their patients' emotional expressions.[40–42] Other literature suggests that even when physicians do respond to a patient's feelings, they typically offer only minimal empathy (e.g., brief acknowledgment in contrast to exploration of deeper feeling), which tends to discourage further inquiry into the patient's distress,[39,43] or they engage in "blocking behaviors" (e.g., breaking eye contact, changing the topic) that deflect emotional exploration entirely.[44]

How Emotions Are Currently Addressed in Medical Education

Ignoring and mistrust

Both positive and negative emotions seem to be regarded with some mistrust in medical education. Positive feelings—such as liking and/or feeling affection for a patient—are seen as potentially inhibiting the physician's ability to face either problematic diagnoses or otherwise difficult situations that affect the patient.[45] Although no actual research supports the idea that caring about patients and establishing an emotional connection with them leads to negative outcomes,[46] these fears remain deeply engrained in medical culture. On the other side of the coin, concerns that negative emotions such as frustration, anger, helplessness, annoyance, dislike, and blame can result in poor patient care are justifiable: As a result of such emotions, physicians may avoid the patient or not spend as much time thinking carefully about the patient's problems.[47]

Emotional detachment and distance

In their seminal article "Vanquishing Virtue: The Impact of Medical Education," Coulehan and Williams write, "North American medical education favors an *explicit* commitment to traditional values of doctoring—empathy, compassion, and altruism among them—and a *tacit* commitment to behaviors grounded in an ethic of detachment, self-interest, and objectivity."[48] Others have observed that regardless of the shifts in the paradigms defining the patient–doctor relationship, the overriding principle remains one of emotional control.[49] The cultural norms of medical education likewise promote emotional detachment, affective distance, and clinical neutrality.[50–52] Students receive the implicit message that they should be able to tolerate stress and not express emotions.[53] Medical students are particularly vulnerable to emotional detachment because they are still learning how to modulate their own emotional states in the often stressful and emotionally demanding environment of clinical medicine.[54] Emotional detachment may seem a tempting solution because, at least initially, "not feeling anything" provides a form of self-protection against emotional responses that the learner finds either complicated or distressing.

Empathy as a purely cognitive process

An instructive example of how concerns about expressing emotion manifest themselves in the culture of medicine is the fate of empathy in medical education research and curriculum. Whereas various educational and professional bodies in medicine, such as the Accreditation Council for Graduate Medical Education[55] and the Association of American Medical Colleges,[56] have identified empathy as a key component of professionalism and specify that medical education must include curricula whose goal is the development of empathy in learners,[57] medical education researchers increasingly have tended to adopt a purely cognitive approach to defining the construct. Definitions such as the one formulated by Hojat et al[58,59] identify empathy as an objective, rational, accurate, intellectual process that is "always" good for both patient and practitioner, in contrast to sympathy, which is criticized as an emotional, self-indulgent, codependent, even histrionic practice that will lead to burnout and compassion fatigue. These and similar efforts to separate out the cognitive elements of empathy may have the effect of making the construct easier to identify and measure in learners, but may also result in formulations for teaching empathy that focus on a set of cognitive and behavioral skills[60] rather than a process that incorporates emotional resonance (i.e., learning to calibrate one's *emotions* in response to the clinical circumstances) as well as cognitive comprehension.

Learning to Work Skillfully With Emotions

Over a decade ago, leading physician scholars recognized that physicians' emotions and emotional triggers, expectations, beliefs, and attitudes have an important, but often unacknowledged, impact on how they interact with patients,[61] including how they express or avoid empathy. Calls to address the topic of emotions in medicine have emerged periodically.[1,46] Yet these appeals have not led to pervasive curricular changes because they pose challenges to the existing cultural norms of medicine. Physicians and medical educators may be afraid of the messiness and apparent uncontrollability of emotions, and they may make the assumption that modifying cognition is easier than changing emotions.[59] Yet there is little reason to believe that emotional responses are beyond the pale of awareness, reflection, interrogation, and adaptation. Students themselves recognize the need to be able to process the emotions that they experience during difficult transitions and in the face of ethical dilemmas.[32] Further, evidence shows that medical students can successfully develop emotional self-awareness.[62] In a recent study of breaking bad news, researchers found that students who were "involved" with and emotionally connected to the patient were able to avoid algorithmic, rote forms of interacting. Compared with their peers, these involved students were not afraid of the patient's emotional reactions, seemed "well prepared to

harness their emotions in the service of the patient,"[6(p1589)] and were much more likely to express empathy toward the patient.

Detachment from emotions is associated with burnout and compassion fatigue.[63] Unacknowledged emotions can lead to time-consuming clinical difficulties (e.g., poor patient adherence to medical regimen, lack of patient follow-up with physician).[46] Many physicians and medical educators believe that emotional connection not only leads to caring for, investing time in, expending effort for, and going the extra mile for a *patient* but also to producing rewards, such as sympathetic joy at a patient's progress or satisfaction that a patient's suffering has eased, for the *physician*.[46,63–65] Awareness of negative emotions can be the first step in improving a difficult patient–doctor relationship,[66] as well as clinical outcomes,[67] so these also have beneficial potential. Although unregulated emotional reactions can likely lead to clinical and interpersonal mistakes, physicians can become reflective about such errors and learn to express more appropriate emotional responses. For all these reasons, physicians and physician educators should begin to think systematically about how to address emotions in medical education. Doing so will involve developing relevant theoretical models and concepts as well as identifying possible pedagogical methods.

Conceptual Models and Pedagogical Tools

Because, to date, relatively few medical educators have put systematic thought into how— or even *whether*—medical education should explicitly attend to emotional issues, no adequate theoretical models exist to guide faculty in addressing students' emotions and/or their reactions to patients' emotions. Therefore, describing how to develop a pedagogy for considering learners' and patients' emotions might quickly become a speculative exercise. Nonetheless, several conceptual models and curricular innovations are in existence, and these may point the way to ultimately designing more broadly organized efforts to incorporate the emotions into medical education.

Emotional intelligence

One promising concept is that of emotional intelligence (EI), defined as perceiving (awareness of the existence of emotions), understanding (comprehending the nature of the emotions and being able to discriminate different emotional states), managing (neither ignoring nor being overwhelmed by the emotions), and using (being able to experience, acknowledge, and integrate emotions in ways that promote positive rather than negative patient outcomes) one's own and others' emotions.[68–70] Researchers have conjectured that developing the complex capacity of EI in medical education may allow medical educators and students to move beyond the simplistic behaviorism of learning communication skills that is now favored toward the development of interpersonal skills that allow people to build good relationships with others.[68] Others have asserted that EI might allow medical personnel to experience the emotions involved in close patient relations while still avoiding burnout.[71]

Emotion regulation

Emotion regulation (ER), or the ability to modulate one's emotional experiences and responses,[72] is also a promising concept. Its goal is not simply down-regulation (reduction) of negative emotions but, rather, finding a response between hypo- and hyperarousal, primarily through a cognitive reappraisal (i.e., changing how we think in order to change how we respond emotionally) that is appropriate to changing environmental and interpersonal contingencies[73]; for example, a physician frustrated with her patient's no-show rate for appointments might consider how much that patient struggles to find transportation to the clinic. Individuals who can regulate their emotional state are better able to avoid being overwhelmed by their own emotions and therefore can focus on the needs of the other.[74,75] Some have proposed a variant of ER, mindful emotion regulation,[73] which emphasizes cultivating awareness and nonreactivity in response to troublesome emotions. This approach may allow individuals to consciously choose which emotions and thoughts they identify with rather than automatically getting caught up in "unskillful" emotions; in the above example, the physician might first notice, then encourage, feelings of caring and compassion that start to "compete" with the original feeling of frustration.

Related concepts

Other concepts of potential value in exploring emotions in medical education include ethicist Jodi Halpern's[46] idea of *clinical empathy*, which depends on a detailed experiential as well as cognitive understanding of what the patient is feeling. *Relationship-centered care*[76] includes as one of its core principles the idea that affect and emotion are central to the patient–doctor relationship. *Emotional self-awareness* is based on neuroscience research demonstrating that awareness of a distinction between the experiences of self and others constitutes a crucial aspect of empathy.[77] Wald and colleagues[78] have applied the concept of *emotional resilience* to the world of medical education, defining it as the capacity not to succumb to emotional collapse in emotionally challenging situations. Coulehan[79] offers the concept of *emotional equilibrium*—a balance combining emotional steadiness (the capacity not to be overwhelmed by one's own and/or another's emotions) and emotional tenderness (the capacity to be moved by another's suffering). *Mind–body medicine* (MBM) offers interesting possibilities because it has implications for the self-care of physicians as well as care of the whole person of patients.[80–82] MBM encompasses a vast spectrum of emphases including complementary and alternative medicine, integrative medicine, and, in some formulations, the biopsychosocial orientation.[80] Notably, however, although certain aspects of MBM pay attention to the emotional states of *physicians*, on the whole, the primary thrust of MBM is focused on employing mind–body techniques to influence clinical outcomes of diagnosable disease in *patients*.[81] Mindfulness and *mindful practice* in medicine advocate the training of self-aware physicians who are skilled in a moment-by-moment self-monitoring of their actions, thoughts, sensations, and emotions in a way that is nonjudgmental, curious, and open to multiple perspectives.[83,84]

Tools for working with emotions

Currently, intriguing curricular initiatives exist whose goal is to help students become familiar with emotions, both their own and those of their patients. Several educators have used training in

mindfulness meditation[64,85] to bring mindful awareness to learners' emotional responses, and one interesting study[86] of 70 self-selected primary care physicians provides associational evidence of the positive effects of such training on emotional stability, mood disturbance, emotional exhaustion, and empathy.

Narrative medicine[87,88] brings attention to the emotional dimension of both patient and physician experience. In the triad of desirable physician attributes—attention, representation, and affiliation—that narrative medicine pioneer Rita Charon identified, the last refers to a physician's capacity to connect emotionally with the patient and to be emotionally resonant with the patient's suffering. The medical humanities in general,[89,90] and reflective writing in particular,[8,91] have also shown theoretical, anecdotal, and some empirical promise in terms of helping students to become more aware of emotions and their role in medicine, to learn how to critically question the role of emotions in clinical practice, and, as a result, to express multidimensional empathy. The relevant premise behind such humanities-based teaching strategies is that, by engaging with and encouraging reflection on the emotions, the humanities create familiarity with emotional landscapes as well as an awareness of how the interplay of emotions in clinical settings affects both patient and physician.

Another innovative means of helping students to reflect on and develop skills for managing emotions (with which I am personally familiar) is the fourth-year elective course, Art of Doctoring, that the University of California, Irvine, School of Medicine offers. The course includes modules on working with difficult emotions, cultivating positive emotions, developing emotional equilibrium, and enhancing empathy in challenging patient and supervisory interactions. This work is based on the conceptual model of control therapy[92] and on mindfulness meditation,[93] which helps students (1) to identify their emotions in a particular clinical or supervisory encounter, (2) to investigate them (separating out stories that fuel the emotions), (3) to evaluate them in light of the goals and aspirations that the student holds for that particular situation (e.g., professional and personal values), and finally (4) to calm (not suppress) negative emotional reactions and encourage the inclusion of more positive emotions.[94] A five-year (2005–2010) review of student self-reported evaluations shows that students felt increased empathy, improved emotional equilibrium, enhanced self-understanding, and greater capacity both to manage difficult emotions and to cultivate desired emotions such as compassion, kindness, and caring.

Despite anecdotal reports and preliminary research (such as that reported immediately above[94]), the efficacy of the majority of these curricular initiatives in terms of developing in learners, first, greater awareness of emotions (both their own and their patients') and, then, greater ability to modulate these emotions has yet to be systematically validated in medical settings. At this point, even the approaches themselves often address emotional awareness and regulation only *in*directly—or only as part of larger curricular goals and objectives. Many qualitative and quantitative research opportunities exist in this domain.

In Sum

Obviously, all those involved in health care—patients, physicians, and trainees (as well as, of course, family members, medical team members, and allied health professionals)—experience a range of sometimes overwhelming emotions which have significant consequences for clinical interactions, health outcomes, and job satisfaction. At this point, what medical personnel actually understand and agree on *less* is how they should prepare student–physicians to be aware of and work with these emotions. Much theoretical and translational work remains to be done. Perhaps a starting point for all of us engaged in the project of medical education might be to remember that medicine ultimately is about human beings interacting with other human beings. Once we recognize this reality, we must certainly realize that the emotional dimensions of these interactions deserve attention so that the physicians of the future can exercise as much skill in working with emotions as they do in the informational and technological aspects of clinical practice.

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