

Adriana E. Foster  
Zimri S. Yaseen *Editors*

# Teaching Empathy in Healthcare

Building a New Core Competency

 Springer

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*Editors*

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*To Steve and Brent for their unconditional  
love, support, humor, and wit.*

*—Adriana E. Foster*

*To Dilu for her loving challenge.*

*—Zimri S. Yaseen*

# Foreword

All clinicians seek to deliver high-quality healthcare. That is why we have become doctors, nurses, or allied healthcare professionals in the first place. We care about our patients, and we want to be able to give them the most effective care possible, in order to cure their diseases or, when cure is not possible, alleviate symptoms and maximize health. Why? Because health is a resource for living. Our job is to help people live well.

Nowadays, the young clinician is bombarded with a variety of concepts to understand and learn to integrate into everyday work: evidence-based medicine, technical skills, communications skills, shared decision-making, self-management support, patient activation, patient empowerment, health literacy, to name but a few. But do they understand that empathy is fundamental to all of these? And are they taught the art and science of empathy? Do they know how to improve their empathy and how to get the professional balance right—the right amount of empathy, at the right time? And do they understand the wider determinants of health and the way that empathy can be undermined or thwarted by the high pressure—and at times brutalizing—environment that healthcare often operates in?

If (as I suspect is often the case) the answers to many of these questions is no, then help is at hand. *Teaching Empathy in Healthcare: Building a New Core Competency*, edited by Adriana Foster and Zimri Yaseen, and with contributions from over 40 co-authors, is a comprehensive, up-to-date account of empathy in the clinical context. Set to become a classic text on the subject, the book takes the reader on an engaging three-part journey from understanding what empathy is (and how it can be measured) to approaches to empathy education, and finally to a systemic perspective, addressing issues such as equity, stigma, and law. Each section is packed full of the latest evidence-base, including the remarkable strides that have been made over recent decades in the neurobiology of empathy.

Although many books have been written on empathy in medicine over the last 20 years or so since I became active in research in this area, this new book is different from those that have come before. It draws on a very wide range of contributors across many disciplines and takes an unashamedly evidence-based approach. It takes a longitudinal approach to clinical empathy, emphasizing the benefits of

embedding empathy training in undergraduate and post-graduate curricula, but also the need to reinforce the importance of empathy according to the clinicians' stage of professional development. Empathy is not something to be learnt quickly in first year of medical school, but a professional skill and attitude for the entire clinical career. Finally, and very importantly, it broadens its scope to include the societal and institutional factors that relate to whether empathy is fostered and nurtured, or not, within our healthcare systems.

I enjoyed reading this book, and I learned a lot from it. I am sure you will too. Enjoy, digest, imbue, share, and implement! Our patients deserve nothing less.

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June 2019

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**Part I**  
**What Is Empathy and How Can It Be**  
**Evaluated?**

# Chapter 1

## What Is Empathy?



Zimri S. Yaseen and Adriana E. Foster

### 1.1 Conceptualizing Empathy

#### 1.1.1 A Brief History

The roots of “empathy” as a concept run deep in Western thought. For example, Martha Nussbaum in an essay on cosmopolitanism [1, p. 4], quotes the Stoic and Roman emperor Marcus Aurelius “Accustom yourself not to be inattentive to what another person says, and as far as possible enter into that person’s mind.” Those conceptual roots, however, are certainly not limited to a Western genealogy; Buddhist philosophy, for example, holds *compassion*—an altruistic action-oriented empathy for suffering—as a central principle [2]. *Empathy* itself, however, is a rather young word, emerging from late nineteenth century philosophical work such as Robert Vischer’s [3], Wilhelm Worringer’s [4], and Theodor Lipps’ [5] in aesthetics, William James’ in psychology [6], and Vernon Lee’s at their intersection [5], and only entering circulation in English early in the twentieth century [7]. In 1908, Titchener, a psychologist at Cornell University, coined the word “empathy” as a

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translation of Vischer's German coinage *einfihlung* ("into-feeling") in his investigations into the nature of thought [8]. In Titchener's words, "Not only do I see gravity and modesty and pride and courtesy and stateliness, but I feel or act them in the mind's muscles." [8, p. 9] Thus, in early usage, empathy focused on the internal experience of meaning and aesthetic appreciation [7]. Several notions here were intertwined; one was of the associative recording of sensory impressions into memory, another was of aligning oneself in kinesthetic imagery with the observed other, and the third was that the traces of these processes were then habitually repeated as conditioned responses, in a sense, to the stimulus of a word. Thus, Titchener describes how a conjunction like "but" is internally experienced as meaningful: "It was my pleasure...to sit on the platform behind a somewhat emphatic lecturer, who made great use of the monosyllable 'but.' My 'feeling of but' has contained, ever since, a flashing picture of a bald crown..." [8]. This imagery is fused with a kinesthetic image of the bodily experience of conflicting desires, i.e., "to make two incompatible reactions at once." [8] These external experiences would then for Titchener be reliably elicited in trace form, he argued, when he would employ the conjunction "but" in thought or speech.

Feeling oneself into another, be it a lake or a loon or another person, was initially recognized not only to be an act of an embodied self but also as a creative action of the imagination. This emphasis on creative action led initially to a figuring of empathy in a one-person psychology as projection—a mere casting back of this created sense onto its triggering object—lake, loon, or interlocutor. As the use of the term shifted from individual research in psychology to the domain of psychotherapy, this one-person psychology focused on the experience of the observing therapist. In a shift away from such a solipsistic understanding, the psychologist Carl Rogers, though working within the treatment framework of a one-person psychology, provides a beautiful and generative description of empathy as an embodied interactive process that arguably gave birth to the "relational turn" in psychotherapy [10]. Although this relational approach initially focused on the process of dialogue, with words at first taking center-stage, leaving a "disembodied" two-person account of mutually constructed experience, a synthesizing approach considers a dialogic process that is built upon embodied experience.

Rogers thus describes empathy as a *process* rather than a trait or even a therapeutic state, putting the emphasis on action in relation to another—mutually constructed action. Central to this process is an attitude of respectful and non-evaluative listening. Further, this listening is done with the therapeutic goal in mind of deepening and clarifying the "flow of experience"—that totality of thinking and feeling that Eugene Gendlin termed "felt sense," that is, the inner experience (harkening back to Titchener's introspections) that we examine to know the answer to a question such as "Are you happy?" and that allows us to reply, "Yes, but more than that, I feel relieved..." [11]. This deepening and clarification of felt sense is therapeutic because it supports and enhances the agency of the patient; when you know you are feeling thirst, then you know to seek water; if you mistake thirst for hunger, you may keep eating yet feel unsatisfied. In a one-person psychology, this process of clarifying and beholding foregrounds the patient as its object (acted upon by the observing, supporting therapist subject). But, Rogers argues, the process of empathy draws the



individual out of isolation and alienation—a hopeless state of aloneness—into the relational experience of communion with another. Thus, in a two-person or relational psychology, the patient and therapist are both subjects and both objects, and the spotlight of the empathic process roves, now resting on the patient (“I want to know you are trying to see me”), now the care-provider (“I feel that, and at the same time I feel lost – I think you are one place, but I keep turning out to be wrong”), and now the felt sense of the relationship or system that they are constructing together (“It feels as if we are playing hide and seek”). Take note of the bodily sensations that arise in you as you read words like “lost,” “wrong,” or “playing hide and seek”.

### ***1.1.2 An Integrative Definition***

As an over-arching and integrative framework, we propose empathy to be the process of relating to another in a mode that serves and aims to facilitate the creative elaboration of mutual understanding and recognition. The empathic mode thus presupposes both commonality and difference as it seeks the development of a common language—a shared network of meanings, allowing one to see beyond pre-existing commonalities and create new ones. Thus, core to empathy is not only the process of unfolding an understanding of the meaning of another’s experience—an understanding rooted in and feeding a further grasp of the emotional impact of that experience and also the continual expansion of the recognition and appreciation of the limits of that understanding—of the dark, still formless space between us.

Within this proposed framework a variety of component skills and traits may be integrated as factors that shape the empathic process between individuals. Moreover, the aim of the empathic process entails care or concern for the other; to allow another to understand and recognize us requires that they be trusted, and to trust those who lack care or concern for us is at best a difficult undertaking. Indeed, the critical role of care and concern in the empathic process is evidenced in the appearance of caring and concern in infants, well before the development of a theory of mind (requisite for the cognitive component of empathy) [12].

What makes the empathic process therapeutic in health care, whether the approach is via a one- or a two-person psychology, is placing the process in service of the patient’s goals. A clarifying question by the clinician is more liable to be therapeutic if it is in service of bringing the patient’s experience into sharper focus for the patient than if it is in service of allaying a fear on the part of the care provider. If a patient says “My headache started suddenly” and I ask “Like a thunderclap?” with focus on the nature of the pain and the patient’s experience, I am more likely to inspire the patient’s confidence and elicit the information that will support or help rule out the diagnosis of a ruptured cerebral aneurysm than if I ask the same question with the aim of reassuring myself that the patient’s situation is not so serious. In that case, the patient may sense my need for reassurance and “protect” me by being less forthcoming or minimizing the experience on the one hand, or become frightened and angry, and thus less cooperative, on the other. Of course, in this example, the shift in probabilities toward worse outcome may be too slight to measure but

compounded over hundreds of conversational exchanges in an encounter with a given patient, and multiple encounters with multiple patients, even such small shifts are liable to accumulate to make an appreciable difference.

Within this framework, compassion, a concept closely associated with empathy, may be viewed as an empathic regard for another's suffering [13, 14]. Thus, if health care is ultimately aimed at the relief and prevention of suffering, capacity for compassion and the development thereof will be particularly important. While empathic responding in the positive valence domain is valuable in general social interaction and supports good collegial relations, compassion rises in prominence with the greater centrality of suffering in an individual's relational role as a *patient*. In contrast, pity might be understood as an abortive form of compassion—one which stops at the potentially painful apprehension of another's suffering. Where the empathic/compassionate stance comprises an orientation to increasing understanding and thus an openness to such shared experience, the orientation of pity aims rather to protect from the pain of shared experience by establishing a hierarchical separation from the sufferer. The empathic process therefore relies on the broad array of faculties operating in social cognition. Friedlmeier, cited in Neumann [15], describes empathy as an affective reaction that stems from the perception of another person's emotional state that involves vicariously experiencing (i.e., mentally representing oneself in) the other person's situation, and that is characterized by paying attention to the other person's emotions. Working to connect the process of empathy to underlying neurobiological processes, Preston and de Waal [16] explain that the "subjects' state results from the attended perception of the object's state" (p. 4), where "*the object* is referred to as the primary individual who experienced the emotion, while the *subject* is the individual that secondarily experienced or understood the emotion of the object, through empathy" (p. 4). They highlight that we need the "central nervous system to perceive the facial expressions, body postures, gestures, and voices of other individuals in order to navigate the physical and social environment and create a response" (p. 20), concluding that the perception–action link allows for empathy to be expressed [16]. A neurobiological basis of this theory was articulated in the early 1990s, when empathy was associated with the mirror neuron system. Cattaneo and Rizzolatti [17] proposed that in order to experience a witnessed emotion, humans must have the representation of the action associated with the emotion they are witnessing. The major components of the mirror neuron system, the superior temporal and inferior frontal areas, which are critical for action representation, and the limbic system, which processes the emotional content of action, are connected by the insula, which acts as an important relay from action representation to emotion. Such neuroscientific characterizations may be seen as distillations of constituent processes that continuously recur, feeding back into themselves to produce the emergent phenomenon of empathy. Such distillations of key processes, though potentially reductive, facilitate experimental investigation in the development of a science of empathy. (See Chaps. 2 and 3 for a detailed discussion of the neural and physiological bases for empathy.) In the following sections, we therefore examine what have often been presented or construed as alternative models of empathy rather as descriptions of key constituent processes involved in empathy, i.e., as functional elements of the empathic process.

### 1.1.3 *Functional Elements of Empathy*

**“Moral Predisposition in Empathy”** Morse [18] describes the moral aspect of empathy as “an internal altruistic force that motivates the practice of empathy”. The moral component involves broad and deliberate acceptance of fellow humans, and a commitment to being receptive to and understanding of others and to assisting them in meeting their basic needs. One has the power to decide whether to engage with another or to avoid and distance oneself from the other.

This view seems to stand in contrast to the notion of merely “tactical empathy”—the “empathic” powers deployed by, for example, skillful confidence artists, allowing them to discern the motivations of their victims and manipulate them. This contrast is instructive in drawing out the distinction between skills that underlie certain components of the process of empathy, and the mode of relation in which those skills are utilized.

The moral stance underlying the practice of empathy guides perception of the experience of the other toward the end of *shared* deepening and clarification of that experience—toward communion; “tactical empathy” does the opposite. In this way perhaps, what is on face an unempathic but sincere and open response may serve the empathic process more fully than a facily tender one. On the other hand, if William James is right, and emotion is as much created by as creative of the bodily experience and physical manifestation of emotion [6], the “tactical” empath stands in danger of entering into altruistic empathy, though they may not be doomed to so doing [12]. However, for the average person, when one is dealing with the pain and suffering of another, the empathic mode may really be experienced as a danger. Indeed, resistance to the empathic mode by medical professionals reflects this potential danger: “If I spent my time feeling what my patients felt, I wouldn’t be able to do my job and help them.” We argue, however, that such fear is rooted in losing sight of the essential orientation of empathy as a relational process *in service of mutual recognition*; in the context of the care-giving interaction, such recognition deeply involves the patient’s goals *as a patient meeting with a care-provider*. The emotional component is needed because that is how humans work—it is a part of our process of understanding. Pain, be it our own or others’, becomes suffering when it is futilely rejected instead of being made useful, even though, along the way, we are unlikely escape suffering altogether.

**Cognitive Empathy** Cognitive empathy is conceptualized as the intellectual ability to understand another person’s feelings by mentally representing that person’s perspective—the system of meanings and practical implications pertaining to a person that will cause a particular course of events to elicit a particular set of emotions and behaviors on their part. For example, Kohler, cited in Neumann [15], argues that empathy is a matter more of understanding another person’s feelings (being able to identify their precipitating antecedents) than sharing them (vicariously having those same or similar feelings oneself). Thus, cognitive empathy may be thought of as one skill that can serve the relational process of empathy as we have defined it. This skill may allow one to cognitively process the situation of another at an emotional

distance—that is, limiting entry as an interested party into an experience of the emotion of the other, and instead working toward obtaining an objective stance. In other words, processing at an emotional distance is focused on forming an accurate predictive model of another’s behavior based in a motivational (rather than a merely behavioral) framework, but without valuation of those motivations [18].

Thus, cognitive empathy relies on role-taking, rather than vicarious experience. Role-taking is defined here as understanding and anticipating the actions and reactions of another individual. Piaget viewed role-taking as a marker of overcoming childhood egocentrism—the young child’s view of the world as an extension of themselves, such that the experiences of others are not imagined or else imagined simply to coincide with their own (Piaget cited in Neumann [15]). Thus, critical to cognitive empathy is the developmental capacity for role-taking or theory of mind. Having plenty of milk of one’s own, one does not cry over spilt milk. On the other hand, understanding that in the case of some other person a glass of milk might be a day’s sustenance, one can predict their feeling of painful loss when it is spilled, without oneself necessarily experiencing any feeling of pain.

Consequently, cognitive empathy is not unidimensional; rather it can vary within an individual, across the valence range of another’s emotions. That is, a person may have greater ability to understand and predict another’s positive experiences than their negative experiences (or vice versa) [19]. Moreover, it is accordingly likely that this balance of cognitive empathic capacities may change within an individual both on short time scales with their own mood, and over longer time scales with experience of and exposure to previously “under-sampled” emotional states and situations. Thus, this skill is amenable to being taught as a set of component skills and competencies [20].

It is important to remember then, that to have much chance of success in developing a useful model of another’s motivations and responses in context, that other must be either extremely similar (as people often are for run-of-the-mill purposes), or else a continued process of information gathering and model-testing and re-fitting must be engaged. For example, in a qualitative study of medical students’ conceptualization of empathy, participants felt that they did not need to experience the same feelings as patients in order to empathize effectively. Nonetheless, they thought that having experiences in common with patients contributes to kindness and improves patient care [21]. Thus, though the need for similar experiences was partially disavowed, we can see in the students’ observations that a more direct understanding of the experience of the other *motivates* behavioral change. Further, the students viewed learning empathy as important and recognized that their life experiences may not be sufficient to equip them to be “good empathizers” [21]. Thus, openness to becoming aware of one’s own biases, conflicts, and concerns is also important because they need to be overcome (or at least set aside) in order to examine the experience of others from their vantage point.

**Emotional Empathy** Emotional empathy has been conceptualized as the ability to perceive and share another person’s inner feelings or psychological state and has also been conceptualized as sympathy. *Sympathy* is the emotional response to and

experiencing of someone else's suffering [15]. Sympathy has been historically described by Nightingale in the nursing literature as a required attribute for those who care about patients: "the nurse must always be kind and sympathetic, but never emotional" [22, p. 87]. It was at the same time understood as "fellow-feeling of joy or grief," highlighting the important aspect of communion rather than mere emotional contagion [18]. Nonetheless, sympathy involves sharing emotion while empathy involves also sharing understanding [23]. But, this understanding must come via a process of partially shared feeling, for what do we truly understand of an experience we never touch? Empathic connection is a mainstay of a social support system and a resource people use to share emotions and understanding of each other and thus develop a sense of belonging [15].

The metaphor of sharing is a problematic one for internal experience, however, given the complexity as well as the essential nature of internal experience. It might be helpful to think instead of harmonizing one's own internal experience with the internal experience of the other. When you show me joy or grief and I emotionally empathize with these feelings, I do not feel the same joy or grief that you do; rather, I match the voice of my emotional experience to what I can hear of yours (see for example Sonnby–Borgström [24]). Indeed, this happens automatically and may be independent of cognitive components of the empathic process such as conscious affect recognition [24]. This capacity is an inherent human trait, aroused by the perception of cues or opportunities offered by the others. Emotional empathy is innate—a natural trait that develops with maturity [18]. However, just as with cognitive empathy, emotional empathy is not unidimensional; some may harmonize more easily with the positive emotions of another than with their negative emotions, and so on [19]. It seems likely to follow here too that in different moods and with changing life experiences, the balance of empathic capacity across the spectrum of emotion may be modulated. Therefore, while emotional response to another (such as a patient) is reflexive and automatic, it can also be learned or enhanced and refined by learning (Morse, cited by Kunyk and Olson [25]). In this view, emotional empathy is also seen as a component of social competence [15] and emotional intelligence [26]. (For more detail on affect and affect recognition, see Chap. 5.)

Wallbott, cited by Neumann [15], describes interactive competence as involving knowledge of social rules and norms, ability to act according to norms, and ability to recognize and handle appropriately another person's emotional cues expressed within a normed social framework. While trait facility in emotionally "reading" others is crucial to the proper deployment of this interactive competence, Wallbott sees empathy as a competence that can be used consciously and with a specific purpose, and thus distinct from automatic recognition of affect. This understanding, therefore, points to the link between the emotional and cognitive faces of empathy.

With respect to medical students, while they are likely to experience emotional aspects of empathy more intensely when they start their studies, as medical school progresses, the intensity of these experiences often declines. There may be a compensatory development of sophistication in the cognitive aspects of empathy, however [21]. Because much of the emotional component of empathy with a suffering

patient is painful, not only may habituation occur but also defenses may arise to reduce the intensity of such experience. Elaborating the cognitive aspects of empathy may allow more nuanced management of the experience of a patient's pain and thus constructively preserve rather than replace emotional experience in the empathic process by giving it use and meaning (see Chap. 6).

***The Communication of Empathy*** The communication of understanding is an important move in the empathic process; perceiving another person's emotion prompts one to express understanding (to share one's perception) and that other person to perceive one's understanding as a result. The expression can be verbal or non-verbal and is influenced by both innate ability and learned skill [25]. Empathic behavior is observable and therefore may be measurable by its recipient or by an independent observer. Communication of empathy (i.e., of one's intention to be engaged in an empathic process with one's interlocutor) occurs through verbal response, body posturing, mirroring, active listening, perception checking, validation, and self-disclosure [18]. (For a detailed discussion of these physical aspects of empathic communication, see Chap. 3).

Bylund and Makoul [27] developed a coding system that rates verbal responses to empathic cues or opportunities (i.e., challenges or emotions) from a level of 0 (denial of patient's perspective) to a level of 6 (shared feeling or emotion). In the framework of empathy as an interpersonal process occurring in a particular mode of relation, such communications ("I feel x along with you") can be seen as signaling to another that one is engaged with them in an empathic mode. Ultimately, however, the key test for the communication of empathy must be the recipient's perception of the fit of the response with the need of the recipient, be it silence, encouragement, commiseration, or instruction. Depending on who I am, what our treatment relationship is, and what has gone on before, when I tell you that I am worried about my new cancer diagnosis, informing me about the relevant statistics or exploring my fears may at that moment each be empathic or unempathic responses, even though, on face, without knowing such contextual factors, one might tend to assume that the first response is not empathic while the second response is. Whether either response is successfully empathic (i.e., communicates an adequate empathic understanding of my state) will depend on whether the true need I have expressed by telling you I am worried is a need for information and expectation management, assurance of your technical medical competence, assurance of your concern for me, care and communion, hope, or some other thing. Further, finding out more about my needs by asking about the nature of my worry may communicate both a lack of empathic understanding—you needed to ask—and, at the same time, if the question sounds genuine, can communicate your orientation to and engagement in an ongoing empathic process.

Although the example above operates at the level of individual difference, understanding empathy as a relational process and the communication of empathy as a communication of intent to be engaged in a particular relational mode highlights the embedding of empathic communication in culturally structured norms. (See Chap. 11. Teaching Cultural Humility for a detailed discussion.) This cultural

embedding operates also at the intermediate level of medical subculture. We may therefore ask the specific question of how doctors and other health care providers may signal to patients their aim to be empathically engaged.

***Empathy As a Professional State*** The *cognitive* and *behavioral/communication* dimensions of empathy have been seen as intertwined in yielding empathy as a professional, deliberate, therapeutic process that allows one to convey understanding of another person's reality back to them [25]. Self-awareness plays an important role in empathy as it helps clarify and maintain boundaries between self and others. The appropriate attention to the boundaries of each person's role in the health-care relationship helps the health-care provider to act professionally (Thompson, cited by Kunyk and Olson [25]). It has been argued that persons with "trained" empathy or "affective distance" can make a selection of the best response in a situation, much like any other learned clinical skill [23, 28]. Because both clinical decision-making and cognitive engagement in empathy have high cognitive load while strong emotional experience can often reduce concurrent cognitive capacity, constraining emotional experience may be useful when the clinical task is focused on the body of the patient (for example, determining the probable source of a febrile illness). At the same time, however, openness to closing emotional distance, being ready to experience emotionally, may often be critical to a cooperative relationship between patient and health-care provider.

Therapeutic responding can help relieve a patient's distress, facilitates the human exchange, and fosters growth in the person who receives the exchange [18]. In work on empathy in the field of nursing, for example, empathy has been figured as a reciprocal relationship between the nurse and the patient. In the work with special patient populations (e.g., hospice patients), the nurse's spending time to know the patient and the patient's reciprocal sharing constitute the empathic relationship (Raudonis, cited by Kunyk and Olson [25]). Under this conceptualization, that relationship derives from acting toward meeting the physical and emotional needs of the patient as a result of understanding the patient [25], which includes listening, comforting, and talking, while "curing" includes taking care of the physical and emotional needs of the patient (Hudson cited in [25]).

## 1.2 Functioning and Failures of Empathy in Medicine

### 1.2.1 *Function*

Patients consider empathy to be very important in consultations and show better treatment adherence and greater satisfaction with more empathetic doctors. In the same vein, findings suggest that physician empathy and communication skills are associated with reduced risk of malpractice claims [9]. Mercer and his group [15, 20] propose that a clinician who has the ability to communicate empathically will be more successful in allowing patients to talk about symptoms, collect more data,

make a more accurate diagnostic and psychosocial perception, and thus better understand and resolve patients' needs by using more specific therapies and communicating better.

These physicians' qualities can help improve short- and long-term patient outcomes because patients feel listened to, valued, understood, and accepted. This in turn alleviates the isolation due to illness [15]. Empathy not only increases patient satisfaction with medical encounters, it improves treatment outcomes and correlates with health-care providers' job satisfaction and work engagement as well. Providers' support and empathy allows patients to fully express feelings and opinions about medical concerns, decreases anxiety, psychological distress, pain, and blood pressure and improves patients' overall function [29]. In patients suffering a cold, an empathic medical encounter, focusing on patient empowerment and education, compared with a medical encounter as usual, led to significantly shorter duration and lower severity of illness, as well as significant differences in inflammatory cytokine IL8 levels and neutrophil counts [30]. Hojat [31] showed that patients whose physicians had high empathy scores on Jefferson Scale of Physician Empathy (JSPE) had significantly better control of hemoglobin A1c and LDL cholesterol than did patients treated by physicians with low empathy scores. Likewise, patients treated by physicians with high empathy scores had a significantly lower rate of acute metabolic complications of diabetes compared with patients of physicians with moderate and low empathy scores [32]. General practitioners' empathy was the only consultation factor that predicted decreased symptoms and improvement in patients' general well-being, whereas patients' overall rating of health, number of physician visits, level of depression, or symptoms duration did not influence outcomes in an outpatient population [33].

### **1.2.2 Failure**

It is clear that collapses of the empathic process are problematic. Gaps in communication, poor patient interactions, and failure to collect or validate interview findings lead to diagnostic errors [34], whereas acknowledging patients' social and emotional concerns are thought to improve quality and efficiency of medical care [35]. In a 3-year prospective study of internal medicine residents, West [36] showed that increased burnout and reduced empathy were associated with increased odds of self-perceived medical error in the following 3 months. Furthermore, having reported errors led to a decrease in residents' quality of life and increased burnout and odds of depression in the following 3 months.

As empathy is a process evolved to facilitate group cooperation and survival, it is unsurprising that empathy is contextually dependent and more likely to be engaged in with in- than out-group members (and one might speculate that this finding is just shy of tautology) [1, 12, 37]. Thus, bias, race-, sex-, and class-ism, as well as stigma all work as barriers to empathy or can be defined by its failure—the exclusion (total or by degree) of members of certain groups from the domain of



empathic engagement [38]. (For a detailed discussion of stigma, see Chap. 16; for bias, see Chap. 14.)

Further, the pressures and bonds of professional camaraderie are liable to produce group dynamics that cast medical colleagues as in-group members and patients as the out-group. Literature abounds describing the erosion of empathy that occurs with medical education and practice as a result of threats like time demands, lack of personal time, mounting clinical responsibilities, contact with cynical, non-empathetic role models, and personal burnout [21, 39–41]. Such doctor-versus-patient framing is evident in the language of “defensive medicine” (and in the paradigm of medicine as a service rather than as care-taking [42]). Indeed, given the evidence that less empathic care is associated with greater risk of malpractice litigation [9], it appears that vicious cycles may be a systemic propensity. The presence of such an inextricable systemic liability points to the need for a continuously operating systemic corrective. (See Chap. 15. Burnout for a discussion of how systemic forces can work to foster or erode cultures of empathy.)

While curricula include teaching empathy and psychosocial aspects of care, the number of hours dedicated to such teaching declines as medical school progresses and standardized evaluation of empathy is lacking. Medical students identified a dire need to increase teaching empathy in clinical years, during their experiential training. Further, they thought that role-modeling by teachers would be most helpful [21]. To allow physicians to cultivate and express empathy, the biomedical and psychosocial aspects of teaching must be balanced, patient contact must start early in medical education, and the tension between detachment and connection with patients must be resolved [43]. Handford [44] challenges the claim that medical training decreases empathy. When coupling measurement of self-reported empathy with a behavioral measure such as the “Reading the Mind in the Eyes” test [45], experienced clinicians performed better on the empathy test than aged-matched controls with comparable levels of education and professional status. Thus clinical practice may be instrumental in maintaining empathetic skills, against a general tendency of empathy to decline with age [44]. However, others challenge this view, with findings that lower levels of self-reported empathy in older individuals represent a cohort effect rather than a decline with age [46].

### 1.3 Implications

In medicine, empathy training is treated as an “add-on” rather than a core component of training and thus it plays a peripheral role. Minimal literature focuses on the role of empathy in clinical competence, diagnostic skill, self-reflection, and self-recognition of errors [47]. Limited work exists about the association between empathy and imagination although our proposed framework highlights its centrality to the empathic process, and it is thought to also be important in solving complex clinical problems. Pedersen [47] therefore suggests that empathy should be taught and developed throughout the acquisition of medical knowledge, rather than as a sepa-

rate “humanities” section. Including empathy longitudinally in the matrix of a medical curriculum will help avoid the dichotomy between biomedical knowledge and human experience of illness and health. By addressing the subjective aspects of human existence throughout biomedical training, we can address the non-scientific knowledge, biases, and prior experiences of the health-care trainees [47]. If physicians’ interpretations and prior experience are not addressed, it is likely that physicians will neglect the moral and existential issues faced by patients as well. Healing, like empathy, is a process predicated on the maintenance of creative potential in body and in mind.

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# Chapter 2

## Neurobiology of Empathy



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### 2.1 Definition and Overview

The majority of studies define the complex phenomenon of empathy as a prosocial behavior linked to an individual's ability to experience and share the emotional state of another [1]. In an attempt to conceptualize empathy, de Waal identified three components: emotional contagion, sympathetic concern, and empathic perspective-taking [1]. Emotional contagion is a low-level process where an individual is affected by another's emotional or arousal state. Sympathetic concern is the appraisal of and an attempt to understand another's condition motivated by a desire to relieve their distress. Lastly, the high-level mechanism of empathic perspective-taking occurs when an individual can model the point of view of another [1]. To simplify, we will distinguish between *emotional empathy* (an affective reaction to others' emotions and/or actions) and *cognitive empathy* (understanding others' perspectives). The concept of mentalization and the related Theory of Mind (ToM) expands further on cognitive empathy. Mentalization is the capacity to understand

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the emotional states of others in terms of and in relation to their desires, wishes, attitudes, and goals [2]. ToM involves the capacity to employ “social intelligence” to understand the other’s thoughts and beliefs based on their frame of reference (rather than our own) [3]. The classic example of mentalization is exhibited in the false-belief task for children—the Sally–Anne test—developed by Wimmer [4]. Sally places a ball in a basket and leaves the room. Anne comes in and moves the ball to a box. When Sally returns, the children asked where Sally will look to find the ball (the belief question). After 4 years old, children can typically correctly answer that Sally will look in the basket. In an attempt to simplify, in this chapter, we will treat mentalization capacity as interchangeable with cognitive empathy.

In mammals, including nonhuman ones, empathy emerges from a variety of behaviors which are themselves the result of complex processes. One of these processes is motor mirroring or mimicry, which occurs when the observer of another individual maps that individual’s bodily and facial expressions onto their neural circuitry (e.g., someone feels compelled to yawn after seeing somebody else yawn). A manifestation of empathy as an emotional contagion consists in an observer taking on the emotions of another (e.g., seeing someone appearing sad or happy may cause one to also feel sad or happy, respectively). Finally, it can manifest in altruistic behaviors—simply seeing others in distress often induces a person, dog, or rat to soothe the other mammalian in distress [5].

This chapter aims to give an overview of the neurobiology of empathy, focused on brain mapping associated with empathic behavior, the role of mirror neurons, and the influence of oxytocin and its genetic correlates on empathy.

## 2.2 Evidence of Empathy Networks from Structural and Functional Imaging Studies

### 2.2.1 Tools and Methods for Evaluating the Neurobiology of Empathy

To delineate the neurobiology of empathy, neurobiological measurements (assessments of brain structure and function) must be linked to measurements of cognitive, affective, and behavioral constructs centrally related to empathy. Structural imaging studies helped to delineate variation in brain structures, thought to underlie empathy. *Functional MRI (fMRI)*, captured while the individual performs specific tasks, shows a correlation between localized cerebral blood oxygenation (a proxy for neural activity) throughout the brain and task engagement on a time scale of seconds. *Electroencephalography (EEG)* captures cortical brain activity on a time scale of microseconds.

Among the self-rated empathy instruments, the *Interpersonal Reactivity Index (IRI)* is extensively utilized in studies mentioned in this chapter. IRI is a 28-item scale which measures *emotional* (Empathic Concern subscale) and *cognitive*

(Perspective-Taking) dimensions of empathy, as well as *response to others' suffering* (Personal Distress), and *empathy for fictional characters* (Fantasy) [6]. The subscales of the IRI make it a useful self-rated instrument for studying and comparing cognitive and emotional dimensions of empathy. Further details on the IRI and other self- and observer-rated measures of empathy can be found in Chap. 4 [7].

In addition to self-reported empathy measures, many tasks (objective measures) have been used to test empathic capacity or components thereof. Among these, we describe a few frequently mentioned in the studies summarized in this chapter.

*The Reading the Mind in the Eyes Test (RMET)* is a task during which the participant is asked to identify the emotional and mental state of a person based on an image of the eye region of the face, in a fixed-choice paradigm [8]. It is an affect recognition task assessing capacity for affect recognition (a process thought to underlie emotional empathy).

*The Facial Action Coding System (FACS)* is used to taxonomize facial expressions of affect quantitatively. This allows refinement of assessments of recognition of the emotional type and significance of various known facial expressions [9]. For example, it enables a researcher to evaluate not only whether a subject can recognize a smile (associated with happiness), but also how big the smile has to be before the subject can reliably recognize it.

*The False-Belief task* assesses whether an observer knows what another person knows (i.e., believes), even if this knowledge is not correct and is able to apply this to predicting their behavior [10]. The false belief tasks are ToM-related tests that should relate to cognitive empathy.

*Action-understanding*, when an individual encodes another's intentions through their actions, can be assessed using various methods, including asking participants to estimate the weight of a box by watching another person lift it [11] or being able to associate context words with action words quickly (e.g., turning, door, key vs. blowing, cake, candles) [12].

## 2.2.2 Brain Networks Associated with Empathy

Structural and functional imaging have helped discern the differences between brain regions associated with emotional and cognitive empathy, as well as empathy for pain.

### 2.2.2.1 Cognitive Empathy

The cognitive component of empathy appears to be supported by a network comprising the ventromedial and dorsomedial prefrontal cortex, anterior midcingulate cortex, temporoparietal junction (TPJ), and medial temporal lobe which are involved in attribution of mental states, ToM processes, and perspective-taking. This network appears to be functional in primates (chimpanzees), fully develops at the time of

adolescence and may prominently involve dopaminergic signaling from neurochemical perspective [13].

In structural imaging studies, cognitive empathy, self-assessed with the IRI, was deficient in those with lesions in the ventromedial prefrontal cortex [13]. Greater gray matter volume in the middle cingulate cortex and dorsomedial prefrontal cortex was associated with higher cognitive empathy, as measured with the Questionnaire of Cognitive and Affective Empathy, which assesses both cognitive and emotional empathy domains [14, 15].

Functional imaging studies highlight the role of the TPJ in cognitive empathy. The TPJ is thought to be associated with the representation of the mental states of the self and others [16]. Cheng et al. [17] found that viewing painful images (e.g., squeezing one's finger in a door) from the perspective of a loved one (vs. adopting self or a stranger's perspective) was associated with increased activity in the anterior cingulate cortex and insula, which are associated with emotional empathy for pain. In the same experiment, adopting a stranger's perspective during a painful scenario, which involves cognitive empathy, increased signaling in the right TPJ and superior frontal gyrus. This suggests that emotional empathy networks, as opposed to cognitive networks, are activated more strongly when those whom we are close to are suffering. In a study that used transcranial direct current stimulation to inhibit the right TPJ, participants' ToM and cognitive empathic accuracy decreased [18]. Being emotionally incongruent to others likely requires someone to mentalize others' emotions (despite not feeling the same emotions), thus recruiting brain areas associated with cognitive empathy. The TPJ and orbitofrontal cortex are active when viewing emotional responses that are incongruent to one's own emotional responses (e.g., viewing somebody not react to a painful-looking injection) [19]. Other parts of the brain that may be involved with emotional incongruence include the dorsomedial prefrontal cortex and precuneus [16, 20, 21]. The superior temporal cortex is also implicated in assessing other's thoughts and behaviors [16, 22, 23].

#### 2.2.2.2 Emotional Empathy

In contrast to cognitive empathy, emotional empathy is thought to be a more automatic and unconscious response to others' emotions [20, 24, 25]. Brain structures highly involved in the emotional component of empathy include the inferior frontal gyrus, inferior parietal lobule, anterior cingulate, and anterior insula. These structures create the network responsible for emotion recognition, emotional contagion, motor empathy, and shared pain. This network is functional in rodents, operates in humans as early as infancy, and appears to feature oxytocin signaling neurochemically [13, 26].

Patients with focal lesions in the anterior insula have shown impairment in emotional empathy [27]. Patients with insular glioma scored lower in empathic concern and perspective-taking compared to healthy and other-lesion controls [28]. The anterior insular cortex was necessary for empathic pain perception as such deficits were not observed with lesions in other locations [29]. A meta-analysis of structural



imaging studies that investigated empathy for pain found that gray matter density in the insula was correlated with self-assessed empathy scores [27]. For example, greater gray matter density in the insula was associated with higher levels of emotional empathy measured with the Questionnaire of Cognitive and Affective Empathy [15].

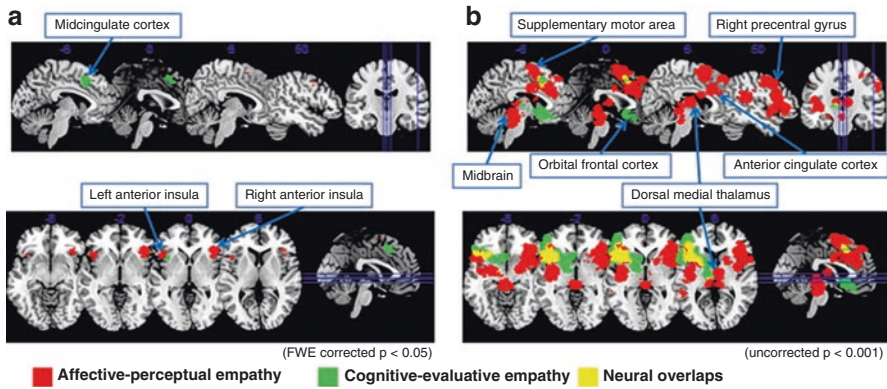
Emotional empathy was deficient in those with lesions in the inferior frontal gyrus [13] and acute lesions in the temporal pole and anterior insula [27]. A study looking at atrophic regions of the brain in patients who had refractory mesial temporal lobe epilepsy found that lower emotional and cognitive empathy scores on IRI associated with smaller volumes in right fronto-limbic areas (including the mesial temporal lobe, thalamus, fusiform gyrus, inferior temporal gyrus, and dorsolateral and medial prefrontal cortex) [28]. Congruently, a study examining white matter tracts found a positive association between emotional empathy and the integrity of communicative pathways in the limbic system [29]. On the other hand, in patients who underwent surgery for low-grade glioma, low cognitive empathy was associated with a disconnected left cingulum bundle, previously implicated in ToM circuitry [30]. In the same study, high emotional empathy measured on a self-reported measure, was associated with lesions in the right inferior fronto-occipital fasciculus, while damage in the right uncinate fasciculus predicted low overall empathy. To explain these findings, the authors speculated that the volume of lesion infiltration in the white matter may lead to disturbance of inhibitory self-regulation [30]. This highlights a limitation of the use of self-report measures of empathy, particularly in lesion studies.

Similar to structural imaging studies, numerous functional imaging studies point to the role of the anterior insula in emotional empathy [16, 31] (see Fig. 2.1). Different methods of assessment of emotional empathy were considered: intentional empathy (i.e., intentionally controlled response to others' emotion) [32], self-report [33], intentional imitation tasks [23], immersive fiction reading [34], social exclusion [20], prosocial behavior [20], and empathy for pain [16, 19, 35–39]. The insula connects the superior temporal and inferior frontal cortices, which mediate action representation, to the limbic system (including the OFC, ventral striatum, and amygdala), which mediates emotional responses [22]. The bridging function of the insula points to the centrality of understanding the emotional significance and motivations of others' behaviors in the empathic process.

### 2.2.2.3 Empathic Integration

Although distinct brain networks were identified supporting cognitive and emotional empathy, there appears to be a significant overlap in the activation of these structures with cognitive and emotional empathy tasks. This may highlight the importance of emotional experience in understanding emotionally informed behavior. In a quantitative meta-analysis of 40 fMRI studies in empathy, the anterior midcingulate cortex, dorsal anterior cingulate cortex, supplementary motor area, and insula form the core network of empathy [31] as illustrated in Fig. 2.1.

### Comparison between affective-perceptual and cognitive-evaluative forms of empathy



**Fig. 2.1** Comparison between brain regions consistently activated in the affective-perceptual and the cognitive-evaluative forms of empathy. Comparison between brain regions consistently activated in the affective-perceptual (red color in (a, b)) and the cognitive-evaluative forms of empathy (green color in (a, b)), with threshold level at (a) FWE (family-wise error) corrected  $p < 0.05$  and (b)  $p < 0.001$  uncorrected, respectively. Neural overlapping regions are shown in yellow color. (Reproduced with permission from Fan Y, Duncan NW, de Greck M, Northoff G. Is there a core neural network in empathy? An fMRI based quantitative meta-analysis. *Neuroscience & Biobehavioral Reviews*. 2011 Jan 1;35 (3):903–11)

#### 2.2.2.4 Empathy for Pain

The prosocial concern for the suffering of others, a component of empathy that has been recently distinguished from other forms of emotional empathy, includes sympathy, empathic concern, and empathic motivation for helping behavior [40] and appears to be supported by a network involving the anterior insula and anterior cingulate cortex [16].

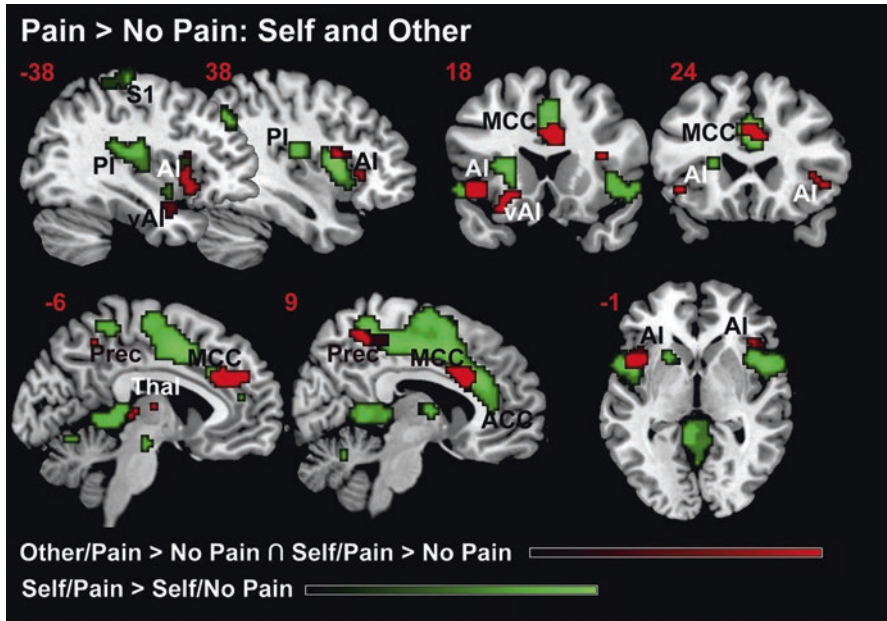
The anterior insula is functionally intertwined with the anterior cingulate cortex, the two structures often being activated together during empathy tasks [31, 35, 41]. An fMRI meta-analysis found that, similar to the anterior insula, the anterior cingulate cortex activates when participants observed emotional faces [42]. Additionally, when participants engaged in interoceptive awareness [42] and immersive fiction reading [34], both the anterior insula and cortical regions showed enhanced activity. Low-empathy groups have been found to have lower functional connectivity between the anterior cingulate cortex and medial prefrontal cortex.

The anterior cingulate cortex has been implicated when people feel acute and chronic physical pain [43–45], and even social pain (i.e., pain resulting from social rejection, social disconnection, and other adverse interpersonal events) [21]. People's acute reaction to viewing another person in pain is a paradigm frequently used in functional imaging studies and is thus, commonly used when studying empathy. The reaction to others who are in pain represents an important manifestation of empathy for medical professionals.

Empathy for physical pain was first localized by Singer et al. [25] in a landmark study in which fMRI was used to compare areas of neural recruitment while volunteers either experienced painful stimulus or observed a loved one receiving similar stimulus. This study found strong support that the anterior insula and anterior cingulate cortex were responsible for both experiencing and observing pain. These same findings have also been reported in children [38] and when hearing others' verbal exclamations of pain (demonstrating independence of sensory modality) [45]. The higher a participant-rated painfulness while observing images of painful stimuli, the greater the activation of the anterior cingulate cortex and anterior insula [37, 46]. Wicker et al. [47] also found activation of the anterior cingulate cortex and anterior insula when participants inhaled odors that produced a disgusting smell or when they observed facial expressions of disgust. Meta-analyses of fMRI studies and literature reviews [16, 31, 48, 49] not only confirm these findings for empathy of pain and disgust, but also of fear, happiness, anxiety, and social exclusion (social pain). Similar reports also associate activation of the anterior cingulate cortex with personal distress [33, 50]. These findings suggest that empathy is a multisensory response [51] generated such that the brain can respond to self and others. Through meta-analyses of fMRI studies, Lamm [16] demonstrated that empathy for pain of others activates a core network that includes anterior insula, and the medial and anterior cingulate cortices. The same areas are activated when individuals experience pain directly, as illustrated in Fig. 2.2.

#### 2.2.2.5 Implications for the Health-Care Professional

Being a health professional may modulate one's empathy. Physicians who practiced acupuncture were more likely to activate the medial and superior prefrontal cortices often associated with emotional regulation and cognitive empathy while watching different body parts being pricked with needles, whereas the nonexpert controls showed stronger activations in the anterior insula and anterior cingulate cortex (both areas being associated with emotional empathy) [35]. Decety [52] used event-related potentials (ERP) (obtained through electro-oculogram and EEG recording) to compare how physicians and controls process pain perception and regulate emotion that results from this pain perception, when visualizing body parts being pricked by a needle or touched with a Q-tip. The physicians had no ERP responses while the controls had distinct ERP responses to pain in the frontal and centroparietal regions when compared to no pain [52]. Studies also showed that repeatedly being exposed to noxious images leads to habituation in activation of the anterior insula and anterior cingulate cortex, but does not necessarily cognitively decrease one's pain assessment [53]. These findings shed light on the neurobiological foundation of health-care professionals' empathic response towards the pain of others', particularly in context of chronic exposure to pain.



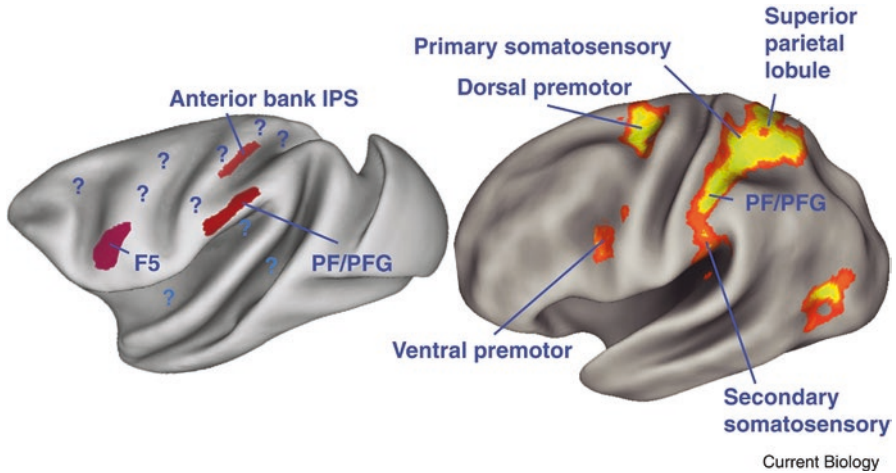
**Fig. 2.2** Common and distinct activation when observing others in pain, and experiencing pain oneself. Areas of common activation include anterior insula (AI), medial and anterior cingulate cortex (MCC/ACC), Prec and Thalamus (conjunction of other and self-related activations, color-coded in red, displayed at the voxel-wise conjunction threshold  $P = 0.0001$ , uncorrected), distinct activations for self-related responses only are observed in posterior insula (PI), primary somatosensory cortex (S1), and in large parts of medial and anterior cingulate cortex (MCC/ACC; color-coded in green, displayed at a threshold of  $P(\text{FWE}) = 0.01$ ,  $k = 20$ ). (Reprinted from meta-analytic evidence for common and distinct neural networks associated with directly experienced pain and empathy for pain, *NeuroImag*, 54 (3), Lamm C, Decety J, Singer T, 2492–2502, Copyright (2011), with permission from ScienceDirect)

## 2.3 Mirror Neurons

### 2.3.1 Basic Structure and Function of the Mirror Neuron System

Mirror neurons are a specific class of visuomotor neurons discovered by the team of Giacomo Rizzolatti in the frontal-motor area F5 of the monkey premotor cortex. These neurons respond both when the monkey performs a particular action (e.g., hand grasping) and when it observes another individual (monkey or human) performing the same action. This finding suggested the existence of a biological system, the mirror neuron system (MNS)—illustrated in Fig. 2.3, which activates for both the self and others and has similar mirroring properties in humans.

What is then the role of the MNS in humans? The MNS has been implicated in ToM, allowing people to process facial expressions and interactions between people



**Fig. 2.3** Mirror neurons. Left: regions in which mirror neurons have been recorded in the macaque; and right, voxels showing activity both during observation and execution in the human brain. Many brain regions have not yet been explored for mirror neurons in the monkey, hence the “?”s. IPS, intraparietal sulcus; PF/PFG, areas of the inferior parietal lobule. (Reprinted from *Mirror neurons*. *Current Biology* 19 (21), Keyser C., R971-3, Copyright (2009), with permission from Elsevier)

and objects [54]. The MNS enables people to perceive and understand others’ feelings without words and activates more intensely when emotionally unpleasant pictures represent moral violations (vs. exposure to unpleasant pictures without moral connotations), indicating a possible role in morality [55]. The MNS may play a role in the development of empathy in children, especially as the MNS is prominent in brain regions associated with empathic concern [56]. Finally, further research on the MNS will help us understand the pathophysiology of conditions theorized to have an impaired MNS, including autism spectrum disorder [57–59] and schizophrenia [60].

The MNS should be distinguished from the ToM network; however, the MNS comprises insula, middle temporal, inferior frontal and inferior parietal gyri, superior temporal sulcus, and ventral premotor cortex (see Fig. 2.3) while the ToM network consists of bilateral TPJ, medial prefrontal cortex, precuneus, and posterior cingulate cortex.

Thus, MNS and ToM areas seem to be complementary. The MNS is an action-understanding system, recruited when the subject observes a scene in which there is another subject in motion. The ToM network is recruited when the individual tries to infer the intentionality of a subject in the absence of sensory information but when a specific behavior enabling inferences about goals, beliefs, or moral issues is presented in abstract terms (most often via verbal stories) [3]. MNS areas were hypothesized to provide sensorimotor information to ToM areas in order to support and constrain inferential processes for understanding the intentions of others [61]. However, this hypothesis has not been tested yet; the integration of mirroring with

the higher-order processes comprised by cognition, is an important future direction for mirror neuron research [62].

Among the methods used for inferring MNS activity in humans, changes in the EEG mu rhythm have been evaluated in numerous studies. EEG amplitude in the mu frequency band was found to be decreased during both execution and observation of actions. This decrease is known as desynchronization and is identified as an index of sensorimotor cortical activation. In a recent meta-analysis including 85 studies (comprising 1707 participants), consistent EEG mu desynchronization was reported during both action execution and action observation [63]. Hence, mu rhythm suppression seems to reflect the activity of the human mirror system.

In addition to hand movements, which have been most studied, the MNS has been found in other types of movement, specifically mouth actions, such as sucking and lip smacking [64]. Schulte-Ruther et al. [65] found that areas involved in both the MNS and ToM were activated when participants were asked to focus on others' facial expressions of emotions or their own emotions. There even exists an auditory MNS discovered through fMRI [66] which responds to both performance of and exposure to auditory events (e.g., hand clapping).

Given the multiple sensory modalities leading to central neural activations, it has been proposed that visual, auditory, and motor feedback in the MNS is important for regulating and understanding self vs. others' actions. The superior temporal cortex encodes an action's visual description, sending information to the posterior parietal cortex which codes the kinesthetic aspect of movement, where from the information goes to the inferior frontal mirror neurons, which encode the goal of the action [23]. In a meta-analysis of over 200 fMRI studies, Overwalle and Baetens [3] found the MNS exists in the anterior parietal sulcus and premotor cortex, which is able to encode moving body parts, supporting the argument that the MNS is responsible for understanding bodily action.

In 2010, direct single-neuron electrode firing for hand grasping and facial expressions was finally recorded in humans [67], allowing for greater precision than whole brain studies. In addition to prior discoveries with fMRI, mirror neurons were also found in the supplementary motor area, hippocampus, and parahippocampus. These various locations suggest that multiple systems are involved with mirroring for conceptualizing self and others' movements. These findings shifted thinking that mirror neurons reside in a dedicated region of the brain, suggesting that instead they could be found throughout the brain [68]. This supports prior evidence that the MNS is multimodal.

### 2.3.2 *Empathy and the MNS*

What then is the ultimate purpose of the MNS and how does it relate to empathy? Gallese [69] argues for a different intersubjectivity hypothesis in which mirroring exists, so that we may share in the experiences of multiple people, given that one's actions share the same neural structures and activations when the same actions are

observed in others. Ultimately, the purpose may be to understand actions and emotions. The richer one's understanding of and expertise in the action, the greater the sensitivity of the mirroring mechanism [70]. Indeed, the MNS may not only encode actions, but the goals of those actions as well, which speaks to the intentions of the one performing the action [71]. This underscores the connection of the MNS with empathy.

For example, when participants viewed grasping hand actions with context (e.g., cleaning, drinking), this yielded a greater increase (compared with decontextualized grasping) in activation of the inferior frontal gyrus and adjacent ventral premotor cortex, where hand actions are represented [72]. When grasping motions were more precise (thumb-and-index-finger vs. whole-hand grasps), there was also greater activation [73]. Interestingly, greater *empathic concern* self-reported with the IRI correlated with MNS activation [74, 75]. These findings point to the importance in empathic processing of understanding the context and purpose of others' actions. Moreover, just as the MNS fires for performance and observation, the anterior insula and anterior cingulate cortex behave similarly for performance and observation of emotions such as pain and disgust [47].

The question of how mirroring may relate causally to empathy remains, however. The MNS may mediate empathic processes through imitative internal representation of others, facilitating social cognition. For example, mirror neurons may allow people to conceptualize motor content through the parietal-frontal-cortical circuits during observation or action, enabling understanding of action and intention [76]. Within the MNS, higher-order visual inputs relay to the frontal cortex, which processes understanding and intention, as well as the parietal cortex, which encodes motor representation of actions. These areas use the insula to relay to the limbic system, thought to be responsible for emotional processing and imitative learning [76]. This may thus provide the underpinning for empathic understanding of the connections between other's feelings and actions.

On the other hand, prominent empathy researchers, such as Lamm and Majdandžić [77] have also cast doubt on a causal role for the MNS in generating empathy. They suggest that mirror neuron activity, rather than *feeding up* to higher-level interpretation of the experience of another in picking up a glass of water or being cut by a broken glass, is *reflective* of such higher-level interpretation. Lamm and Majdandžić propose that the MNS serves to represent a *predictive model* (based on the higher-level interpretation) that guides continued observation of such actions (in order to further refine that interpretation). This understanding of the relationship between the MNS and empathy may be extended broadly to the findings of common networks of activation for the variety of observed and directly experienced experiences described in the preceding sections. That is, common activations may represent the *product of* rather than the *substrate for* empathic understanding of the experiences of others. Indeed, such a view is consistent with an understanding of empathy as an iterative process in service of understanding another, as described in Chap. 1 [78]. Here, the notion is that we construct models of others in order to predict their behavior; when our predictions fail, we are challenged to change our understanding—it is precisely the failure of the predictive model that lets us know that we did not understand.

## 2.4 Hormones and Empathy: The Role of Oxytocin

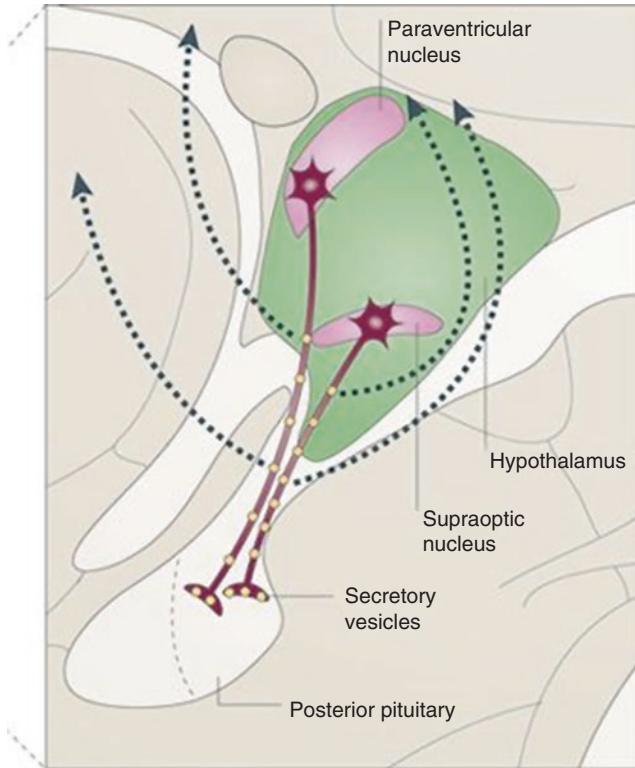
Hormones, most notably oxytocin, may play a role in regulating empathic processes. Oxytocin, along with arginine vasopressin (AVP), are neuropeptides produced by the paraventricular and supraoptic nuclei of the hypothalamus and stored in the posterior pituitary [79, 80]. Oxytocin and arginine vasopressin travel along the axonal projections from hypothalamus to amygdala, hippocampus, striatum, suprachiasmatic nucleus, and bed nucleus of stria terminalis where they act as neuromodulators (e.g., modulating the activity of neurons in the amygdala) or neurotransmitters. A graphic representation of basic oxytocin circuitry is shown in Fig. 2.4, adapted from Meyer-Lindenberg [79].

Oxytocin's primary function outside the central nervous system is uterine contraction during labor and milk secretion, stimulated by suckling, during breastfeeding [81]. Oxytocin thus plays a significant role in birth, delivery, and childcare, and exogenous oxytocin is used to prevent postpartum bleeding and induce labor. It has also been implicated in parental bonding with infants. Intranasal oxytocin administration was demonstrated to increase trust between two people under certain experimental conditions [82]. Oxytocin reduces amygdala and hypothalamus–pituitary–adrenal (HPA) axis reactivity to social stressors and thus promotes the effect of positive (stress-reducing) social interaction and increases prosocial behavior [79]. In psychopathology like borderline personality disorder, where loss and abandonment trigger impulsive self-harm behaviors, plasma oxytocin levels were found to be significantly lower than plasma oxytocin levels of controls [83].

Multiple studies demonstrate oxytocin's role in empathy enhancement. When men were given intranasal oxytocin, their emotional, but not cognitive, empathy responses rose from baseline [84]. Exogenous oxytocin can also increase perceptions of harms in victims of criminal offenses without increasing the desire to punish offenders [85]. Oxytocin and not placebo, increased generous behavior in people with high trait empathy measured with IRI [86]. Self-assessed empathy in response to an emotional video is associated with an increase in oxytocin, especially in women [87]. In a double-blind experiment, participants treated with intranasal oxytocin expressed more empathy when they imagined pain in other people [88]. Intranasal oxytocin also enhanced affective empathy for fear [89]. Oxytocin has also been shown to increase empathy for both the “in-group” (belonging to one's own social or ethnic group) and “out-group” (not belonging) members [26, 90].

How does oxytocin promote empathic behavior? Cumulative evidence suggests that oxytocin may serve to increase the salience of social cues thus increasing attentional focus on them [91]. Oxytocin appears to reduce amygdala activity and increase skin conductance (plausibly a measure of emotional and sympathetic responses) independent of culture and gender [92]. Geng [92] demonstrated that oxytocin administration in a sample of men and women increases emotional empathy in both genders as assessed by RMET, decreases amygdala activity on fMRI,





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**Fig. 2.4** Neurophysiology of Oxytocin and AVP. Oxytocin and arginine vasopressin are synthesized in magnocellular neurons in the paraventricular and supraoptic nuclei of the hypothalamus and are processed along the axonal projections to the posterior lobe of the pituitary, where they are stored in secretory vesicles and released into peripheral circulation (inset). In addition to this release from axonal terminals, there is dendritic release of oxytocin and arginine vasopressin into the extracellular space, resulting not only in local action but also in diffusion through the brain to reach distant targets (shown by the dotted arrows). Furthermore, smaller parvocellular neurons in the paraventricular nucleus also produce oxytocin and arginine vasopressin and project directly to other regions in the brain. (Adapted from Meyer-Lindenberg A, Domes G, Kirsch P, Heinrichs M. Oxytocin and vasopressin in the human brain: social neuropeptides for translational medicine. *Nature Reviews Neuroscience*. 12 (9):524, Copyright (2011), with permission from Macmillan Publishers)

and increases the coupling between amygdala and insula and posterior cingulate cortex for stimuli with positive valence (while it decreases this coupling for stimuli of negative valence). An fMRI study in women, performed in resting state, showed that intranasal administration of oxytocin increased connectivity between the posterior cingulate cortex, and the brainstem, which did not occur in women who received intranasal placebo. Furthermore, women who received oxytocin and were reared in

supportive families had increased connectivity between posterior cingulate cortex, cerebellum, and postcentral gyrus, regions involved in social cognition, motor function, and affiliation [93]. When intranasal oxytocin was administered to fathers viewing pictures of their children, reward structures such as the caudate nucleus, substantia nigra, ventral tegmental area, and putamen, as well as dorsal anterior cingulate cortex (empathy region) showed increased activation [94].

Abnormalities in the oxytocin system have also been implicated in the pathophysiology of conditions that commonly exhibit impairments in social cognition and associated empathic behaviors, including schizophrenia [95–98] and autism [99–102]. Several oxytocin gene polymorphisms have also been implicated in social cognition in humans and animals, especially ones of the gene encoding for the oxytocin receptor (OXTR) protein. The rs53576 polymorphism has the most replicated association with empathy, with GG subjects showing greater empathy. Given oxytocin's role in parent–child bonding, it is not surprising that rs53576 correlates with greater interaction quality and empathy between parent and child [102]. A meta-analysis of 12 studies supported greater empathic ability in G allele carriers, regardless of ethnic differences [103]. GG carriers were shown to have stronger neural responses in the insula, amygdala, and superior temporal gyrus (all areas associated with emotional processing and empathy activation) compared to AA carriers of OXTR rs53576 [104]. Risk allele carriers, had lower levels of sociability, along with lower activation of the amygdala, and structural abnormalities in oxytonergic brain areas such as the hypothalamus [105].

Single nucleotide polymorphisms of the oxytocin receptor gene (OXTR) may also relate to empathy via social cognition. One such polymorphism, rs11131149 marker was associated with differential results on social cognition assessed with behavioral tasks, where more copies on the major allele lead to improved social cognition [106]. Five OXTR polymorphisms analyzed together to calculate a cumulative genetic risk predicted empathic communication in romantic relationships [107]. A haplotype of yet another six single nucleotide polymorphisms increased emotion recognition with exposure to exogenous oxytocin [108]. A study on two samples of children was able to replicate the association of the OXTR single nucleotide polymorphism rs1042778 with callous and unemotional traits across gender and age, indicating a likelihood for decreased empathy and development of psychopathy [109]. The role of oxytonergic genetic variation in modulating empathy needs to be studied further and must include replication of individual studies. These findings point, however, to the impact of biology and heredity on empathy.

## 2.5 Neuroplasticity: Can People Change?

If empathy is heavily reliant on the structure of our neural network, receptors, hormones, and genes, is there hope in enhancing empathy through these neurobiological mechanisms? Given that fMRI has been the predominant tool used to study

changes in the brain, it can also be used to gauge feedback and physiologic self-regulation facilitating voluntary control of brain activity [110]. In a meta-analysis, Lamm et al. [16] studied the effects of cognitive and motivational processes on individuals' responses to self and others' pain. When participants imagined themselves or others undergoing pain stimuli with or without treatment for pain (using picture-based or cue-based paradigms), pain intensity ratings were higher when treatment was perceived to be ineffective, indicating greater empathic concern for greater perceived pain. Adopting the perspective of pain to oneself elicited higher activity in the left parietal cortex while taking on others' perspective elicited greater activity in inferior posterior parietal areas. This indicates that external motivations and voluntary control do make a difference in recruiting specific neural networks.

But, can these neural networks be modified to improve empathic capacity? In other words, can empathy be learned, and to what extent? For a recent review of the literature on empathy teaching interventions, including virtual patient technology for medical, nursing, and allied health professions education, see Foster et al. [111], as well as Chaps. 5, 6, 7, 8, 9, 10, 11, 12, and 13 in Part II of this book: *Approaches to Empathy Education*.

Hein et al. [112] used fMRI to study empathy-related neural changes when Swiss individuals required help from members of an out-group they initially devalued (Balkan) vs. in-group members (Swiss). Despite having initially more positive impressions when receiving help from in-group members, the emotions towards the out-group members (measured with IRI EC scale) became more positive after receiving help from them. Study participants who received help from the out-group cohort also showed greater anterior insula activation (highly associated with empathy) after learning that the person who could potentially prevent them from experiencing pain chose to give up money to save the participant from application of a painful stimulus on the hand or take the money and allow the participant to experience pain on the other. Learning occurred after just two positive experiences with the out-group. This suggests that individuals can enhance their empathy for people identified as belonging to a group different than themselves, with very few learning experiences.

After receiving real-time functional MRI-assisted neurofeedback to voluntarily upregulate anterior insula activity when visualizing painful situations, healthy participants exhibited stronger functional connectivity between the anterior insula and PFC and greater empathic responses to pictures of painful situations post-training compared to their baseline, appreciated by participants by rating how much they felt the pain experienced by the person in the picture [113]. Other neurofeedback studies have been used to increase empathic emotions such as tenderness and affection and fMRI activity in associated neural networks, most notably in the septohypothalamic area, medial frontal cortex, temporal pole, and precuneus [114, 115]. These studies highlight the efficacy of neurofeedback training in enhancing prosocial behaviors.

Just as neurofeedback has worked for healthy subjects, it may also work for patients with various other pathologies often associated with difficulties in emotional understanding. EEG and fMRI neurofeedback studies have been conducted in

individuals with autism spectrum disorder to improve cognitive and behavioral symptoms with long-term benefits [116–119].

Other modalities have been used to enhance empathy as well. Wang et al. [120] found that transcranial direct current stimulation of the PFC increased self-assessed pain empathy when participants were shown pictures of people undergoing painful procedures. In a meta-analysis looking at healthy individuals across 22 studies measuring dependent variables including facial expression recognition [9], action-understanding tasks, and RMET, interventions employing repetitive transcranial magnetic stimulation were found to enhance these measures of empathy [121].

“Low-tech” approaches however are also capable of producing change observable at both the level of empathic phenomena and of brain structure and function. Long-time loving-kindness meditation practitioners were also found to have greater gray matter volume in the right angular and posterior parahippocampal gyri compared to novices [122], while compassion meditation in healthy novice participants was found to enhance empathic accuracy on RMET and increase neural activity in the inferior frontal gyrus and medial prefrontal cortex, areas previously associated with empathy [123]. Klimecki et al. [124] studied differences between “empathy” vs. “compassion” training. Compassion was defined as showing concern for others’ suffering, and was trained through a technique that cultivated feelings of benevolence and friendliness in a state of quiet concentration. Empathy training in this study was focused on sharing and feeling the other’s suffering through guided imagery and self-generated sentences (e.g., “I see your pain”). Empathy training was associated with greater activation in the anterior insula and anterior midcingulate cortex as predicted, but participants had greater negative affect. Compassion training, however, was associated with positive affect and increased activations in non-overlapping networks including ventral striatum, pregenual anterior cingulate cortex, and medial orbitofrontal cortex. Compassion training may thus be effective in reducing burnout.

These studies highlight the efficacy of neurofeedback, compassion training, and various methods of neurostimulation in enhancing prosocial behaviors.

## 2.6 Conclusion

The breadth of the empathy concept, with its affective, cognitive, and prosocial domains, makes the study of its neural circuitry complex. Differentiating the brain structures involved in emotional and cognitive empathy remains difficult, in part because such processes rarely occur in isolation. Understanding empathy as a relational iterative process wherein observation informs model building, modeling guides further observation, and that observation tests the model, prompting model elaboration or correction, may allow for a general organization of the findings relating to the neurobiology of empathy. Mirror neurons in the premotor, inferior frontal, parietal and temporal cortices, as well as the insula, become active not only when the individual performs an action but also when the person observes similar behav-

ior and are thought to relate to action modeling. Emotional empathy is evolutionarily present in mammals, develops in human infants in the presence of adequate bonding with parents, is likely modulated by oxytocin, and involves the anterior cingulate gyrus and insula, in addition to cortical structures. Cognitive empathy is common to primates and humans; it develops in adolescence, appears to relate to neural activity in the temporoparietal junction, and appears to respond to interventions like neurofeedback and neurostimulation. Perhaps most relevant to health care is empathy for pain, which appears to relate to neural activity in the anterior insula and anterior cingulate and can be modulated by experiences in caring for others. Further study in neuromodulation of empathy (using techniques such as neurofeedback or even pharmacologically enhance training) is warranted and may inform best practices in teaching empathy to health-care professionals. Linking the capacity to improve understanding with enhancement of motivation for care is critical.

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# Chapter 3

## The Physiological Nature of Caring: Understanding Nonverbal Behavior



Anjelica J. Halim, Adriana E. Foster, Laura Ayala, and Erica D. Musser

### 3.1 Exploring Nonverbal Empathy

Interpersonal communication is an exchange of information between two or more people [1, 2]. Successful interpersonal communication occurs when all parties within a conversation understand what is being sent and received through verbal and nonverbal communication [1, 3]. Suppressing emotional expressions can lead to impaired interpersonal communication [4, 5]. Although much emphasis is placed on health-care providers' verbal empathy, nonverbal modalities of communication significantly influence the patient's perception of the provider's empathy [6–8]. Nonverbal empathy accounts for 45% of the variability in how empathy is perceived by the person who receives the communication, while verbal messages account for 22% [6]. This chapter will examine the nonverbal expression of empathy. We describe how these nonverbal modalities influence empathic communication with patients and how they can be enhanced through teaching.

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## 3.2 What Is Nonverbal Communication?

“Nonverbal communication takes place every time one person interacts with another, it may be intentional or unintentional, and it is part of the rapid stream of communication that passes between two interacting individuals” [9, p. 386]. It is necessary to understand the channels of communication to understand nonverbal empathy, which goes beyond the written or spoken word. Nonverbal communication encompasses aspects of body language including facial expression, eye contact, posture, gestures, and interpersonal distance [9]. Nonverbal communication involves cues that are encoded and communicated continuously by the sender, either consciously or unconsciously, and subsequently decoded by the receiver [9]. Communication, including its nonverbal component, allows us to construct or reconstruct individual and common histories [10]. Nonverbal cues define, condition, constrain, and help regulate communication, cueing hierarchy and priority among communicators [11]. A summary of the characteristics of nonverbal communication, their definitions, and where known, anatomical and physiological correlates, is presented in Table 3.1.

### 3.2.1 Processes Involved in Meaningful Communication

*Perception* is an active process of giving meaning to sensory input by selecting, organizing, and interpreting people, objects, events, situations, and other phenomena [1]. Processes of perception are continuous, cohesive, and serve as the passage for effective interpersonal communication [24]. There are three pathways to perception: selection, organization, and interpretation [1], as illustrated in Fig. 3.1.

*Selection* involves noticing how an individual communicates their message, how gestures are presented, words are chosen, and how others perceive such information. Selection represents narrowing one’s attention to certain stimuli (e.g., the position of a patient, or sounds/noises a patient makes when in a particular state), and which stimuli become relevant to act upon (e.g., determining a patient’s diagnosis). What we select to notice influences the way we approach individual situations [1, 24, 25].

*Organization* is defined as perceiving information and attributing meaning through interaction between the person’s experiences and ideas [26]. There are four types of organizational strategies that help us understand interpersonal properties: prototypes, personal constructs, stereotypes, and scripts [1]. *Prototypes* are clear and descriptive example that represent an ideal model of a category, e.g., coworkers, patients, physicians, etc. [1]. Prototypes assist in deciding which category a phenomenon fits [1]. *Personal constructs* is used to evaluate an individual’s particular qualities, e.g., how intelligent, kind, responsible, reliable, and trustworthy is this person? [1]. Once an individual has been categorized, they are stereotyped to perform a particular way. *Stereotypes* are based on our perceptions of similarities

**Table 3.1** Characteristics of nonverbal communication

Characteristics of interpersonal communication	Categories, examples, and operational definitions	Anatomy and physiology correlates
<p><i>Facial Expression:</i> one or more motions or positions of the face muscles that convey the emotional state of an individual to observers [12]</p>	<p>Information about facial expression is gathered from multiple sources, e.g., frown, and smile [2]</p> <p><i>Frown</i> is a type of facial expression in which the eyebrows are brought together and forehead is wrinkled. This indicates displeasure, sadness, worry, confusion, or even concentration [12]</p> <p><i>Smile</i> is a facial expression that involves any upward curve of the mouth and indicates pleasure or satisfaction [12]</p>	<p><i>The frown muscles</i> are orbicularis oculi (2 muscles), corrugator supercillii (2 muscles), procerus (1 muscle), and orbicularis oris (2 muscles) [13]</p> <p><i>The frown neurophysiology</i> includes the release of adrenaline and cortisol (for anger and fear), serotonin, dopamine, glutamate, and norepinephrine (for sadness) [14]</p> <p><i>The brain regions that contribute to frown include:</i> the posterior superior temporal sulcus which recognizes facial expressions, orbitofrontal cortex which receives representations of angry faces, and amygdala which controls emotional processing of fear, triggers anger, and motivates action (fight-or-flight response) [14]</p> <p>Emotion recognition of angry and fearful faces is complex [15]</p> <p><i>The smile neurophysiology</i> includes the release of dopamine, serotonin, endorphins (which aids in calming the individual who smiles by lowering heart rate and blood pressure) [14]</p>
<p><i>Oculesics:</i> eye gaze and movement</p>	<p>Oculesics defines the communicative aspects of eye behavior [9]</p>	<p>Brain responses to blinks occur in the viewer’s occipital cortex during an audiovisual presentation, with stronger responses for subjects who are more empathetic [16]</p>

(continued)

**Table 3.1** (continued)

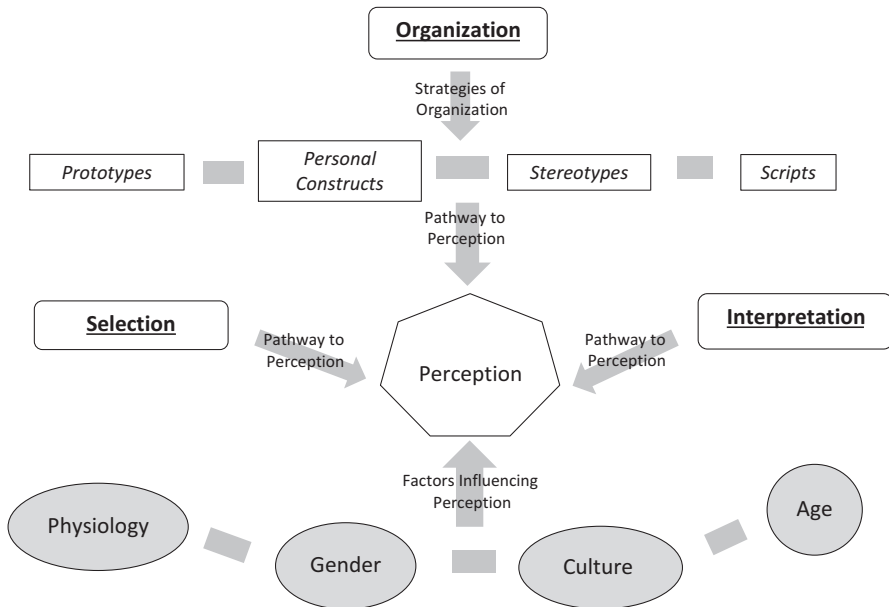
Characteristics of interpersonal communication	Categories, examples, and operational definitions	Anatomy and physiology correlates
<p><i>Paralinguistics</i>: tone of voice, volume, inflection, and pitch [2]</p>	<p><i>Tone of voice</i>: verbal communication that includes an individual’s pitch, timbre, and their expression of thoughts in communication [17]  <i>Volume</i>: how loud or soft an individual speaks  <i>Inflection</i>: change in pitch, change in tone, change in timbre  <i>Pitch</i>: the vibration rate of the vocal folds [3]</p>	<p><i>The air pressure system</i> includes the diaphragm, chest muscles, ribs, abdominal muscles, lungs  <i>The vibratory system</i> includes the voice box—larynx and vocal folds  <i>The resonating system</i> includes the vocal tract—throat to the pharynx, oral cavity, and nasal cavities  <i>The Voice Box Cartilages</i>: thyroid cartilage, cricoid cartilage, arytenoid cartilages (left and right)  <i>The Voice Box Muscles</i>: thyroarytenoid muscle, lateral cricoarytenoid muscles, interarytenoid muscles, posterior cricoarytenoid, vocalis muscle, cricothyroid muscles [13]  <i>Neurophysiology</i>: production of vocal calls includes basal ganglia, periaqueductal gray, and nucleus ambiguus which houses motor neurons innervating the larynx muscles [13, 15]                      Control of speech production takes place in Broca’s area in the inferior frontal gyrus [18]</p>
<p><i>Gestures</i>: deliberate movements and signals that express an idea, sentiment, or attitude and influence the response of the person we communicate with [2, 16]</p>	<p><i>Gesture</i>: Nonverbal communication in place of or in conjunction with speech (i.e., come here, over there, etc.) [16]. Hand movements may be used without conscious awareness or intention when communicating face-to-face or even communicating by phone [11]</p>	<p><i>The neurophysiology</i> of gestures varies depending on the type of movement: inferior frontal lobes are sensitive to the semantic import of hand movements. Inferior parietal, posterior superior and middle temporal regions, bilateral posterior superior temporal sulcus, and left anterior inferior frontal gyrus respond strongly to speech when accompanied by gesture [16]</p>

(continued)

**Table 3.1** (continued)

Characteristics of interpersonal communication	Categories, examples, and operational definitions	Anatomy and physiology correlates
<i>Kinesics</i> : body language, body posture, and movements [9]	<i>Body position</i> : A natural body posture the body assumes in microgravity. Other positions such as sitting, standing, walking, and laying down, require support from muscles and ligaments during weight-bearing activities, combining both equal strength and flexibility in skeletal muscles [9, 13]	<i>Head support</i> : scalenus, prevertebral, sternomastoid, splenius, semispinalis, and capitis <i>Shoulder Girdle</i> : trapezius <i>Midsection</i> : erector spinae: spinalis, longissimus, and iliocostalis; multifidus, posterior rectus abdominis, and oblique muscles <i>Pelvic region</i> : transverse abdominis, iliacus, psoas, hamstrings [13] precentral gyrus, located on the surface of the posterior lobe, controls voluntary movements of the skeletal muscles [18]
<i>Proxemics</i> : modulation of space that people feel is needed between them and others [2]	Proxemics is a culturally elaborated system that is comparable with and complements language in communication [19]	Proxemics include posture of individuals, orientation of bodies, kinesthetic factors, the type of touch (caressing, holding, holding and pressing against, spot touching, accidental brushing, or no contact), the visual code, the thermal code (contact, radiant, or no heat), the olfaction code (detectable body odors and breath, no present olfaction), and voice loudness scale [20]
<i>Haptics</i> : the somatic sense of touch [21]	Touch, proprioception (body position felt as muscular tension), kinesthesia (movement of body and limbs), and vestibular sense (balance) combine to create the synergistic integration of the body in the environment referred to as “haptic,” in contrast with “optic/visual” perception [21]. Touch is a “prototypic means of establishing and maintaining intimacy” [22, p. 15]. The categories of touch are playful, control, formal (e.g., greeting and departure touches or making transitions in and out of focused interactions), hybrid (e.g., greeting and affection), task-related, accidental, and touch that conveys positive affect (e.g., support, sexual interest, and affection) [22]	<i>Peripheral nervous system</i> allows touch processing through receptors in the skin, muscles, tendons, and joints (Merkel cells, Meissner’s corpuscles, Ruffini and Pacinian endings in epidermis and dermis, muscle spindles, Golgi tendon organs, and joint receptors in muscles and joints) [23] <i>Central nervous system</i> receives information transmitted via nerves to the spinal cord and medulla, then to the thalamus and then to the contralateral primary somatosensory area in the anterior parietal lobe. Parietal operculum and posterior parietal areas receive information from the primary somatosensory area [23] Postcentral gyrus, located in the lateral parietal lobe, locates the primary somatosensory cortex that receives the sense of touch [18]





**Fig. 3.1** Pathways to Perception (Figure created based on text in Wood [1], *Interpersonal Communication: Everyday Encounters*)

between people or on social perspectives that we have internalized, which may be accurate or inaccurate [1]. *Scripts* are the final cognitive schema used to organize perception. Scripts consist of sequences of activities used that we are expected to perform while completing a task, in a particular environment, and in encountering any particular situation [1].

*Interpretation* is the process that assigns meaning to stimuli that we have noticed and organized, such that our perceptions make sense to us [1, 24].

**Factors That Influence Perception** Everyone perceives information differently, as influenced by factors like physiology, gender, age, culture, and expectations [1, 9, 25, 27]. Sensory abilities and physiology differ. A patient's physiology, specifically his/her emotional state, may influence the way health-care professionals perceive the patient's condition (e.g., medical diagnosis or use of medications affects perception) [2, 9]. Similarly, when tired or under stress, a health-care professional is more likely to perceive things negatively [2]. Men and women, possibly influenced by gender and culture, interpret nonverbal communication cues differently. Women smile more, approach closer than men and respond more positively to touch when considered friendly and appropriate [9]. Culture and expectations come into play as people are more likely to appropriately perceive others' nonverbal behavior if they are culturally, linguistically, and racially similar [9, 28]. Health-care providers must be aware that there is the potential for cultural misinterpretation of their communication. Expectations may influence the way nonverbal communication is perceived,

for example, how empathic a physician may be when communicating diagnostic results to a patient. If specific characteristics reveal a diagnosis, the patient is more likely to reproduce or become aware of additional symptoms associated with an already established diagnosis [1]. As an individual ages, facial expressions, body language, and paralinguistics are altered and may affect how people express themselves. Overall, older individuals have lower empathic accuracy than younger individuals. However, the decline in empathic accuracy is less evident in older physicians compared to nonmedical controls [27]. In sum, nonverbal communication has a complex structure and intertwined anatomical, physiological, social, and personal underpinnings that color its perception and manifestations in patients and health-care professionals alike.

### 3.3 What Is Nonverbal Empathy?

Sapir [29] explained that humans respond to gestures using a “code” that is not written, but it is universally understood. Nonverbal empathy, as it is the case for the global concept of empathy, is challenging to fit into a unitary definition. In the following sections, we present the known components of nonverbal empathy and highlight the areas of further research and progress of knowledge that relates to empathy in health care.

#### 3.3.1 *The Concept of Empathy*

Empathy is a basic form of human expression, which facilitates interpersonal communication [5, 30]. Empathy can be framed as the ability to accurately perceive how another person is feeling [31] and show emotion and concern for others [32]. Empathy has an *affective* (or emotional) component, that allows for the perception and sharing of another person’s feelings, a *cognitive* component that allows for the understanding another’s feelings and a *behavioral* component that includes verbal and nonverbal response (e.g., active listening, validation, and self-disclosure) [33–35]. *Cognitive* empathy is described as a learned intellectual process that requires understanding the feelings of another person [34, 36] and placing oneself in the other person’s frame of reference [37]. *Affective* empathy is described as “the unique capacity of human beings to feel and understand what another person is experiencing” [38] and as “a process for understanding an individual’s subjective experience by vicariously sharing the experience while maintaining an observant stance” [39]. *Behavioral* empathy was described as “close communication with another, as well as a deeper, fuller appreciation of the other as an individual” [38]. In a clinical setting, empathy requires understanding the patient’s perspective, communicating that understanding verbally and nonverbally, and acting therapeutically on that understanding [40]. This section will focus on the behavioral component of empathy, and

in particular, on nonverbal communication of empathy which predicts perceived empathy by patients [41].

Preston and de Waal [42] formulated the perception-action model (PAM) of empathy as a unifying theory with behavioral, physiological, and neuroanatomical components. In this model, perception of the state of an “object” (in our case the patient) activates the “subject’s” (in our case, the health-care professional’s) somatic autonomic responses and prefrontal functioning [42], thus offering a useful conceptual framework when discussing nonverbal empathy. PAM focuses on the *process* where the perception of the *object’s* state automatically activates the *subjects’* existing representation of the state, situation, or object, in turn generating autonomic and somatic responses (unless these responses are inhibited). The stronger the connection between the subject and object, the more the subject will attend to the event, the more their similar representations will be activated, and the more likely the subject’s response will occur. This response can involve emotional contagion, cognitive empathy, and helping behavior. PAM draws evidence from existing empathy theories, neuroanatomy, animal and human emotion, physiology and neurology, as well as disorders of empathy (e.g., autism, prefrontal lobe impairment due to trauma or neurocognitive disorders). According to PAM, individual experience of the emotional component of empathy is associated with similar signs of emotional arousal in the observer, as demonstrated by indices like autonomic nervous system activity, facial expression, subjective response, and central nervous system activity [42–44]. Empathy increases with subject’s *familiarity* with the object, with *similarity* between subject and object (e.g., in age, gender), with *past experience*, with *salience* (the strength of the signal) and with *learning* (as a result of teaching) [42]. Learning and reinforcing empathy throughout one’s professional life is highly relevant to health-care professionals who are thought to experience a decline in empathy as they progress in training and clinical practice [45, 46].

### 3.3.2 Evaluating Nonverbal Empathy

**Facial Affective Communication** Emotional expression is a multimodal phenomenon [47] of utmost importance in expressing empathy. In particular, when working with patients, one means of expressing empathy is affective matching, and more broadly, affective communication via emotional expression. Expression of emotion involves facial muscle movements (i.e., facial expressions), vocalizations, autonomic responses (e.g., pupillary activity, blushing), movement of the extremities (e.g., clapping, opening arms), shifts in posture and head movement, gestures, and full body movements [47], as illustrated in Table 3.1. However, facial affective behavior (i.e., facial muscle movements, facial affective mirroring of the patient, and duration of facial expressions) and its relationship to empathetic responding have received the greatest amount of empirical attention [47]. For example, prior work has demonstrated that “high empathy” individuals display more facial affective behavior when exposed to emotionally evocative video clips than “low empathy”

individuals [48–50]. Additionally, prior work has demonstrated that individuals with greater empathy are more accurate when labeling the facial expressions of others [49].

Several theories describe the mechanisms by which facial expressions coordinate social interaction and empathetic responding [51, 52]. First, in social interactions, emotional expressions via affective facial communication provide relevant information about the emotional states of both interaction partners, which allows them to predict subsequent behavior and engage in empathetic responding [53, 54]. Further, affective facial expressions convey information about the environment, which allows social partners to empathetically coordinate their actions and responses to both opportunity and threat. Finally, affective facial expressions serve as incentives to interaction partners by providing rewards or punishments for certain behaviors. For example, warm smiles in parents of young children incentivize repeating certain positive behaviors, and laughter has been shown to increase cooperation among individuals [55, 56]. Similarly, it is likely that a providers' warm smile would incentivize repeating certain desired behaviors, such as medication compliance or engaging in healthy dietary or activity choices. In sum, facial affective behavior can increase perceptions of empathy by patients via affective matching and affective communication.

**Autonomic Nervous System** The human nervous system is divided into the central nervous system (i.e., brain and spinal cord) and peripheral nervous system (i.e., all other nerves throughout the body). The peripheral nervous system is further divided into the somatic nervous system (i.e., the portion that controls voluntary motor movements) and the autonomic nervous system (ANS). The ANS is the division of the peripheral nervous system that is responsible for the control of mostly unconscious functions, including heart rate, respiration rate, pupillary response, digestion, urination, sexual arousal, and more. The ANS is controlled by the hypothalamus, which allows for connection to the limbic system. The ANS is subdivided into the sympathetic and parasympathetic nervous system. The *sympathetic* nervous system (SNS) is well-known to underlie the “fight or flight” response, as well as many “approach and avoidance” behaviors. In contrast, the *parasympathetic* system is well-known to underlie restorative processes and the maintenance of homeostatic functioning. Emotion reactivity and regulation, and relatedly empathy, have all been associated with changes in ANS functioning [57]. Psychophysiological measurements via electrocardiogram, impedance cardiography, and electrodermography allow for peripheral indexing of autonomic nervous system functioning. Below we examine indices derived from each of these psychophysiological measures, as well as some of the literature linking these indices to empathy.

**Respiratory Sinus Arrhythmia (RSA)** Electrocardiogram data can be reliably and validly used to derive RSA, a known index of parasympathetic activity. Biologically, RSA is related to the parasympathetic control of the heart through efferent vagus nerve activity, as empirically demonstrated by pharmacological blockade studies [58, 59]. A preponderance of prior empirical work demonstrates that, in specific

contexts, RSA withdrawal is positively associated with emotion regulation and empathetic responding in emotional situations [58, 60–63]. Further, RSA withdrawal has also been empirically associated with affiliation and related social behaviors, which are believed to be related to empathy [62]. Empathetic responding to both positive and negative emotional cues from others has been linked to RSA withdrawal (i.e., decreased heart rate variability) [64–69].

**Cardiac Pre-ejection Period (PEP)** Impedance cardiography can be utilized to derive cardiac PEP, an index of SNS activity [70]. PEP is a commonly utilized index of beta-adrenergic influence over the heart and is characterized by the time between depolarization of the left ventricle and the onset of ejection of blood into the aorta [58, 60]. PEP has been associated with a variety of sympathetically mediated functions, including emotional reactivity, mental effort, reward sensitivity, and in some contexts, approach behaviors, including anger [58, 60, 71]. Interval shortening of PEP, in response to emotionally evocative contexts, generally indexes greater sympathetic control of the heart (and greater cardiac output), which is associated with emotion-laden approach behaviors, including anger, as well as reduced empathetic responding [58].

**Electrodermal Activity (EDA)** EDA [72] or the measurement of the activity of the eccrine sweat glands [73], has also been utilized to index SNS activity. Cholinergic fibers that directly affect the activity of the eccrine sweat glands have been associated with SNS activity [58, 72, 74, 75]. Specifically, EDA has been positively correlated with levels of emotional arousal [76], and negative, avoidance-based emotions, in particular (e.g., sadness, nervousness, and/or stress) [77]. With respect to empathetic responding, specifically, EDA has been shown to positively correlate with patient ratings of perceived therapists' empathy in 20 patient–therapist dyads, such that higher levels of EDA are associated with greater ratings of therapist empathy. Further, during the periods of high concordance in electrodermal activity, the patient and therapists showed greater positive social-emotional behavior [78, 79], suggesting an essential role of affective matching in empathetic responding. A further example of the importance of concordance of electrodermal responding to empathy is in the context of pain. Specifically, the higher the concordance in electrodermal responding between the observation of pain in others and self-experienced pain, the more likely the individual will be to engage in the helping of others [79, 80].

### 3.3.3 *Nonverbal Behaviors That Express Empathy in Clinical Settings*

**Amount of Time Spent with the Patient** As the time spent by the health-care providers documenting in electronic health record (EHR) increased, the time spent making eye contact and speaking with the patients decreased [81]. Nurses feel that the time spent using the EHR leaves them less time to care for patients, even when

they bring the computer in the hospitalized patients' room. Although the nurse is physically present in the patient's proximity, the computer makes it difficult to look at the patient and not at the screen during the patient interactions. The EHR "checkbox" model of patient assessment allows little room for describing details about the patient's medical condition. The patients feel that they are answering questions to a computer. Overall nurses feel that the EHR improves patient safety, but it lowers quality of care [82]. In the case of physicians, the amount of time spent with patients significantly predicts patient satisfaction, with patients who spend more than 10 min with their doctor being most satisfied [83].

**The affective tone** of the physician (warmth, tone, and responsiveness) is influenced by patient-physician racial dyad pairing, with South Asian physicians being more proficient at decoding the facial expressions and vocal tone of South Asian patients and similar findings in African American concordant dyads [8]. Race and culture influence empathy in cross-cultural care. Physician's nonverbal expression of concern is the best predictor of patient satisfaction ( $p < 0.001$ ) and of positive recommendation of the physician by patients ( $p = 0.001$ ) [8].

**Touch** is regarded as a form of human connection beyond words which can represent caring even when verbal communication is limited or inadequate [84]. Nursing research distinguishes functional touch to perform necessary patient-care tasks from touch as a "nonverbal expression of care, comfort, and empathy" [85, p. 201]. A metaethnography of touch across health professions [84] and it identified its important characteristics. Touch communicates caring. Touch is important in Swedish nurses' cross-cultural communication, and it is important in Filipino patients developing trust in their nurses. Supportive touch is an important tool (along with eye contact, smile, vocal warmth, and respectful silence) in the delivery of bad news to patients [8]. Touch in geriatric nursing is seen as mothering, and it is perceived as being caring. Touch can also represent power and status. Touch can be regarded as risky in the case of male nurses and family physicians due to the risk of sexualization or crossing professional boundaries, whereas it is seen as acceptable, natural, and maternal when delivered by a woman although age and cultural context intervene in this context as well [85]. While it is widely accepted in professions like physical therapy and osteopathy, touch is avoided in psychotherapy, where physical contact is often associated with a boundary violation [85]. The experience of touch is bidirectional, and it connects the provider and the patient in the process of health care. Touch can be perceived as empathic and caring, or it can be perceived negatively, depending on the provider's and patient's gender, age, space, and boundaries within which it is performed, as well as personal and professional experience [84].

**Listening** could be one of the most useful means of caring for people. Listening well is described by hospital chaplains as an intercorporeal phenomenon [86] which includes eye level, eye contact, emotions as embodied narrative plots, being still, and distancing self from religion. Placing self at the same eye level with the person by sitting down, invites dialog through a communicative body, enhances empathic ability, and minimizes power imbalance [86].

**Eye contact** is important in nonverbal behavior, particularly since the brain responds even to another person's small nonverbal signals, such as gaze shifts and eye blinks, with stronger response in subjects who are more empathetic [16]. Although positive in many cultures, there are differences in how eye contact is received by the subject of empathy. Eye contact is important in Hispanic women's interaction with physicians, along with simple signs of professionalism and warmth on the part of the health-care provider, while in other cultures (Tobago), it is considered disrespectful to look an elder in the eyes [8]. In a multinational qualitative study, keeping eye contact with patients, listening without interruptions, empathy, and avoiding disruptions due to computer and phone were among the tips given by patients to make the medical consultation more successful [87]. Eye contact is paramount in nurses' interactions with nonverbal patients in the intensive care unit, contributing to positive communication when combined with asking open-ended questions, greeting by name or touch, and the use of gesture or pointing in assisting patients [88]. Further, eye contact is important in recognizing the unspoken emotions like anxiety or shame. Taking in people's embodied performance of emotional life through listening and eye contact, for example, listening to someone crying, is an important part of chaplains' work with hospitalized patients [89].

**Gestures and Body Posture** Body movement and posture correlate with emotional states [79]. Counselors' arm and leg positions significantly influence how people appreciate counselors' warmth and empathy. The arms crossed position and the leg crossed over the other leg (such that the ankle of the crossed leg rests on the knee of the other leg) are considered as the coldest and the least empathic positions [85]. Speakers with higher empathy towards the listener produce more salient gestures. In turn, the person spoken has a higher chance to understand the information that is transmitted [90]. Further, speakers take into account the knowledge and shared experiences of the listener and adapt the quantity and form of their gestures accordingly [91].

A specialized type of body interaction takes place in habilitation (i.e., services like occupational therapy, speech-language pathology, and others that help people with disabilities learn daily living skills). Here, the therapist applies body empathy to understand the children's experience of limitations in body function [88]. Being together with a child with significant motor limitations involves understanding and communicating about the limitations of the child and further, adapting the therapist's actions to the unique individual they are supporting at the time. Among the body experiences described by therapists, affection, and closeness are significant and closely related. The therapists report an enhanced experience of their own body on the background of the relationship with the child [88]. Finally, being still when listening to a patient is important because it invites unspoken questions about meaning and fears, and it invites the other person to share in the listener's calmness and share their story [86].

### 3.3.4 *The Impact of Nonverbal Empathy on the Patient and the Health-Care Provider*

***Patients' Perception of Nonverbal Empathy*** Since nonverbal empathy accounts for 45% of the variability in empathy perception by the object of communication [6], it plays a role in patients' perception of health-care providers' empathy. A relaxed body language of the doctor with respect to hand movements, with low reading and writing activity, were associated with patient empowerment in a study of primary care. Other features of socioemotional interchange (agreements, approvals, laughter, and legitimization) were associated with the extent to which a patient feels empowered after a medical consultation, in terms of being able to cope with, understand, and manage their illness, defined as patient "enablement." These features, together with task-related behavior, explain up to 33% of the variance of enablement [92]. Physicians (oncologists) who lowered the pitch of their voice when giving bad news, in addition to delivering empathic verbal content were perceived as more caring and sympathetic by listeners [93]. Clients of counselors with better ability to decode nonverbal communication have higher improvement of symptoms of depression and anxiety [94]. Infrequent speaking, closeness to the patient, head nods, concerned understanding, listening, and mutualism, as well as increased experience and age are important characteristics of empathic nurses [95]. In a study of surgeon's interactions with their patients, blinded raters coded the following characteristics of surgeons based on audiotapes: warm, anxious/concerned, interested, hostile, sympathetic, professional, competent, dominant, satisfied, and genuine. The raters accessed the audiotapes after they were filtered for conversation content, leaving only intonation, speed, pitch, and rhythm of the interaction to be coded. Based on these variables, surgeons who were judged to be more dominant (OR 2.74,  $P = 0.02$ , 95% CI 1.16 to 6.43) and less concerned/anxious based on their tone of voice (OR 0.46,  $P = 0.05$ , 95% CI 0.21 to 1.01) were more likely to have been subject to malpractice claims than surgeons who were judged to be less dominant and more concerned/anxious [96] (with the limitation that there were no data about the history of unfavorable surgical outcomes for the participant surgeons) [97]. Physicians who display empathy through nonverbal behavior are perceived as more empathetic, warm and competent than physicians who display non-empathetic nonverbal behavior [98]. In a study where medical residents were impersonated by actors, patient-centered gaze and body orientation had a positive effect on perceived empathy as rated by members of the general population. In this study, the effect of the gaze was stronger than the effect of body orientation, and it was particularly pronounced in the case of male actors [99]. In a study of final year medical students who each interviewed standardized patients, there was a significant correlation of empathy with nonverbal communication (i.e., gaze and body orientation), but not with verbal communication, as appreciated by two independent raters. This supports the idea that both verbal and nonverbal communication of empathy must be addressed equally with training and feedback in medical student education [100].



In summary, although the research into the effect of nonverbal empathy on patient satisfaction and health-care outcomes is scarce, evidence points to its prominent role in patient–clinician communication.

***The Patients and Health-Care Providers Show Consistent Physiological Changes in Situations That Trigger Empathy*** Empathy comes at a cost in terms of personal distress, concern, compassion, and sympathy experienced by the health-care providers in the process of health-care delivery. Rollings [67] measured heart rate and respiratory sinus arrhythmia in people who viewed video clips that represented happy, sad, and physical pain affect conditions. High Personal Distress and Empathic Concern subscale scores on the Interpersonal Reactivity Index (IRI) [97] independently predicted a change in heart rate in each of the affective conditions. Further, in this study, individuals with high Personal Distress scores had an unhealthy cardiovascular response to the affective stimuli. The higher the autonomic response displayed by subjects when receiving painful stimulation and when observing pain being inflicted on another person, the greater the likelihood that they would decide to prevent the infliction of pain on others by choosing to endure the pain themselves [80]. This finding shows that the strength of one’s autonomic response to pain motivates the prosocial behavior of avoiding pain in others. Decety [101] demonstrated that physicians conditionally downregulate the sensory processing necessary to perceive pain in others when compared to matched controls. This downregulation dampens the personal distress component of empathy and frees up cognitive resources to assist others who experience pain, without becoming emotionally over-involved in a way that can hinder patient care [101]. Research demonstrates that emotional responses are attenuated by concurrent cognitive processes [102]. Collectively, these results demonstrate that clinicians show a notable physiological response to patients’ emotions, and that, depending on complex factors, this response can lead to clinicians’ personal distress or can be adapted to facilitate clinical performance.

### **3.4 Nonverbal Empathy in Health-Care Education: How and When to Train?**

Empathy training in health care utilizes written patient narratives, experiential learning through patient shadowing, communication skill workshops with role play, wellness programs, as well as visual art, music, and literature [103–107]. Some of these empathy training methods include role play and/or videotaping of an encounter with a colleague, actor or patient, followed by encounter feedback from peers or supervisors [108, 109]. However, if these methods of deliberate practice and feedback if these methods do not address nonverbal elements of communication and experience, they will be incomplete by not addressing the contribution of providers’ nonverbal empathy to the patients’ experience of health care. To be complete, all modalities to teach empathy must equally address verbal and nonverbal modalities

to communicate empathy. In addition to the trainee's verbal communication and global perception of empathy, detailed reference must be made to aspects of nonverbal empathy like affective tone, gestures and body posture, eye contact, and facial affective behavior [110]. To date, few educational interventions focus on nonverbal communication.

The most common type of intervention addressing nonverbal communication skills is the feedback given to medical, nursing and other health-care professions' trainees on standardized patient (SP) checklists, following SP encounters. In addition to content items related to the patient's clinical issue, such lists contain feedback on trainee's gestures, body posture, proxemics, smile, and overall appearance [111]. Generally, this feedback is qualitative and subjectively related to the preferences and life experiences of the SP filling out the checklist, which is in itself a strength since the behavior exhibited should be attuned to the particular patient.

Walter and Shenaar-Golan [110] created an experiential teaching intervention in the group setting for social workers, combining sensory language play activities with the learning of Gendlin's focusing-oriented psychotherapy [112]. The authors supported, lifted, and carried others in order to understand the movement of different body parts, body size, strength, and develop a physical relationship with a partner and a group. Through touch, participants explored themes like bonding, attachments, relationships, personal body image, body awareness, and feelings. Participants felt that the experience increased their self-awareness, empathy, ability to prioritize between the needs of oneself and others, and professional self-confidence [110].

The awareness and recognition of patient affect often represent an elusive and intimidating challenge for students. Micro Expression Training Tool and the Subtle Expression Training Tool [113] were successfully used to train medical students' nonverbal communication skills and resulted in 29.3% improvement in students' ability to detect short facial expressions, and 36.2% improvement recognizing small movements of face that occur when a person is trying to deliberately or unconsciously control a strong emotion post-training [113]. In addition, physicians who receive this empathy training elicit higher patient ratings of empathy and higher ability to decode facial expressions of emotion in their patients, compared to a control group of physicians [114].

Grace [115] taught counseling students the basic concepts of nonverbal attentiveness by role-playing and sharing the salient observations with the peer and the group. The students responded to the client (impersonated by another trainee) based on a specific nonverbal behavior of the client, with one of the peers counseling the student on ways to convey the information to the client. Finally, the students had to practice using their awareness of patients' nonverbal behavior to make empathic statements. In this study, brief training, attending and responding to nonverbal behavior resulted in more trainee responses to client nonverbal behavior, and these responses seemed to lead to higher client ratings of working alliance [115]. In sum, although empathy is taught extensively throughout health professions, only few didactic methods include focus on nonverbal aspects of empathy, leaving a large educational gap to be addressed.

### 3.5 Conclusions and Future Directions

Understanding how to engage emotionally during patient–clinician interactions is a guiding principle in building empathetic cooperation, patient confidence, and rapport [115]. Such attentiveness will lead to a subtle appreciation for the patient and their concerns, ultimately leading to an increase in health-care quality and patient’s sense of empowerment and appreciation for the clinician [116]. To perform these tasks, clinicians need to attend to the patients and their own eye contact, facial expression, gestures, proxemics, and touch. They must understand the importance of spending time with the patient unimpeded from the work on the computer and the importance of listening. Nonverbal empathy is neglected in many educational interventions despite the fact that it strongly underlies the patient’s perception of clinician’s empathy and competency. To address this gap, we propose a multimodal, multistep approach to teaching empathy. *Firstly*, attention must be paid to components of nonverbal empathy in the didactic and experiential teaching of empathic communication and must be reinforced throughout clinical training and later, throughout professional practice. *Second*, nonverbal empathy must be included in formative and summative evaluations along with feedback and suggestions for improvement given to the health-care trainee or clinician. *Finally*, research on empathy interventions should include objective physiological measurement of nonverbal empathy to further inform areas of interest for interventions. Research points to the connection between clinicians’ personal distress (i.e., feelings of discomfort and anxiety) and physiological arousal in the process of communicating with patients. Further research into this area may uncover modalities to address clinician’s well-being and emotional response to patients.

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# Chapter 4

## Measuring Empathy in Health Care



**Gabriel Sanchez, Melissa Ward Peterson, Erica D. Musser, Igor Galynker, Simran Sandhu, and Adriana E. Foster**

### 4.1 Operationalizing Empathy

To teach, reinforce, and assess empathy, its measurement is imperative. The critical first step in measuring empathy is the complex task of operationalizing the concept [1]. Empathy is a multifaceted phenomenon, which includes the following:

- an *emotional* component which allows perception and sharing of another person's inner feelings,
- a *cognitive* component which allows understanding another's feelings, and

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- a *behavioral* component which includes a range of pro-social actions (e.g., verbal and non-verbal response, active listening, validation, and self-disclosure) as described in Chap. 1, [2].

Further, the complexity of empathy allows overlap with the notion of sympathy [2], as illustrated by Nightingale et al. [3, p. 1]: “empathetic physicians share their understanding, while sympathetic physicians share their emotions with their patients.” As defined by Mercer and Reynolds [4], empathy in health care includes understanding the patient’s perspective, communicating that understanding verbally and non-verbally, and acting therapeutically on that understanding. Extensive research has focused on the development and application of measurement tools that can reliably measure these domains separately or globally. For systematic reviews of empathy measurement tools, we direct the reader to excellent work that provides an in-depth look at such instruments from the medical and nursing perspectives, respectively [1, 5].

In this chapter, we review the most widely utilized instruments that assess empathy from the perspectives of the health-care provider, patient, or expert observer, and discuss their potential applications in health-care education and life-long learning.

#### ***4.1.1 What Is an Empathic “Clue” or an Empathic Opportunity?***

Based on their observations of videotaped physician–patient encounters, Branch and Malik [6] described “windows of opportunity” or “patient-created empathic opportunities” where the patient brings up an emotional, psychological, or social concern. Another study of videotaped interviews noted that physicians often ignored such windows of opportunity, and that some patients would continue bringing up the concern repeatedly and with increasing emotional intensity. Such a tendency for a physician to ignore clues provides an opportunity for improvement of empathic communication. This can be facilitated by the ability to measure such instances and offer feedback to the clinician [7]. Levinson [8] described the patients’ clues as direct or indirect comments about “personal aspects of their lives or emotions” and found that such clues were present in more than half of outpatient encounters with primary care physicians and surgeons. In surgical encounters, the cues were predominantly emotional, while they were predominantly psychosocial in primary care settings. The authors of the Empathic Communication Coding System (ECCS) [9] cite and build upon this previous research, creating a tool which measures both patient-provided opportunities to provide empathy, and health-care provider responses to such opportunities [8, 9]. Defining empathic opportunities is thus an important stepping stone for evaluating clinicians’ behavioral response to such patient-generated opportunities.

## 4.1.2 Empathy Measures

### 4.1.2.1 Self-Rated (First Person) Empathy Measures

First-person measures are questionnaires filled out by the subject who is being assessed.

**Empathy Scale** One of the first empathy measures was created in 1969 by Robert Hogan, who looked at “empathic disposition... as the capacity to adopt a broad moral perspective, that is, to take the moral point of view” [10, p. 307]. Hogan intended to measure one’s ability to “put himself in another person’s shoes.” [11, p. 646]. The Empathy Scale is a 64-item self-rated questionnaire, with each item answered as True or False. It was validated by comparing results to a mix of Minnesota Multiphasic Personality Inventory (MMPI) and California Psychological Inventory (CPI) questions [10]. The Empathy Scale correlated with CPI items that measure interpersonal adequacy and MMPI items that measure sociability, optimism, and freedom from worries and doubts. Hogan [10] tested and confirmed the scale’s ability to discriminate between people who are friendly, likable, charming, poised, outgoing, and comfortable in social situations (high scorers) and those who are cold, aloof, and alienate those around them (low scorers). The scale’s test–retest reliability ranged between 0.60 and 0.84 in various samples. Factor analysis of the Empathy Scale by Johnson et al. [12] on a sample of 168 students and a different sample of 111 individuals yielded four factors: Social Self Confidence, Even Temperedness, Sensitivity, and Nonconformity. Test–retest reliability and internal consistency raised some concerns, which led to the scarce use of Empathy Scale once new measures were developed [1].

**Interpersonal Reactivity Index (IRI)** The IRI is a 28-item self-assessment, each item rated on a 5-point scale (1 = “does not describe me at all” to 5 = “describes me very well”) with nine reverse-scored items [13]. The IRI measures dispositional or “trait-based” empathy, taking a multi-dimensional approach that considers both intellectual and emotional aspects of empathy. The IRI has four domains, each including seven questions that are thought to evaluate different aspects of reactivity to others. The IRI domains are as follows:

- Perspective Taking (PT) (the ability to adopt the view of others, i.e., cognitive empathy)
- Fantasy (FN) (the ability of respondents to transpose themselves into the feelings of fictional characters in books, movies, etc.)
- Empathic Concern (EC) (sympathy and concern for others in unfortunate situations, i.e., affective empathy) and
- Personal Distress (PD) (anxiety and “unease” in difficult interpersonal scenarios) [13, 14].

The internal reliability alphas of the IRI's subscales range from 0.70 to 0.78, and subscale test–retest reliabilities range from 0.61 to 0.81 [1, 14]. Sensitivity to change was demonstrated through statistically significant change evidenced by the same sample over three years of medical training (effect size =  $-0.51$ ) [1]. Construct validity is supported by associations with well-being, cognitive empathy, medical errors, choice of medicine as a career [1] and prosocial behaviors [15]. Convergent validity exists with other empathy measures (e.g., JSPE;  $r = 0.45$  for total IRI score) [1, 15]. Establishing IRI score norms for medical professionals was possible given the multitude and diversity of studies available [15]. Further, rather than being limited to health-care professionals, the IRI has been broadly used in self-assessment of empathy; thus, rich comparison data is available [15]. At the same time, the factor structure, particularly the construct validity of the Personal Distress subscale, has been challenged [15].

**Jefferson Scale of Physician Empathy (JSPE)** Hojat and colleagues developed a 20-item questionnaire, the Jefferson Scale of Physician Empathy [16] to measure empathy in physicians. Each JSPE item is rated on a 7-point scale. Scores range from 20 to 140, with higher values indicating a higher degree of empathy. JSPE has been translated into 56 languages and dialects [17, 18]. An example item is “I try to understand what is going on in my patients’ minds by paying attention to their non-verbal cues and body language.” The JSPE has good internal consistency with alpha between 0.81 and 0.89 in various samples of medical students, residents, and physicians [1]. The JSPE test–retest reliability coefficient for physicians was 0.65 [1]. The reports on JSPE correlation with the Jefferson Scale of Patient Perceptions of Physician Empathy (JSPPE, a patient-rated measure of physician empathy) are mixed. Glaser et al. [19] reported a moderate correlation between JSPE and JSPPE ( $r = 0.48$ ) in a sample of family medicine resident physicians but in a sample of practicing family physicians [20], the relationship was substantially weaker ( $r = 0.23$ ). Hojat [21] found a moderate correlation between the total scores of the JSPE and IRI ( $r = 0.45$ ). JSPE versions have been developed for medical students (JSE-S), health professions (JSE-HP), and health profession students (JSE-HPS) [19, 22, 23]. JSPE and its medical and health-care profession student versions have been used extensively to assess the progress of self-reported empathy throughout health-care training and later, during clinical practice [22, 24, 25]. Suggested US JSPE (medical student version) norms are 112.3 for males and 116.2 for females with  $\leq 95.0$  for males and  $\leq 100.0$  for females being considered unacceptable for a caring profession [26, 27].

**Toronto Empathy Questionnaire (TEQ)** The TEQ was developed with the goal of making a parsimonious self-reported empathy measure [28]. This measure was created by compiling elements from previous self-reported empathy scales (IRI, Hogan’s Empathy Scale, the Questionnaire Measure of Emotional Empathy, a reworded Balanced Emotional Empathy Scale, the Scale of Ethno-cultural Empathy, the JSPE, the Nursing Empathy Scale, the Japanese Adolescent Empathy Scale, and the Measure of Emotional Intelligence). Statistical analyses included exploratory

factor analysis, iterated principal-axis factor analysis, and forcing the items to load on to a single factor, thereby assembling a group of related items springing from a variety of empathic measures [28]. The result was a 16-item questionnaire with items rated on a 5-point Likert-scale corresponding to the level of frequency (0=never, 5=always), with an equal number of positively and negatively worded/scored items. Internal consistency alpha for the TEQ was 0.85. In tests of convergent and divergent validity, the TEQ correlated strongly with the IRI Empathic Concern subscale ( $r = 0.74$ ), less with the IRI Perspective Taking subscale ( $r = 0.35$ ) and negatively with a measure of autism symptoms, the Autism Spectrum Quotient ( $r = -0.30$ ), which measures deficits in social processing (higher TEQ scores associate with less difficulty in social processing and communication) [29].

**Affective and Cognitive Measure of Empathy (ACME)** The ACME was developed in response to concerns about validity of the IRI [30]. It conceptualizes three empathy domains: *cognitive*, which involves accurately determining what the other person is feeling, *affective resonance*, defined as empathic concern, pity, or compassion (the traditional conceptualization of affective empathy), and it introduces the new concept of *affective dissonance*, which is defined as experiencing a “contradictory emotional response,” such as taking pleasure in the pain of others or feeling annoyed at the happiness of others [30]. The scale includes 36 items rated on a 5-point scale ranging from disagree strongly to agree strongly. The internal consistency of the ACME was  $\alpha=0.88$  [30]. According to Murphy et al. [15], who evaluated the IRI and ACME scales’ measurement, the ACME is less likely to identify traits like coldheartedness and meanness as compared to the IRI. Both scales appear to show precision in detecting moderate and low empathy, but both are less accurate in measuring high empathy, which may limit their use in individuals from professions dedicated to helping people (i.e., health care) [30].

Overall, although first-person measures are used extensively in health care and social psychology research, concerns remain about these measures’ test–retest reliability, their factor structures, and their ability to measure empathy as a broad psychological construct [1, 15].

#### 4.1.2.2 Patient-Rated (Second Person) Measures

Second-person questionnaires are filled out by patients rating the providers from which they receive care, or standardized patients rating trainees during simulated patient encounters [1].

**Jefferson Scale of Patient Perceptions of Physician Empathy (JSPPPE)** JSPPPE is an easy to administer 5-item questionnaire designed to measure patient perception of physician empathy, with items rated on a 7-point Likert scale (1=Strongly Disagree, 7=Strongly Agree). Principal factor analysis yielded one factor with factor loadings for each item ranging from 0.84 to 0.92. Thus, the JSPPPE’s internal consistency is very high ( $\alpha=0.97$ – $0.99$  for patient groups of various age and

gender). JSPPE scores have been shown to correlate strongly with other measures of patients' perceptions of empathy, e.g., patient satisfaction ( $r = 0.93$ ) and willingness to recommend the physician to family and friends ( $r = 0.87$ ), as well as patients' compliance [31]. However, the JSPPE did not correlate with physicians' self-assessed empathy (JSPE) [31].

**Consultation and Relational Empathy Measure (CARE)** The CARE is a validated 10-item instrument that measures patients' perception of physician's empathy in the medical encounter [32]. Each item is measured on a 5-point scale (from 1="Poor" to 5="Excellent"). Hemmerdinger found the CARE measure to be the only second-person empathy tool in their systematic review to have good validity (correlations with other patient-rated scales of provider empathy between 0.84 and 0.85; positive correlation with patients' understanding and coping with their health issues) and internal consistency ( $\alpha = 0.93$ ) [1]. The CARE has been extensively validated and has a moderately strong test-retest correlation ( $r = 0.57$ ) [32]. Normative data on CARE allows the user to identify low-empathy (CARE score 10–30), middle-empathy (score 31–40), and high-empathy providers (score 41–50) [33, 34]. Lower CARE scores of primary care physicians have been associated with poorer patient outcomes [33, 34], and patient perception of physician empathy measured with CARE has improved after educational interventions targeting empathy, providing evidence of the CARE's sensitivity to change [35]. Bikker et al. [36] validated the CARE measure in nursing, in a study where 774 patients completed the CARE immediately after their encounter with a nursing professional. The measure's exploratory factor analysis suggested a single-factor structure with high loadings for each item and correspondingly high alpha (0.97) [36]. In the same sample CARE correlated robustly with patient satisfaction (Spearman's rho 0.54,  $p < 0.001$ ), providing evidence of criterion validity [36].

The JSPPE and CARE correlate moderately, providing evidence of their convergent validity, but suggesting that they measure somewhat different constructs ( $r = 0.48$ ,  $p < 0.05$ ) [19].

#### 4.1.2.3 Expert/Observer Rated (Third Person) Measures

Third-person scales are standardized assessments filled out by an observer of the interaction between the health-care provider and patient during clinical practice or standardized patient simulations [1].

**Empathic Communication Coding System (ECCS)** The ECCS is an expert-rated scale that measures both the empathic opportunities provided by the patient and the clinicians' verbal responses to such opportunities. The opportunities are operationalized as three types: a statement of *emotion*, a statement of *progress*, or a statement of *challenge*. The ECCS also codes health-care providers' different types

of verbal responses into seven categories ranging from level 6, shared feeling/experience to level 0, denial of patient’s perspective, where the clinician completely ignores the empathic opportunity presented by the patient [9, 37]. Table 4.1 illustrates examples of empathic responses to a patient-generated opportunity along levels 0–6, coded with ECCS [38]. In a study by Bonvicini et al. [39], blinded coders with high inter-rater reliability watched 232 videotaped physician–patient interactions and used the ECCS to explore whether physicians improved in their empathic skills after a series of three workshops on communication skills vs. a wait-list control group of physicians. Blinded coders evaluated the same videotaped interviews with the Global Rating Scale (GRS), a scale developed to measure the quality of interventions that teach motivational interviewing. Both scales showed significant sensitivity to detect change in physician empathy following the communication skills intervention [39]. The intensity of physicians’ empathic responses increased further at the 6-month follow-up in the trained group but not in the control group. In addition to allowing coding of both empathic opportunities and responses to such opportunities, ECCS allows giving feedback to the clinician or trainee. In a study by Foster et al. [40], medical students interacted with virtual patients who presented with empathic opportunities, received feedback on their empathic responses to the virtual patients coded with ECCS, and demonstrated a significant increase in their verbal empathy in subsequent encounters with standardized patients.

In summary, a number of instruments of variable psychometric value are available to measure empathetic responding, which could be used to measure or improve empathy in health care.

**Table 4.1** Examples of response levels in a health-care trainee–virtual patient interaction

Empathic response level	Examples of user responses to empathic opportunity:
Shared feeling/experience (Level 6)	“Doctor, my swallowing problem worries me. I am a chef and I cannot taste my own food!”
Confirmation (5)	“I love to cook and eat, as well. I understand how difficult that might be.”
Acknowledgement with pursuit (4)	“I know it can be hard, but we’ll try to get to the bottom of this and get you better!”
Acknowledgement (3)	“We want to do everything we can to get you back to where you can have a good quality of life. Tell me more about this swallowing problem”
Implicit recognition (2)	“We’re gonna do our best.”
Perfunctory Recognition (1)	“Do you only have trouble with liquids during mealtimes?”
Denial (0)	“Hmm”
	“Do you have any other medical problems?”

Table adapted from Halan, S., Sia, I., Crary, M., & Lok, B. (2015). Exploring the effects of health-care students creating virtual patients for empathy training. In W.-P. Brinkman, J. Broekens & D. Heylen (Eds.), *Intelligent Virtual Agents* (Vol. 9238, pp. 239–249) [38], with permission from Cham: Springer International Publishing, 2015

## 4.2 Reasons to Measure Empathy in Health Care

Empathy in the course of clinician–patient encounters has been an area of keen interest in medical education research. Empathic relations produce greater trust between provider and patient and increase their psychological well-being; such immediate benefits associate downstream with better symptomatic and functional outcomes for patients [33, 41–43]. We highlight the role of empathy in various domains of health care.

### 4.2.1 *Empathy Improves Patients’ Satisfaction and Patients’ Health Outcomes*

Empathy and its outcomes as a health-care intervention have been difficult to quantify; however, data are emerging. A meta-analysis of randomized controlled trials found a small but significant effect size (Cohen’s  $d = 0.11$ ,  $p = 0.02$ ) for interventions aiming to improve health-care professionals’ relationship with their patients (e.g., training in verbal empathy and non-verbal empathic signals, such as not interrupting, sitting down, making eye contact) and patient health-care outcomes (e.g., quality of life, pain, weight loss, and blood pressure) [44]. Among examples of studies that address specific health-care outcomes, Rakei [45] demonstrated that in patients with a cold, a medical encounter enhanced with verbal empathy, eye contact, a handshake, and humor led to significantly shorter illness duration, lower severity of illness, and significant change in inflammatory cytokine IL8 compared with treatment as usual. Trauma patients who rated their surgeon as highly empathic on CARE scale had better treatment outcome than patients of low empathy surgeons [33]. Further, general practitioner’s (GP) empathy was the only factor that predicted self-assessed symptom improvement and well-being in outpatients at one-month follow-up with their GP, as opposed to patients’ overall health, number of physician visits, depression, or symptom duration [34]. We will describe notable applications of the most widely utilized empathy measures in Sect. 4.3 below.

### 4.2.2 *Empathy Relates to Clinicians’ Burnout*

Measuring empathy shed light on areas where improvement can be made in medical education or in the professional work environment. For example, a survey study of first-year Japanese medical students showed a negative association between neuroticism and empathy, and showed a weak positive association between emotional intelligence and empathy [46]. Another survey of 446 medicine and surgery resi-



dents in Singapore found low cognitive empathy scores were associated with high emotional exhaustion, high depersonalization, and a low self-rating of personal accomplishment [47]. Such findings are frequently documented, with some studies showing that decreased empathy can lead to burnout, and other studies showing that preserving empathy is protective against burnout [48–50]. Such correlations can help focus efforts for improvement of professional work environment or medical education.

A highly studied phenomenon is medical students' empathy decline throughout their careers. In the United States, it has been demonstrated, primarily with the Jefferson Scale of Physician Empathy (JSPE) [26], that medical students' self-rated cognitive empathy decreases as they progress through their careers, declining when it is needed most, in the third and fourth year of study, as they enter clinical rotations and become exposed to regular patient contact. A multitude of reasons are cited including role modeling by faculty, the hidden curriculum, the high volume of material to learn, time pressure, high volume of patients, illness acuity, and increased dependence on technology [22, 24, 25]. Literature exists, however, showing that self-rated empathy measured with JSPE decreases from second to third year of medical school, while observed empathy (rated by standardized patients) increases among medical students with more medical training [51]. Similarly, nursing students experience a significant decline in empathy in their final year of study compared to the time when they entered into their respective programs of study, which makes nurses with lower empathy more vulnerable in crises [52, 53]. This finding has been challenged as having been found only in some countries rather than worldwide and having been generated by cross-sectional and self-reported measures as opposed to longitudinal and multi-dimensional evaluation [22].

### ***4.2.3 Correlations Between Empathy Measurements by Clinician, Patient, and Observer***

So far, the reports of patient outcomes being correlated with clinicians' empathy in various areas of health care are based either on clinicians' self-report of empathy, on patients' report, or on observer's report, as noted in Sects. 4.3.1–4.3.3. Research taking a multi-rater approach of the relationship between empathy and patient outcomes (e.g., based on clinician self-assessment, patient assessment, and observation of empathy by an independent observer) is in its infancy. In Table 4.2, we summarize studies employing measurements of empathy from at least two raters (self-, patient-, or observer-rated). As illustrated in the table, when attempts were made to assess the correlation between self-, patient-, and observer-rated measures of empathy, the results were inconsistent.

**Table 4.2** Studies that combine empathy measures from two or more perspectives (self, patient, and expert rated)

Study	Description	Self-reported empathy measure	Patient-reported empathy measure	Observer report of empathy or related construct	Correlations between different types of empathy measures	Comment
Chen et al. [51]	Cohort study N = 163 Second-year medical students, followed through third year. United States	<i>JSE Student-version (JSE-S)</i>	Empathic behavior during <i>Objective Structured Clinical Examination (OSCE)</i> ; rated by standardized patients (SPs)	–	<i>JSE-S</i> and <i>OSCE</i> empathy scores correlated ( $r = 0.22$ , $p < 0.0001$ ). <i>JSE-S</i> scores higher in second year compared to third year (118.63 vs. 116.08, $p < 0.0001$ ). Standardized patients rated second-year students' empathy as lower than third-year students' empathy (3.96 vs. 4.15, $p < 0.0001$ )	Empathy measured with <i>JSE-S</i> decreased from second to third year. Empathy observed by standardized patients during <i>OSCEs</i> increased with more medical training, from second to third year.
Wimmers and Stubber [54]	Cohort study N = 101 Third-year medical students United States	<i>Patient-Practitioner Orientation Scale (PPOS)</i> measures the individuals' attitude toward the doctor–patient relationship; 'sharing' and 'caring' dimensions; each item is measured on a 6-point scale <i>JSPPE</i>	<i>OSCE</i> items measuring physician–patient interaction; rated by SPs	–	Self-rated <i>PPOS</i> and <i>JSPPE</i> scores correlated ( $r = 0.71$ , $p < 0.0001$ ). <i>PPOS</i> did not correlate with <i>OSCE</i> components: history taking, physical exam, information sharing, and physician–patient interaction. <i>JSPPE</i> significantly correlated with the patient-rated <i>OSCE</i> component reflecting patient–provider interaction ( $r = 0.23$ , $p = 0.023$ ).	Standardized patients are able to differentiate the degrees of physicians' empathy during the <i>OSCEs</i> .

<p>Lim et al. [55]</p>	<p>Quasi-experimental N = 72 control N = 77 intervention; Fifth-year medical students <i>Empathy Training Intervention</i> = brief motivational interviewing seminar and role-play. New Zealand</p>	<p><i>JSE-S</i> Behavior Change Counseling Index (BECCI) 11-items; 5-point scale; student self-grading of empathy and behavior change consultation skills; <i>OSCE</i> rated by student</p>	<p>–</p>	<p><i>BECCI</i> rated by blinded tutor <i>OSCE</i> rated by blinded tutor</p>	<p><i>JSE-S</i>: intervention group had significantly higher post-intervention empathy (main effect of time, <math>F(1,125) = 12.10, p &lt; 0.001</math>). Self-rated <i>BECCI</i> not significantly higher post-intervention compared to pre-intervention (<math>p = 0.12</math>). Tutor-rated <i>BECCI</i> higher for the intervention group than the control group <math>t(140) = 4.60, p &lt; 0.001</math>. Tutors' <i>BECCI</i> significantly correlated with the students' self-rated <i>BECCI</i> ratings, <math>r(138) = 0.66, p &lt; 0.001</math> Tutor-rated <i>OSCE</i> performance significantly better in the intervention group than the control group, <math>t(141) = -1.87, p = 0.04</math>. Self-rated empathy in the <i>OSCE</i> significantly higher in the intervention group than the control group, <math>t(140) = -2.83, p = 0.005</math>. Tutor-rated and student-rated <i>OSCE</i> performance significantly correlated (<math>142</math>) = 0.41, <math>p &lt; 0.001</math>.</p>	<p>Empathy increased concordantly after the role-play intervention (based on all testing methods)</p>
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(continued)

**Table 4.2** (continued)

Study	Description	Self-reported empathy measure	Patient-reported empathy measure	Observer report of empathy or related construct	Correlations between different types of empathy measures	Comment
<p>Riess et al. [35]</p>	<p>Randomized control trial  <i>N</i> = 99 residents and fellows  <i>Control</i> = standard postgraduate medical education  <i>Empathy training Intervention</i> = standard + three 60-min. modules (neurophysiology of empathy, physiology of emotions and decoding facial expressions of emotion)                      United States</p>	<p><i>JSPE Balanced Emotional Empathy Scale (BEES)</i> (general empathic responsiveness in personal life; 30 items rated on 9-point scale; total score range: -120 to +120)</p>	<p><i>CARE</i></p>	<p>-</p>	<p>Empathy training group had greater changes in <i>CARE</i> scores than control (difference 2.2; <i>d</i> = 0.31, <i>P</i> = 0.04); greater changes in ability to <i>decode facial emotion</i> (difference between intervention and control group pre-post change scores = 1.9; <i>d</i> = 0.79, <i>P</i> &lt; 0.001) and greater changes in knowledge of empathy neurobiology (difference 1.8, <i>d</i> = 0.79, <i>P</i> &lt; 0.001)                      No significant changes in <i>JSPE</i> (difference between intervention and control group pre-post change scores = 2.3, <i>p</i> = 0.12) and <i>BEES</i> (difference = -1.7 <i>p</i> = 0.49) between groups</p>	<p>Training increased patient-rated empathy measured with <i>CARE</i> and test scores concordantly but it did not increase self-rated empathy measured with <i>JSPE</i> or <i>BEES</i> score</p>
<p>Ogle et al. [56]</p>	<p>Cohort study  <i>N</i> = 57                      Medical students                      United States</p>	<p><i>JSE-S</i></p>	<p><i>OSCE</i> rated by observer; total competence score  <i>Rating Scales for the Assessment of Empathic Communication in Medical Interviews (REM)</i>; nine items rated on a 7-point scale</p>	<p>-</p>	<p>Students with low observed empathy on <i>OSCE</i> (mean, <i>SD</i> = 165.86 ± 12.92) had significantly lower <i>OSCE</i> competence than did students with high empathy [190.35 ± 14.00 (<i>t</i> [57] = 68 <i>p</i> &lt; 0.0001, <i>α</i> ≤ 0.01)]. No statistically significant difference in mean total competence scores of students with respectively, low (179.46 ± 16.90) and high (183.13 ± 17.69) self-rated empathy on <i>JSE-S</i> (<i>t</i> [51] = 0.64, <i>p</i> = 0.525).</p>	<p>Observer-rated behavioral empathy strongly associated with clinical competence. Self-rated empathy not associated with clinical competence.</p>

Mercer et al. [34]	Cohort study N = 659 patients N = 47 general practitioners (GPs) Comparison of patients' expectations, consultation characteristics, outcomes and outcome predictors in areas of high and low socioeconomic deprivation United Kingdom	-	<i>Patient Enablement Instrument</i> CARE	<i>Measure of Patient Centered Communication (MPCC)</i> (exploring the illness experience, understanding of the whole person, and finding common ground) <i>Mehrabian's schemata</i> (nonverbal communication: smiles, facial expression, head nods, eye gaze toward patient vs. use of computer)	GP's verbal communication was significantly less patient-centered in the deprived group than in the affluent. Low deprivation, 1.42 (0.45) High deprivation 1.27 (0.49) [ $p = 0.02$ ] GP nonverbal communication significantly poorer in the high-deprivation areas <i>Smiles</i> = 0.38 (0.65) in low deprivation, 0.29 (0.58) in high deprivation [ $p = 0.2$ ] <i>Supportive facial expressions</i> = 1.78 (1.76) in low deprivation, 1.27 (1.41) in high deprivation [ $p = 0.04$ ], <i>Seconds looking at patient</i> = 21.51 (9.10) low deprivation, 17.94 (10.23) in high deprivation [ $p = 0.01$ ] <i>Consultation length</i> did not differ significantly between groups. Significantly lower CARE scores (perceived GP empathy) from patients in high-deprivation areas than those from affluent areas ( $p = 0.02$ )	Empathy was concordantly lower for more deprived individuals bases on patient-rated empathy (CARE), observer reporting (MPCC) and Mehrabian's (schemata) tests
Bernardo et al. [20]	Cohort study N = 51 physicians N = 945 patients Brazil	<i>JSPPE</i> <i>IRI</i>	<i>JSPPE</i> CARE	-	Positive moderate correlation between <i>JSPPE</i> and CARE (0.56; $p < 0.001$ ) No correlation between total scores of <i>JSPPE</i> and <i>IRI</i> No correlations between CARE or <i>JSPPE</i> (patient rated) and <i>IRI</i> or <i>JSPPE</i> (self-rated)	CARE captures subtle differences in patients' perception of physicians' empathy depending on medical specialty. CARE captures differences in empathy between initial and subsequent physician-patient visits

### 4.3 Applying Empathy Measurement in Health Care

#### 4.3.1 *Applications of Self-Rated Clinician Empathy Scales*

Duarte et al. [58] aimed to explore whether empathy and self-compassion influence domains of nurses' professional quality of life, specifically compassion satisfaction, compassion fatigue, and burnout. Nurses' compassion satisfaction (i.e., the nurse being motivated by satisfaction derived from helping others) was positively associated with Empathic Concern and Perspective Taking and negatively associated with Personal Distress dimensions of the IRI [58]. The working alliance partially mediates a positive association between clinician empathy and patient adherence to the clinician's treatment recommendations. In a study of 152 neurology outpatients, physicians' empathy measured with the JSPE significantly and positively associated with patient satisfaction both directly and through working alliance [59]. This may be because empathy improves the quality of communication between patient and provider. However, for medical students, this relationship may be less straight forward. LaNoue and Roter [60] explored the relationship between medical students' self-reported empathy and patient-centered communication in a clinical encounter with a standardized patient, focused on colon cancer screening. Empathy measured with JSE-S correlated to medical students' patient-centered communication analyzed with the Roter Interactional Analysis System (RIAS). Among the RIAS elements identified in communication during the encounter, emotional responsiveness (making empathic statements, showing concern, and medically relevant self-disclosure in the encounter) was positively related to the JSPE-S, while student data-gathering and biomedical counseling were negatively related to JSPE-S [60]. This divergence highlights the need for training to help students harness the power of empathic communication to improve gathering information that will best inform diagnosis and treatment.

#### 4.3.2 *Applications of Patient-Rated Instruments*

Patient-rated empathy measures have provided evidence of a positive relationship between empathy and treatment outcome. One study including 350 patients and 6 clinicians used the CARE measure to demonstrate a significant association between high physician empathy and decreased duration ( $p = 0.001$ ) and severity ( $p = 0.018$ ) of common cold symptoms ( $n = 719$ ) [45]. There was also a significant association between high physician empathy and changes in levels of interleukin-8, a biological marker of inflammation ( $p = 0.02$ ). Effect sizes were not reported in this study. Trauma patients who rated their surgeon as highly empathic on CARE (score  $>41$ ) 6-weeks after discharge had 4.2-fold higher odds of good treatment outcome (95% confidence interval 1.44–12.63) 12 months post-hospital discharge ( $p = 0.009$ ,  $R^2 = 33.5$ ) (evaluated with a module of subjective satisfaction with treatment), when compared to patients of low empathy surgeons (CARE score  $<31$ ) [33].

On the same note, our group [61] used CARE to elucidate whether patients' rating of their health-care professionals' empathy correlates with patients' perception of medical errors made by their health-care professional. Medical error was defined as "a failure in the process of care that could have been prevented," and health-care professional was defined as a physician, nurse, nurse practitioner, physician assistant, physical therapist, etc., with whom the survey respondent had an encounter as a patient. The survey respondents completed an anonymous retrospective survey including the CARE measure. Of 181 respondents, those who rated their health-care professionals as showing high empathy (CARE score  $\geq 41$  points) had 80% lower odds (OR = 0.2; 95% confidence interval: 0.04–0.6) to have perceived professionals' error, compared with those who assigned low empathy to their health-care professionals [61]. In this study, a limitation could be that empathy and outcome (i.e., possible medical error) were recorded at the same time, then this could be attributable to patients being satisfied with their outcome therefore having a more positive impression of their health-care professional.

### ***4.3.3 Empathy Measurement in Behavioral Health***

Evidence from assessment of working alliance in psychotherapy shows a moderate but consistent and reliable association between the quality of the working alliance and positive patient outcomes in therapy, regardless of the type of therapy, duration of treatment, or number of study participants. Furthermore, in some studies the quality of the working alliance as measured by clients is the most predictive of treatment outcomes, with therapist assessments of working alliance following, and the with observers' assessment of alliance being least predictive of therapy outcomes [62, 63]. Empathy may be understood as a fundamental component of the working alliance. For a detailed examination of the role of empathy in the working alliance, see Chap. 7. Getting on the Same Page [64].

### ***4.3.4 Empathy, Gender, and Health-Care Profession: Empathy Measures as Selection Criteria for Medical Education***

Self-reported empathy varies with gender. Women consistently report higher empathy than men do. This is supported by findings with observer-rated measures as well. Bylund and Makoul [9], in their exploration of empathy in internists' encounters with patients using the expert-rated ECCS, found that the mean scores of the physician's empathic response in these encounters (range 0–6) differed modestly but significantly by gender (female 3.27, male 2.90,  $t = -2.62$ ,  $p < 0.01$ , d.f. = 40.7). This was not attributable to differences in patient behavior, as the number of empathic opportunities created by patients did not differ significantly by physician

gender. Berg [65], in a study in third-year medical students of the self-rated JSPE, found gender and ethnicity differences in empathy using multivariate analysis of variance for JSPE followed univariate analysis of variance when F ratios were statistically significant. Univariate analysis results for the JSE showed a main effect of ethnicity ( $F(2, 550) = 3.6, p = 0.03$ ) (black/African American > white = Asian/Pacific Islanders), a main effect of gender of  $F(1, 550) = 13.2$  (women > men,  $p = 0.0003$ ), and an interaction effect of ethnicity and gender ( $F(2, 550) = 3.4, p = 0.03$ ).

Quince [22] presented scoring norms for males and females on popular self-rated empathy measurement tools with females consistently scoring higher on these measures' global scores and components.

Medical students planning to choose specialties with high patient interaction (e.g., primary care and pediatrics) show higher mean empathy than those entering specialties with low patient communication (e.g., pathology and radiology) [66]. Nursing research seems to indicate differences in empathy between work settings; however, findings are less conclusive [5]. Differences in empathy have been shown between members of different health-care professions. For example, mental health workers from Latin American countries were shown to have higher levels of empathy than general physicians [67]. Another study showed that first-year nursing students scored significantly higher on the JSPE—health professions version than first-year students studying to become another type of health-care professional (e.g., physiotherapy, biomedical laboratory technician, dental hygiene, and occupational therapy) (113.52 vs. 108.99,  $p = 0.001$ ). Effect sizes were not reported in this study [55]. To what extent this is an issue of self-selection versus a product of educational and professional culture it is still a matter of debate, and particularly important in medical student selection.

Indeed, empathy has been proposed as a selection criterion for medical school applicants [68]. Hojat [69] argued that Medical College Admissions Test (MCAT) in the US and UK Clinical Aptitude Test should include validated measures of empathy as part of the social accountability of medical schools. Such decisions could have potentially significant implications, e.g., excluding candidates with high MCAT scores who have low self-assessed empathy, or pre-orienting medical school candidates career preferences toward “people-focused” vs. “technology-focused” specialties at the time of medical school admission [24]. Further, the multidimensional nature of empathy may interfere with decisions using such measures [1, 2]. Empathy measures can be completed by the person being assessed, the patient or a third-person expert/observer/rater. In the context of selection for professional training, while self-rated measures are feasible to apply, “patient validation,” or the reciprocal positive emotion from a patient, an important dimension of empathy measurement, would inherently be missed. Such second-person measures are feasibly administered only during training and assessment of students, residents, or professionals [1]. Furthermore, if empathy is amenable to learning, the domain to be evaluated before starting medical school might not be empathy per se, but rather the motivation and ability to be trained in empathy; however, such instruments are not yet available.



## 4.4 Conclusion

The multitude of assessments and three different angles from which to measure empathy (first, second, and third person) make the study of empathy exceedingly complex. It is difficult to value one empathy scale over another as they have been often studied separately and only infrequently compared in same study. The consistent finding, even in face of inconsistent measures, is that empathy contributes to patient outcomes. Improving the quality of empathy measurement is imperative to thoroughly assess its contribution to patient care. Clinicians, educators, researchers, academic institutions, and health-care organizations must all contribute to developing and implementing effective assessments of clinician empathy and effective responses to the findings that result.

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**Part II**  
**Approaches to Empathy Education**

# Chapter 5

## Teaching Clinicians About Affect



Tamara Zec and David Forrest

### 5.1 Case Scenario

“He didn’t tell me anything. I sat down and filled out a bunch of forms, he asked me about symptoms and then gave me three medications. And that’s it!” And with that Ms. Smith rolled her eyes, threw her arms up in the air and looked at me incredulously. We sat like that in silence for a few moments, she looking at me and shaking her head, her eyes welling up, lip quivering. “You must have been so angry,” I said. “I was! So angry! And also very disappointed. There was more I wanted to explain.” I nodded. Ms. Smith took out a tissue, dabbed her eyes, took a deep breath, and dove into her story, the details of which were indeed very relevant. It turns out, however, in Ms. Smith telling me more about her previous encounter with a psychiatrist, that Dr. Y took a very good and thorough history and prescribed a reasonable treatment regimen. Despite that Ms. Smith walked away angry and misunderstood. Why is that? What affected her perception of the previous encounter?

When I ask medical students rotating through their psychiatry clerkship to tell me what some possible answers to this question might be, I am most often met by silence and stares. Majority reach for additional questions about the patient’s psychiatric history, convinced that coming up with a DSM-focused, descriptive diagnosis will provide the answer. “Maybe the patient has a personality disorder that makes her misinterpret things,” one student said once. “Maybe,” I said, “but let’s start with the basics first.” Here, I usually ask them to venture a guess as to how the patient might have been feeling. Those who are brave enough to venture into the world of patient emotion usually say: “She sounds somewhat frustrated.” This is the typical

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safe description of the patient's affect. Many are loath to name the actual emotional state, especially during more intense moments like the one described above. In exploring this further with students, one finds that they often feel de-skilled when it comes to correctly identifying, engaging with, and responding to emotion in a patient encounter. Understandably, acknowledgement of a lack of skill or gap in knowledge is anxiety-inducing and therefore kept at a distance. And yet, when spoken to in a clinical encounter, it often unlocks a wealth of information not otherwise accessible.

## 5.2 Definition of Affect and Its Development

Affect, as understood in psychoanalysis and as Charles Brenner explains, is a “complex mental phenomenon best understood in developmental terms [1].” Affects develop out of a matrix of our earliest sensations, typically associated with either gratification/satisfaction or frustration of our most primitive needs (nurturance, responsiveness, food, hunger, safety, attachment, to name a few). When needs are satisfied, this is associated with a pleasurable sensation (ex: satiety). When needs are frustrated or outright neglected, this is associated with an un-pleasurable sensation (ex: hunger). Since brain (i.e., cognitive) development lags behind this visceral experience of the world in the first few months of life, the child is at first incapable of attaching any ideas or thoughts to these sensations and experiences. Later on, and in particular, with the development of the frontal, prefrontal, and temporal cortices, a child begins to be able to form thoughts and ideas and attach them to these sensations:

The resulting complex of sensations and ideas is *an affect*. Any affect includes (a) sensations of pleasure and un-pleasure or a mixture of the two, plus (b) thoughts, memories, wishes, fears – in a word, ideas. Ideas and sensations together constitute an affect as a psychological phenomenon [1, p. 24].

Therefore, Brenner explains, affects can eventually be distinguished on the basis of their ideational content. For example, *happiness* can be conceptualized as an affect associated with gratification of a particular need. If the sensation of pleasure resulting from this is particularly intense, one can call this affect *ecstasy* or *bliss*. Similarly then, the affect of *fear* can be conceptualized as a sensation of un-pleasure plus a certain set of ideas attached to it, namely that something bad/dangerous is about to happen imminently [1].

Understanding affect in this way is important because it emphasizes a point that is often overlooked: affect is more than just immediately observable emotional content. It is emotion plus the ideas/thoughts and meanings a patient has developed around a particular emotion. What complicates matters (and confuses clinicians) is the fact that either component of affect (emotional or ideational) can be psychically repressed, that is to say, submerged below the level of conscious day-to-day awareness. The reasons for this are many and varied and individually based. They are also

beyond the scope of this chapter. What is clear from psychoanalytic study, however, is that repression is a ubiquitous phenomenon of the human mind. Therefore, and we appreciate this readily in psychotherapy, while patient A can acknowledge and feel their anger fully, patient B may, by virtue of ideas and meanings he or she has unconsciously learned to attach to the visceral sensation of anger, not be able to do that. Patient B may instead express their anger through veiled means such as passive-aggressive commentary. It is not difficult to appreciate why patient B might experience interpersonal difficulties. More often than not, if a clinician were to point out to patient B that they might in fact, be angry with someone or something, patient B would disagree. This happens because the affective complex of *anger* remains repressed and out of this patient's conscious awareness. Patient A, on the other hand, might readily acknowledge that they are feeling angry when this is pointed out to them. In psychotherapy, for example, this might mean that patient A may be able to work through certain concerns more efficiently.

In contemporary psychology, we often find it useful to focus on six basic, culturally universal affective states: fear, anger, sadness, disgust, joy, surprise [2]. David Forrest added the affective states of shame and guilt as well, which he showed are distinguishable and psychodynamically important in clinical interactions [3].

In addition, within each affective state, and based on individual histories and responses, “subtypes” of a particular affect can be appreciated as well. For example, *ecstasy* and *bliss* can be conceptualized as variants of *happiness* [1].

Returning to the example of patient B above, it is not difficult to imagine then, given the complexities of affect and its various dynamics, why clinicians shy away from engaging the patient on this level altogether. A common concern that comes up with medical students during psychiatric interviews is “well, what if I name an emotion for them and they get upset?” Well, what if a patient does? Do either patient or clinician explode? While this concern does reflect some anxiety related to clinical inexperience, it also betrays a paucity of clinical training explicitly focused on engaging the patient emotionally (that is to say, fully) and the extent to which clinicians feel de-skilled in this particular arena.

### 5.3 Teaching Affect in Medical Training

In *Elements of Dynamics* (2003), David Forrest points out that a good patient interview involves being able to attend to and respond to a patient's affect. Omission of this typically results in rupture of rapport, evident for example, in instances where patients do not return for follow-up appointments or therapy sessions. In psychiatry in particular, attending to affect can be “more specifically diagnostic and more predictive of [clinical] outcome than judgements of the disorder of thought [3].” He also points out that much discussion of affect in medical education focuses on its various parameters (ex: range, fluidity, congruence to described mood), rather than the affect itself (i.e., the emotional component of it). This parallels some of my own observations in working with medical students: in their descriptions of a patient's



mental status exam, one hears constantly that “affect is mood-congruent, reactive to the content of the conversation and within a normal range” but rarely that “the patient appeared sad/angry/disgusted/afraid [3].” Exploring this with students often reveals that they are worried that such identifications of emotion somehow mean they are “judging” or “criticizing” the patient, dismissing emotions as a sort of a clinical taboo. Not surprisingly, Forrest wonders how this “avoidance of interest in emotions” blossomed and why have emotions been “relegated to the province of psychoanalysis – unmeasurable, softheaded and therefore imaginary and unimportant. Even in major affective disorders, the somatic and cognitive aspects are emphasized in computerized checklists [3].”

In exploring this further, one begins to realize that such an obsessional style of thinking is exactly what is selected for in medical education and training; throughout training, emotional distance and restraint are emphasized. This is helpful in maintaining a clinical stance but if relied upon exclusively, comes at the expense of empathy. The latter is vital in establishing rapport and favorable clinical outcomes.

### ***5.3.1 But What Do Faculty and Trainees Think About Learning from the Doctor–Patient Relationship?***

Egnew and Wilson designed an exploratory, qualitative study focusing on interviews with medical students (and faculty) regarding learning about effective doctor–patient communication. The study was conducted at the University of Otago in New Zealand where students’ graduate medical education is spread out over 6 years, with clinical work beginning in year 4. In structured, 45- to 60-min interviews, students from years 4, 5, and 6 answered questions on their perceptions of the doctor–patient relationship, observations of it in different clinical settings, what they have been taught and how, and whether there is any assessment of what they learn [4]. Students noted a discrepancy between the hospital and clinic-based setting with the former providing very little guidance and hardly any emphasis on the physician–patient relationship and communication [4]. Moreover,

Intentions to personally connect with patients conflicted with needs to solicit information within allotted timeframes, as a fourth-year student observed: ‘*You’ve gone from ‘touchy-feely’ to ‘forget about it’...* Fears of humiliation for exposing limits of *knowledge conflicted with needs to assertively seek learning, as a fourth year student noted: ‘When you’re around consultants...you just want to stand there and shut up because you don’t want to be made to feel stupid’* [4, p. 202].

There was improvement in the outpatient setting where there was presumably more time to actually discuss this. Outpatient-based primary care physicians in particular held the view that “...what you particularly need about the doctor–patient relationship...has to be learnt and taught in the context of actually interacting with a patient, not talking about it [4, p. 203].” Students were provided not just with modeling of this behavior but also with individualized attention and feedback on

their interviewing skills. Students found this immensely helpful. As one student put it, describing his preceptor: "...he would pick up on instances in a consultation. Even though it may have been busy, later in the day we'd discuss what techniques he'd used and how difficult it can be... [4, p. 203]." In fact, the amount of time spent on this type of feedback did not matter as much to students as the simple fact that someone actually took the time to explicitly discuss the nuances of the physician-patient relationship and communication. Students highly valued even informal feedback from junior residents and other healthcare staff, demonstrating that helpfulness in this arena does not have to be laborious, time-consuming, or complicated.

Teaching medical students and other trainees how to engage emotionally through explicit discussions of (and exercises on) affect can help immensely with development of clinician's emotional maturity and result in greater empathy for patients. Forrest, in his 2011 paper *Teaching Affect Recognition to Medical Students*, explains that enhancing affective recognition is not only possible but necessary [5]. He presented several types of trainees (medical students, residents, foreign-born physicians) with exercises in affect recognition and asked them to rate the six affects (joy, fear, anger, shame, guilt, sadness) from 0 to 4+ similarly to the way one would rate neurological reflexes [5]. He found that all ratings were very similar suggesting that affects can be reliably measured are culturally universal and very real phenomena [5].

Through the use of in vivo and videotaped interviews with psychiatric patients, Forrest introduced trainees to nuances of facial expressions and how they correspond to certain affects. Trainees who had particular difficulty with affect identification were provided with a summary of specific terms associated with six basic affective states (joy, fear, anger, shame, guilt, sadness) [5]. Note that Forrest added the affective states of shame and guilt in place of Ekman's disgust and surprise which he felt were more of a "visceral-sensory response" [3]. Please refer to Table 5.1.

Forrest noted, in line with my own observations with medical students, that trainees were reluctant to name the actual affect but talked instead only of its range or quality for example. One affect in particular proved empathically most difficult for trainees to identify and reflect: anger. This parallels what we already know from decades of psychoanalytic observations: most human beings are afraid of their own

**Table 5.1** Affective states

Joy	Fear	Anger (in)	Anger (out)	Shame	Guilt	Sadness
Happy	Afraid	Morose	Hostile	Humiliated	Sorry	Loss
Delighted	Anxious	Self-punishing	Nihilistic	Exposed	Apologetic	Bereft
Blissful	Scared	Entrapped	Murderous	Embarrassed	Remorseful	Mournful
Ecstatic	Frightened	Put down	Deadly	Red-faced	Repentant	Weeping
Up	Terrified	Belittled	Livid	Naked	Penitent	Tearing
Triumphant	Thrilled	Sour	Remorseless	Blamed	Undoing	Downcast
Content	Distressed	–	–	Bared	Red-handed	Helpless
Rapturous	Nervous	–	–	–	Culpable	Melancholy

From Forrest [3]

anger and will repress it from their conscious awareness to varying degrees. In addition, many trainees (as well as more senior clinicians) “view the appearance of emotions...with suspicion, at worse as a total loss of their own control and at best as an encumbrance that delays progress” [5, p. 232]. “And yet we also know from psychoanalytic training and interventions, that speaking to and attempting to understand intense affects in an empathic and open-minded manner is often the most effective way to break through the tension in a clinical encounter and achieve at least some degree of effective collaboration”. Psychoanalytic insight introduces yet another helpful concept in teaching clinicians about affect: that of countertransference. For practical purposes of this chapter, one can think of this concept as an internal set of feelings a clinician experiences in an interaction with a patient. Becoming aware of and recognizing affects patients produce within us strengthens and deepens the affective capacity necessary for effective physician–patient interactions. It is important to realize that patients with a particular set of personality traits will elicit certain types of affects within us. Please refer to Table 5.2 for examples.

Armed with this information, and once the concept (and experience) of countertransference is normalized, students typically feel more comfortable discussing their own emotional responses to patients and observed affects in the patients they interview [5]. Over time, and with enough practice, this results in greater emotional maturity and openness. This is important to consider, given the fact, as Dr. Forrest points out, that

In their education through college up to beginning medical school, the students have... associated with other students exactly their age. Now as they become physicians...they must begin to tolerate the mindsets of, and associate intimately with people both older and younger than themselves [5, p. 235].

Developing greater emotional maturity and depth is particularly important in being able to effectively handle emotionally charged interactions with patients such as, for example, those involving loss of a loved one or concerns regarding sex and sexuality.

While communication is seen as a core physician skill, the way it is taught, and what is emphasized, lacks focus on nonverbal communication, which easily accounts for close to 93% of what is communicated [6]. What further complicates matters is the fact that much patient communication typically occurs in highly emotionally charged situations (acute illness, hospitalization, trauma, dying) [6]. When the mind is emotionally overwhelmed, it is difficult to think logically/rationally. This is a key point to keep in mind when we are communicating with patients. Therefore, in order for a patient to fully understand the clinical information presented to them (diagnosis, treatment, prognosis), the “storm” in their mind (i.e., emotional charge) must be calmed first. The most effective way to do this is to speak to this emotional content. Piza, Piza, and Schwartzstein, in their recent article, showed the power of speaking to the emotional content by referencing the “Dr. Fox effect” [6]:

In 1973, Dr. Naftulin et al. hypothesized and demonstrated that a charismatic lecturer (“Dr. Fox”), using proper nonverbal cues, could provide a positive learning experience even for expert medical educators, despite conveying meaningless content [6, p. 1].

So how does one use these observations about the power of nonverbal emotional content to make patient–physician communication more effective and without resorting to imitation of emotion? Dr. Forrest provides one such possibility though the use of his “Making Faces” training videos for medical students [7]. Videos showing patient interviews and nuances of facial expression (i.e., the instrument for conveying emotion) are shown to second-year medical students as part of their education on psychiatric interviewing. They are pre-tested using facial expression/affect recognition exercises from Paul Ekman and Simon Baron-Cohen. Then students watch “emotion workout videos” and afterwards receive a primer on anatomy of the face and the muscles involved in facial expressions of emotion [7]. In this way, students feel more prepared (which builds confidence) and are able to “read lines and creases in the map of the face to ascertain habitual expressions [7].” Better affective perception and affect recognition follows. Students are also able to observe that accurate recognition and reflection of affect helps patients feel more comfortable and builds their confidence in their physician. As a result, patients are then typically much more comfortable sharing additional information with the physician, confiding in them and leading to greater cooperation.

A randomized controlled trial from 1995 is one example of this. In this study of 69 primary care physicians and 648 of their patients, physicians were randomized to either a control group or two of the communication-skills training groups focusing on helping physicians better address patients’ emotional distress [8]. Patients’ office visits were audio-taped and their use of subsequent medical services monitored at 2 weeks, 3 months, and 6 months, as a measure of their physicians’ emotion-handling skills and effective emotion-related problem solving. What they demonstrated is that after completing an 8-h communication-skills training program, physicians “used significantly more problem-defining and emotion-handling skills than did untrained physicians, without increasing the length of the visit [8, p. 1877].” Moreover, “patients of trained physicians reported reduction in emotional distress for as long as 6 months [8, p. 1877].”

Indeed, and this parallels data from studies on effective psychotherapeutic interventions, what matters most to a patient is that a clinician took the time to engage emotionally in the first place. Blanch-Hartigan in her 2013 paper shows this by examining a physician’s ability to detect that an emotional cue even occurred. She noted accurately that “if the emotion cue is never detected, then the ability to accurately identify or respond to the emotion never comes into play [9, p. 56].” This is difficult to do because emotional cues are often very subtle. This study looked at the impact identification of an emotion cue had on the patient–physician interaction and whether patient satisfaction was affected by how accurately physicians identified patients’ emotions. Perhaps not surprisingly, patients were most satisfied when the physician detected an emotion cue and identified an emotion correctly. In addition:

The error of failing to detect the patient’s emotion had more severe consequences for ratings of satisfaction than the other possible emotion processing errors: falsely detecting an emotion cue that was not really there (false alarm) or incorrectly labeling the type of emotion cue (incorrect identification) [9, p. 60].

**Table 5.2** Clinician’s affective response to common personality styles

Personality style	Their emotional goal	What you feel with them	Your emotional correction
Obsessive (methodical)	Respect, triumph, rectitude, exactitude, compliance, or defiance	Duty, obligation, faint annoyance, boredom	Surprise them with real feeling, warmth, intimacy, kindness; avoid anger
Histrionic (expressive)	Love, allure, glamour, support, magic	Aroused, their hero or heroine, knight, or fairy godmother	Understand that seductiveness is a request for support not sex
Paranoid (vigilant)	Authority, security	Fear, awe, guilt; blamed, in danger	No need to get too close; remember they are scared and puzzled, avoid humor
Depressive (melancholic)	Escape their emotional pain, fade away, die	Bored, tired, sorry, sad, useless	Mobilize them, help them find their impounded energy
Hypomanic (cyclothymic)	Euphoria; excess of everything is not enough	Party emotions, delight, hilarity, or feeling aghast	Focus on task of monitoring
Phobic (dependent)	Reassurance, rescue, avoiding feared things	Big and brave protector	Perceive strength, wean, coach, approach their fears stepwise
Counterphobic (risk-taking)	Defeat fear, cheat death	Applause, respectful, challenged	Give credit; do not dare them with risky regimens
Sociopathic (extractive)	Con, exploit, harm, “fatten up” to take from	Flattered, charmed, suckered, in danger	Quiet suspicion, do not “buy” or be gullible, take precautions
Schizoid (eccentric)	Observe and evade or elude social conventions	“Weirded out,” creepy feeling, piloerection	Show manners and find common humanity
Narcissistic (aggrandizing)	Admiration; risk but duck public humiliation	Infatuation, grandiosity; later devalued and unrequited love	Remember their real needs, self-esteem injuries, shame
Borderline (delineation disorder)	Project unconsciously unwanted parts of self into others; get you to feel what they do not want to	Angry, conflicted	Set limits, boundaries, recognize projections

From Forrest [5]

Therefore, it is important and matters to the patient that a physician at least tries.

For effective communication to take place between a patient and a doctor, it is very important that a doctor gives the patient “space” to not only express their emotions but also elaborate on them. Explicit expressions of empathy are particularly important and lead to greater satisfaction in the encounter than non-explicit demonstrations of empathy [10]. Patients also highly valued a partnership approach and one focused on recognizing and working with a patient’s individuality [11].

One elephant in the room is the fact that most clinicians are uncomfortable with and feel unprepared for handling intensely negative affective states (irrational fear, unrelenting despair, frank anger). Sometimes (leading to further confusion), negative emotional states are communicated indirectly, through cues. Not surprisingly, there is a lot of variability in terms of how clinicians respond. A study by Finset in 2012 referenced that “oncologists responded with empathy to 29% of patient’s expression of negative emotion [12].” In general, the article points out, most physicians respond with medical questions and giving of information, and at times, premature reassurance [12]. In psychiatric training and practice, the latter especially is discouraged as it closes off an opportunity for the patient to actually elaborate on their emotional state. Those of us in psychoanalytic practice know that such premature attempts at reassurance really stem from our own conflicts surrounding certain emotional states, the tolerance of which in the other (i.e., the patient) then becomes difficult. I routinely point out to third-year medical students in clinic engaging in a psychiatric interview how a pause-reflect (affect)-pause approach yields much more useful and nuanced data about a patient’s emotional state. Many are surprised to find out that sometimes when a patient is angry, they are actually also profoundly sad, and vice versa. That profound grief is also tinged with anger over irreversible abandonment by a loved one. That glee can mask a deep fear of upcoming uncertainty and so on. If only the surface emotion is assumed (*vis-à-vis* quick, closed-ended statements and little opportunity for the patient to open up), what lies beneath never has a chance to emerge and yet may be the crux of the presenting issue. In such interactions, patients often walk away with a sense of feeling misunderstood, defeated, and frustrated, not unlike Ms. Smith at the beginning of this chapter.

It may be important to point out explicitly that we are not advocating for primacy of emotion over other aspects of the clinical interview, but rather demonstrating how much more effective and collaborative the patient–physician interaction can be when steeped within the matrix of meaningful affective attunement. Certainly, there are patients for whom emotional processing is difficult. Here we are primarily thinking of patients who are severely alexithymic and/or on the spectrum of autism developmental disorders.

For example, a study cited by Finset demonstrated that “patients with alexithymia displayed more confusion, less vigor, increased EDA” (electrodermal activity as a physiologic marker of sympathetic discharge indicative of a highly emotional state), “and a feeling of less control over the consultation in consultations with a psychosocial emphasis [12, p. 362].”

But even in these interactions, there are nonverbal and behavioral clues to a patient feeling overwhelmed (ex: rocking, eye-contact aversion, closed body language). The point is that without learning about these cues, how they inform us about the patient and why it is important to stay alert for them, the interview will remain an overwhelming (and ineffective) experience for that particular patient, and a frustrating endeavor for the physician. Paying attention to the cues allows the clinician to calibrate the interview process accordingly.

## 5.4 Affect Training Research: Future Directions

A 2013 article titled *Training clinicians to accurately perceive their patients: Current state and future directions* looked at 13 studies between 1957 and 2012 focusing on “training person perception accuracy in medical contexts [13, p. 329].” One finding that emerged was that being able to accurately perceive and reflect another’s emotional state is indeed a skill that can be learned. This is a positive finding as other studies have also demonstrated that physicians may actually “have lower perception accuracy than their peers who did not pursue medicine as a career [13, p. 329].” In addition, we are all familiar with the finding that empathy appears to decline as one progresses through their medical education, and therefore more explicit training would allow physicians to maintain their skills and perhaps even enhance them. Also, “not responding appropriately to emotion cues is associated with less patient recall of educational information in the visit [14, p. 370].” Further, “patients’ subtle nonverbal behaviors are indispensable when a provider is attempting to recognize emotion cues and understand the emotional experience [14, p. 371].” It is also true that most communication between two people is nonverbal, and this is especially true for patients with more severe health issues [14].

Several training approaches emerged from the reviewed studies [13]. Some focused on educating about the importance of emotional perception and reflection. Others offered instruction on specific emotion cues and/or states and involved either role-play or videotaped sessions or videos with associated feedback. It appears that most effective approaches were those that included active practice and feedback [13].

Some trainings presented newer approaches. For example, one study used the Micro-Expression Training Tool (METT), which helped participants hone in on micro-expressions, that is, “very small glimpses of concealed or underlying emotions visible in momentary facial expressions [13, p. 334].” The training focused on medical students and instructions, via slow-motion video clips, on how to detect certain pairs of commonly confused emotions (fear/sadness, happy/contemptuous, surprise/fear, disgust/anger) [13]. Students were provided with feedback after practicing labeling the above-mentioned emotional states. One interesting finding in this study was that METT helped improve accuracy of facial micro-expression identification for students who were already deemed to be good at clinician–patient communication [13].

Another study involving undergraduate participants evaluated a more comprehensive training approach [15]. Here, groups of students were assigned to a particular training option or a control condition which did not include any training options. The training components included consciousness-raising, instruction, practice alone, and practice with feedback [15]. Consciousness-raising “included a definition of emotional cues, their frequency in a general medical interaction and how often these cues are missed or ignored by providers [15, p. 276].” This was a 10-min video presentation. The instruction condition “covered basic verbal and nonverbal indicators of the emotion cue categories, and general emotion recogni-

tion advice based on findings in the research literature [15, p. 276].” This was also a 10-min video presentation. The practice alone component focused on giving participants an opportunity to practice emotion recognition but without feedback. Participants used the Patient Emotion Cue Test (PECT) to do this. Similarly, then, the practice with feedback condition allowed participants to view the right answer after each video clip and completion of the PECT. In general, those who received any kind of training performed much better than those who were in the control (i.e., untrained) group. Practice with feedback option provided the best results, highlighting the importance of feedback in effective training: “...practicing with feedback in training may allow participants to better adapt their judgments of emotional content [15, p. 278].”

Regardless of the approach, one key (and encouraging) finding was that longer training programs were no more effective than training programs of shorter duration.

There are emotion recognition tests that are specifically tailored to the healthcare context. One such test is the Patient Emotion Cue Test (PECT), mentioned above. The PECT has 47 video clips of “emotion cue enactments” and “cover(s) five emotional cue categories (anger, sadness, happiness, anxiety, and confusion) [15, p. 275].” There are also “neutral clips, which are defined as the absence of emotional content [15, p. 275].” Intensity of expressed emotion varies across clips in both their verbal and nonverbal components and for each clip, clinicians determine which emotion the patient is depicting, and those responses are the scored for accuracy. Each clip is approximately 3 s in duration and the PECT “takes just under 9 min to complete [15, p. 275].” Another such test is the Test of Accurate Perception of Patients’ Affect (TAPPA) [16]. It is similar to the PECT in that both are healthcare-context specific. The TAPPA consists of 48 audiovisual clips extracted from patients’ actual medical visits. Patients would review their recorded visits and would “identify their thoughts and feelings during the visit [16, p. 218].” This information was then used to create the shorter audiovisual clips “for which the correct answer was the patient’s report of the thought or feeling associated with that clip [16, p. 218].” Clinicians then respond to the clips in a multiple-choice format.

Increasingly, there is also a role for virtual reality platforms in teaching students/clinicians how to conceptualize what may be going on with their patient from the patient’s perspective [17]. For example, the article describes a fourth-year medical student at the University of Illinois College of Medicine being able to experience the world as an elderly patient with macular degeneration and hearing loss after “donning a virtual reality headset and headphones [17, p. 1].” The student experienced “a dark mass obscuring her central vision and the sound of muffled voices,” allowing the student to *feel* what it might be like to struggle with this illness on a daily basis [17, p. 1]. Other schools, such as the University of California (UC), Irvine, School of Medicine, and led by Dr. Helen Riess, developed online empathy courses based on “the neuroscience of empathy along with practical techniques for improving the bond with patients. The course is divided into three one-hour long segments and includes training in recognizing emotions, such as identifying key



facial expressions and being aware of our own emotional responses, which can get in the way of effective communication [17, p. 2].”

Dr. Reiss accurately emphasized that even “very compassionate doctors become clinical and direct because they’re flooded with feelings. They are afraid they are going to show too much emotion, so they become very matter-of-fact at time when a family or patient might really need to feel some deep caring [17, p. 3].”

Not surprisingly, it appears that third- and fourth-year students find this type of training especially useful since they have already had a chance to observe and be a part of some challenging clinical interactions.

Other virtual reality platforms focus on certain types of particularly clinically challenging patient scenarios such as delivering bad news, dealing with a very demanding or manipulative patient or interacting with a patient suffering from dementia or terminal lung cancer. Some go even further by teaching clinicians how to express empathy effectively, such as the platform developed by Frederick Kron at the University of Michigan Medical School. This platform “evaluates the user’s facial expressions, body language, and verbal communication, then produces responses from the virtual patient that allow learners to tweak their techniques in real time [17, p. 4].” This approach can be further applied interactions between the different medical specialists, for example, leading to better communication between the different members of a patient’s medical team [17].

## 5.5 Beyond Learning About Affect: Benefits for the Clinician

Interpersonal sensitivity “can be used to include both accurate perception and wise or tactful responses to what one has perceived” and “can be based on both nonverbal and verbal cues [18, pp. 319–320].” The concept is important to keep in mind because, not surprisingly, patients routinely report greater satisfaction in encounters with doctors who have a higher degree of interpersonal sensitivity. On the clinician side, it may be important to also keep in mind that clinicians who are more interpersonally sensitive tend to have better relationships with other people, are more altruistic and empathic, have greater leadership and negotiation skills, tend to be more effective teachers, and be more tolerant and open-minded [18]. Accurate perception of another’s emotional state offers many benefits, and studies in the general population have shown this [13]. Those who are able to do this well typically form better relationships, enjoy better self-esteem, and may have lower instances of social anxiety or depression. Clearly, developing greater interpersonal sensitivity through affect training is a great asset to a clinician both in their personal and professional lives.

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# Chapter 6

## Teaching Emotional Self-Awareness and What to Do with It in Patient Encounters



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### 6.1 Introduction

Effective treatment depends on effective relationships. Effective relationships must be tended. Such tending to relation is central to the empathic mode, and requires attention to everyone involved. When we pay attention to our own experience, we become more aware of it. When we are more aware of our emotions, we can begin to see more clearly what we are doing with someone else and why. This increased understanding of what we are doing together with our patients is critical to an empathic mode of engagement. It is useful when things are not working, and we have to change what we are doing, but do not know yet what change to make or how to make it. When things work, it can help us recognize what makes them work and light the path ahead.

This view, which will be elaborated in this chapter, has its roots in the evolution of thinking about clinician's emotional responses to patients in the field of psychotherapy. The understanding of these responses, often referred to as *countertransference*, has gone through a vast transformation in the past century. Initially, such

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reactions were viewed as a hindrance to treatment, and therefore to be avoided as much as possible [1]. Indeed, psychotherapists' emotional responses often were [2] and sometimes still are [3] acted upon to ill effect. Emotional self-awareness in this view of countertransference serves simply to facilitate that desirable avoidance. This focus on avoidance, however, runs aground on the inevitable pervasiveness of emotional responses to patients. Artificial intelligence might make the dream of an emotionally imperturbable therapist a reality in a not too distant future, but it may turn out as well that our emotional perturbability is precisely necessary in treating other emotionally perturbable humans. Certainly then, while emotional responses to patients remain unavoidable, we must strive to make them useful. Current psychodynamic thinking, therefore, embraces clinicians' emotional responses into the treatment process. We view clinicians' awareness of their emotional reactions as a key to understanding the patient empathically, and, more radically, even as an active component of effective treatment. Finally, we note that emotional understanding is inextricable from empathic understanding; if one seeks to understand behavior from a purely functional/strategic point of view, there is little need for empathy. In this chapter, we will therefore discuss emotion, and how and why to develop attention to our own emotions, in service of the needs of a patient.

Furthermore, in accord with the view that our emotional responses can be actively used as ingredients of the treatments we provide, when we speak of emotional self-awareness it is important to remember that we refer here to *emotional self-awareness in action, as it happens in the moment*. Although reflecting back, after the fact, and clarifying past emotional experience (be it 10 min or 10 weeks past) is an important part of the learning process, and can itself be valuable in moving forward in a healing relationship, such retrospective awareness is not the focus of the teaching we describe here.

To begin, let us think about emotion. "To move" lies at the etymological root of the word emotion, and this etymology is deeply informative. It reminds us that emotions are embodied, for it is the body that moves and does. When we are touched, we feel, and this sensory perception motivates a bodily response—the roots of a movement or, as Frijda puts it, a shift in "action readiness" [4, p. 351]; we become prepared to do some particular things. In a dyad, the nature of the motion of one body depends also on the motion of the other body; if I stay still while you retreat, I too am acting to increase the distance between us. Together we are "enacting" a distancing. If I stay still while you approach, I am allowing the distance between us to decrease; although we may play different roles in it, together we are doing an approach. This means my emotions, when I am addressed to you [5], really are emotions with you; we form them together.

Frijda argues that "emotions arise in response to events that are important to the individual's goals, motives, or concerns [4, p. 351]." Of course, by a process of identification, the goals, motives, or concerns of another may be taken on as one's own; after following the foal Bambi's adventures with his mother, we may feel pain and cry when the hunter kills her [6]; had we taken on the goals, motives, and concerns of the hunter, we might have felt joy instead. But this speaks to our experience

as observers. In interaction with another person, we may experience emotion in response to ways that person impacts our concerns, but we may also experience emotion in response to what we model as their concerns, taking those on as if our own. We both engage and observe. In a healing relationship observing and engaging are fused, for our engagement is meant to be in service of the other. We stand in relation to another and our concerns and theirs work together as a system. The question at hand is not “what are you doing?” or “what am I doing?,” but “what are we doing?” What we are doing is, whatever else it may be, also emotional, and so, to answer that question, we should attend also to our emotions.

If emotion is a mode of readiness for movement, to make sense of our emotion we must note where we stand in our feeling. In the healing relationship, do we feel with the patient and move in response to this feeling—do we address the foal with a shared grief for his loss? Or, do we feel differently from the patient and move in response to the movement with which the patient responds to their own feeling—do we see the foal pace the clearing in circles and try to lead him into the safety of the underbrush?

This distinction between “feeling like” and “feeling in response to” is important in the patient encounter as we move between observation and engagement. We may experience emotions which seem at odds with what we expect to feel when a patient tells us something. Often this is because we are expecting to be responding in a primary way, as open observers—in other words, responding as they did (because we imagined we felt what they felt, e.g., the loss of the mother). Instead, however, we were responding in a secondary way, engaged as actors; that is, we were responding to our own feeling of their response (our emotions in response to feeling their aimless wandering). We were confused because we did not know where we stood. Without paying attention in some way (and there are so many things to attend to!), it will be difficult to know what is happening.

For attention to be developed, learned, or taught, it is helpful to have an organization of its object in mind. When we look at a landscape, it is useful to know that there are parts which are stone and parts which are plants, and that the condition of the plants can tell us about the season, and the shape of the stone can tell us about the ancient history of the landscape. But to motivate this attention and continue to develop this sense of organization, the object of attention must be salient. This salience requires that use be made of the information we acquire by noticing. We are more liable to take note and respond to a bush that marks the location of water below the surface when we are thirsty and need to dig a well.

Likewise, to teach and learn emotional self-awareness, we need to have some framework to guide ourselves and our trainees’ attention over the terrain of emotion. We also need to know how to begin making use of knowing this terrain, how to make use of our emotional responses. In the following sections, we will first describe some ways of organizing an understanding of emotion, we will then describe ways to teach and practice emotional self-awareness, and finally we will examine an example of how such awareness, and even the emotion itself, can be used to advance a healing relationship with a patient.

## 6.2 Theoretical Framework: Organizing an Understanding of Emotion

One approach to organizing understanding of emotions is to frame a set of questions that can be addressed regarding any particular emotion:

1. Under what circumstances (what sequence of experiences), does this emotion typically or reliably come about? What schemas, or narratives and predictive heuristics, are associated with it?
2. What is this emotion adapted to do? How is it a useful response under the conditions which elicit it?
3. How does it prepare to do those things for which it is adapted *in the body*?
4. How does it prepare to do those things *in the mind*? and finally,
5. How does all of this appear (what is actually to be observed by another)?

In more compressed terms, we can ask, much as we might of a tool, “What is it for?” and “How does it work?” This still leaves a broad and complex terrain. To grasp that terrain, it may be useful to think also of what the cardinal directions of that terrain might be. This useful formalization is the essence of circumplex models of emotion.

### 6.2.1 Circumplex Models of Emotion

#### 6.2.1.1 The Affective Circumplex

Circumplex models of emotion provide a useful framework for organizing our understanding and thus our awareness of emotional experience that complements categorical ways of attending to emotional experience. Circumplex models regard emotions dimensionally, and can be applied to those general questions mentioned above. Each dimension of a circumplex model may be thought of as relating to one of those questions by pointing to a common dialectic in the potential responses; What is it for?—Getting something helpful or avoiding something harmful? How does it work?—By increasing activity or decreasing it?

Russel’s circumplex model of affect [7, 8] comprises two independent dimensions: the “pleasure-displeasure continuum” [8], also referred to as “valence,” and the arousal, or alertness continuum. Emotions are hypothesized to be characterized by the levels of activity of the neural networks representing valence and regulating arousal. The valence continuum may be thought of as addressing the “what for?” question, while the arousal continuum addresses the “how?” question. Emotions such as sadness and boredom would be found at locations in emotional space with negative valence and low arousal coordinates; fear and anger would be found at locations with negative valence and high arousal coordinates. Joy and excitement are characterized by positive valence and high arousal, and contentment or

satisfaction by positive valence and low arousal. This approach has been contrasted (but can be integrated) with the theory of “basic emotions” [9, 10], according to which basic emotions are discrete entities, each involving a separate neural pathway responsible for its activation.

Russel’s approach potentially accounts for people’s difficulty defining their emotional state moment by moment, as well as their tendency to report several ambiguous and interrelated emotions rather than one specific and well-defined emotion. For example, when a parent and child are reunited after a traumatic separation, we might observe intense joy and grief alternating rapidly and even occurring at once. Their level of arousal remains high, while their attention shifts back and forth between the pleasure of reuniting (positive valence) and the inextricable memory of the painful separation (negative valence) that makes their embrace not a typical hug but a momentous reunion. Likewise, lonely or distressed patients who long for connectedness and recognition sometimes cry when their therapist demonstrates attunement and empathy, or when they report an act of kindness by a friend or a relative.

The consideration of movements along independent dimensions of an emotional circumplex may also be useful in understanding not only the intermingling of emotions but also the transmutations to which they are liable. For example, one might deliberately or automatically transform a mixture of irritation and disgust at the callow preening of a braggart (negative valence, moderate arousal) into an experience of profound boredom (negative valence, low arousal) by suppressing the urge to lash out. When action is externally constrained, we may accommodate internally by reducing arousal, shifting to a mode that does not call so strongly for action. We also see in this example how conscious and unconscious appraisal of the situation contribute to the particular emotional experience; they differentiate this particular experience of the physiological changes and proprioception that occur at these particular valence and arousal coordinates. Just as, the contentment we may feel eating cake differs from that drinking tea or stroking a cat, the high arousal and negative valence of fear and of anger are distinguished by judgments that we should flee or fight, respectively. Such appraisals involve the activation of conscious and unconscious schemas resulting from the accumulation of memory. These schemas provide an interpretative framework to the neurophysiological experience.

Several schemas may be activated all at once by a neurophysiological experience falling at a given position along the valence or arousal dimensions [8]. In these situations, the emotion experienced by the individual may be multi-faceted, rendering it difficult for the person to identify with precision what is the core emotion at play. To take another example, what may be at its root an experience of fear can be transmuted to one of sadness, as the valence of the experience may be more salient than the level of arousal. Thus, the hyper-alertness triggered by the central nervous system is ignored, while schemas involving past experiences in which the person felt depressed, helpless, and demoralized may be activated, obscuring the highly aroused internal state with perceptions of emotions involving lower levels of arousal.

Finally, individuals may vary in how discerning they are of differences in one dimension of emotional experience versus another. This should be borne in mind when employing the circumplex model as a framework for teaching. Some trainees

may be less capable of discerning between various degrees of arousal in their central nervous system than others, while other trainees may be discerning of their level of arousal, but less so of its valence. Thus, for the former, when the valence experienced is positive, emotions such as excitement, serenity, and pride may be experienced without being discriminated one from the other. In the same vein, when a negative valence is prominent, fear, sadness, or shame may be experienced indiscriminately. For the latter, on the other hand, discriminating poorly between emotions of different valence, fear, anger, and excitement may blend together, as will sadness, boredom, and tranquility.

This is not only a liability, however; much delight and creativity may be derived from the inter-mutability of emotional experiences. Productive clarity may be developed by fleshing out the narrative and predictive content of the various schemas associated with a point of ambiguous experience.

While Russel's circumplex provides a useful schematization of raw emotional experience, it does not itself provide any system to further structure the interpersonal landscape of the associated schemas which lend emotions much of their qualitative specificity.

### 6.2.1.2 The Circumplex Model in the Relational Context

Here, Benjamin's Structural Analysis of Social Behavior (SASB) and its emphasis on the relational dimensions inherent to emotional experience with another person is particularly useful. Inspired by Bowlby's attachment theory [11] as well interpersonal psychoanalytic theories [12], Benjamin's approach posited that relationships in adulthood replicate learned relational patterns with attachment figures in childhood [13, 14]. This phenomenon, referred to as "copying" [15], can take three different forms: (a) replicating the behavior of a significant early figure ("identification"); (b) acting as if still under the authority and the control of an early caregiver ("recapitulation"); (c) treating oneself the way one was treated by caregiver ("introjection"). Benjamin developed the SASB to capture the complex inter- and intrapersonal transactions involved in the copying processes [11–15].

Thus, the SASB is not a model of emotions *per se*, being focused rather on social behavior. If, however, we consider emotions as states of action readiness, the particular kinds of dyadic behaviors (actions) mapped by the SASB may be understood as deriving from, and even descriptive of, particular emotions. The SASB can thus be viewed as an application of Russel's circumplex to the field of relational (i.e., interpersonal) schemas, contextualizing emotional valence and arousal in the relational matrix. In other words, in addition to "what for?" and "how?," Benjamin adds the question, "in what relation to whom?," when characterizing emotionally motivated social behaviors [14, 16, 17].

The SASB represents these behaviors in dyadic interactions along two continuous dimensions (love/hate, and agency/dependence) that approximately parallel Russel's valence and alertness axes. It considers these dimensions as applied to each of three aspects of interpersonal experience, however. Each is represented on a



discrete circumplex surface: (a) one's transitive actions toward others (in the role of subject, e.g., I demand, implore, and support); (b) one's intransitive actions, or reactions, to others (in the role of object, e.g., I am coerced, chased, and affirmed); and (c) one's introjected actions toward the self, or how one treats oneself (when I affirm you, I may reflexively, e.g., coerce myself, set myself aside, or embrace myself) [11–15].

First, the love/hate continuum, expresses the degree of interpersonal affiliation manifest in the interaction (e.g., loving and affirming vs. belittling and rejecting). This dimension roughly parallels Russell's valence axis, as it tends to capture the pleasantness or unpleasantness of the experience motivating the behavior. The second dimension described by the SASB, the agency/dependence continuum, reflects the degree of interdependence or independence sought in the interaction. This concept roughly parallels Russell's arousal axis, in that it tends to capture the degree of *independent* activity called for by the experience (e.g., freeing and forgetting vs. clinging or embracing).

For example, a patient whose intransitive stance toward their clinician involves a high degree of affiliation together with a low degree of assertiveness (agency) will likely come across as trusting and depending on the clinician. This stance is likely to elicit behavior from the clinician that the patient will in turn experience as nourishing and protecting. In this interaction, in the best-case scenario, the patient feels reflexively that they are caring for themselves as well. Thus, this model allows us to capture the meaning and complexity of dyadic interactions at the intrapsychic level.

The questions and structures we have described can be useful in teaching emotional self-awareness as they may give the instructor ways to systematize the trainee's experience. Moreover, they provide a framework capable of accounting for the difficulties trainees are likely to experience when they attempt to identify their emotional state moment-by-moment. Such understandings may simply inform next steps or can be pulled in as didactic material that will reduce trainee anxiety by providing an explanatory framework, into their emotions.

### **6.3 Practical Methods to Teach and Practice Emotional Self-Awareness: How Can Attention Be Drawn to One's Own Emotions When the Task Is to Serve the Patient?**

Here, we present two techniques we have found to be particularly useful in teaching emotional self-awareness and its effective use in healing relationships. Our deep gratitude goes to J. Christopher Muran, Jeremy Safran, and Catherine Eubanks Carter, our mentors, who introduced them to us during our training at the Brief Psychotherapy Research Program [18–20]. The first, *mindfulness meditation*, may be thought of as practice of component internal movements critical to emotional self-awareness in the moment, and the second, *role play*, as their application in a safe practice setting before the actual performance of the dance in which patient and

practitioner engage. These two techniques reflect an experiential approach to learning, in which skills are taught through active practice rather than pure didactics.

### **6.3.1 Mindfulness Meditation**

The practice of mindfulness meditation in medical or psychotherapeutic education uses techniques and shares principles derived from Buddhist religious practice, but should not be confused with it. At least within the experience of practicing those techniques, it may prescribe some of the values belonging to the religious practice from which it derives. While such values may be shared in other religious practices, they may not be universal and care should be taken in the introduction of meditation to keep such values circumscribed to the technical arena for which the meditation is being used as a teaching tool.

Mindfulness meditation can be performed at the beginning, middle, or end of individual or group supervision, under the leadership of the group supervisor, of a trainee, or without leadership at all, depending on the purpose. A meditation exercise can be approached as practice to develop generally useful skills, as a tool to regulate over-arousal that may interfere with supervision (or patient care) in a general way, or as a tool to help find a solution or path onwards with a particular problem. Here, we will focus on the use of meditation to teach skills generally applicable to healing work. The skills learned and practiced in meditation facilitate the development of emotional self-awareness and its utilization in practice with a patient. Once a trainee is oriented to the uses of meditation, their understanding can be deepened by having them take on the role of leading a meditation. Unled meditation will rely on the facility of all involved, and may be useful in supporting an experience of community in supervision, once the requisite skills have been established.

In meditation, trainees are encouraged to cultivate two main qualities that facilitate emotional self-awareness: curiosity and acceptance (non-judgment and non-attachment). Such a mindset can be challenging and counterintuitive for medical trainees who often see objectivity, judgment of the patients' functioning, judgment of their own performance, and latching on to a problem and seeing it through to the end as key professional standards. Yet, letting go of judgment and allowing oneself to stay in the ever-emerging present during meditation practice can be liberating for trainees who discover the possibility of stepping into the role of an observer who has the right to wonder and ask, without need to jump to answer or action. It should be noted here that this mode of curious acceptance is also key to empathic engagement with a patient. Indeed, the mode of relating to self in these meditations may be understood as an empathic mode of relating to the self. Thus, the cultivation of emotional self-awareness comprises the practice of an empathic mode of relating. In this light, emotional self-awareness is not just a component of the skill set for empathic relation with patients, but an example of the same over-all process.

This global mindset promotes three specific skills critical to the development of emotional self-awareness in action:

- (1) The regulation of attention—the ability to focus it with purpose on a particular phenomenon, shift that focus, and modulate the level of focus from narrow to diffuse and back
- (2) Practicing attention to the mind—developing awareness of how one’s attention and interpretations spontaneously move, and
- (3) Practicing attention to the body—developing awareness of how our bodies play in concert with our minds. Thus, learning to cultivate a mindset of curiosity and non-judgment is a critical step toward improving trainees’ capacity to reflect in the moment on the relationship they are experiencing with patients, to better inhabit it, and eventually to act more therapeutically.

Basic mindfulness exercises aim at helping trainees to practice the holding and releasing of attention, develop awareness of the fluctuations of their attention moment by moment, and enhance their ability to hear their own bodies. These skills are applied in clinical practice in two key ways:

- (1) Attending to the relational context in which experiences are embedded—being aware of the emergent systems produced by their interaction with their patient, and
- (2) Self-regulation—being able to moderate their emotional responses and so better act in accord with the needs of their patient.

When clinicians can better identify the internal somatic, emotional, and cognitive processes unfolding in challenging interpersonal situations as they occur, and understand the relational context in which they emerge, they will tend to experience more agency. The experience of agency tends to be soothing (just as the experience of helplessness tends to be distressing, unless radically accepted). This soothing in turn allows clinicians to engage in more logical problem-solving, informed rather than merely derailed by emotional experience. This process is incremental, however. The imperfection and limited nature of any improvements should be accepted as part of the process. Falling short creates novel opportunities for further development, and yet, it is *still* falling short.

### 6.3.1.1 Examples of Meditation Exercises

Jon Kabat-Zinn’s [21] famous raisin meditation can provide a nice introduction to this type of exercise. Trainees are asked to eat a raisin as they typically do in their day-to-day life. They are then asked to repeat those same actions at a slower pace, while attending carefully to each and every feature of the experience—tastes in different parts of the mouth, movements, smells, the actions of the salivary glands and gut, the thoughts and memories evoked, and how attention from one feature moves on to another. This type of simple meditation illustrates the experiential richness of mindfully approaching even simple and mundane experiences.

Other exercises may be used to focus on particular skills, such as awareness of attentional shifts, curiosity, and non-judgment. For example, trainees may be asked to focus their attention on their breathing, and note without judgment each time their attention drifts. Alternately, they may be asked to take note of the thoughts their mind drifts to, and then gently let them go, with confidence that their content will not be lost. Learning to observe thoughts and to let them go helps develop the capacity to listen to patients without prematurely impressing our own preconceived schemas on their experience.

Other meditations can involve practicing attention to the different parts of the body. Under the guidance of the meditation leader, trainees are asked to attend to the physical sensations they experience in different parts of their body. This type of exercise helps trainees gain awareness into the bodily sensations they experience throughout the day, and so prepares them to recognize somatic markers of emotions as they arise.

These skills will eventually be critical to trainees in developing their capacity to remain engaged in their interactions with their patients while maintaining awareness of the constantly changing experiences taking place internally, and interpersonally, with the patient.

### **6.3.2 Role Play**

Experiential learning through role play shares common ground with the deliberate practice approach to psychotherapy training put forward in the recent literature on psychotherapy supervision [22]. Deliberate practice highlights the importance of active experiential learning through behavioral rehearsal to improve skills [22]. Supervision based on deliberate practice centers around behavioral rehearsal followed by expert feedback. Importantly, deliberate practice emphasizes titrating the difficulty of the exercises to place them in an optimal developmental zone. The demands of the exercise should thus extend slightly beyond a trainee's already achieved skills.

Interactions with patients involve complex dynamics that are constantly evolving. Making sense of these interactions cannot happen without reference also to the larger context in which they take place, including social dynamics, the clinic setting, the type of treatment conducted, and the quality of the therapeutic relationship between the patient and the clinician. Increasing clinicians' capacity to attend to these dynamics moment by moment in an interaction is pivotal. To that end, asking trainees to participate in experiential role plays staging challenging moments that they have experienced with their patients can be very effective [22]. Role play offers the trainee an opportunity to revisit the interaction in a safe and supportive setting, explore their experience of it, and experience different ways of responding. Further, role play, calls on the trainee to take the patient's place physically (when the trainee plays the patient, we ask them to do their best to imitate their patient's verbal and non-verbal behaviors). This experience reliably offers the trainee valuable experien-

tial insight into the patient's emotions and motivations. In our view, this is one of the greatest benefits of this exercise, and unique to it. While this does not always enhance the trainee's emotional self-awareness directly, it can be informative in this domain too, by increasing trainees' awareness of the subjectivity of their own emotional responses and how they may read to the patient.

An important consideration in the use of role play is identifying a critical juncture to role-play and defining the problem it may present. Turns in an interaction can be thought of as choice points. For example, when you say "hello, how are you?" I now have a choice to make about how to respond. Such choices are often habitual or reflexive, and, when met by habitual choices on the part of the patient, may lead the interaction into a stuck or repetitive pattern. The role play can shed light on the choice being made and the latent emotional forces that might drive it one way or another. In setting up the role play a fruitful approach can be to take note of such a choice in the trainee's recounting of a repeated impasse with a patient. Other useful points of introduction for the role play may be when a trainee reports on a perplexing or distressing experience with a patient. We explore this experience to better define it, and then take the critical juncture in that interaction as the starting point for the role play. In such cases, the role play can be used to explore new ways of responding, but first it is often helpful as a means of reviving the experience so that it can be seen more clearly by the trainee and their supervisor (and peers, in the case of a group supervision). Thus, the role play can be treated like an interactive video recording of the session to be paused and discussed at points of interest and then replayed, but also modified. If actual video recording is available, this can provide excellent material to serve as a lead-in as well as for further exploration in role-play exercise. In such an exercise the trainee may be asked to play themselves, the patient, both, or to observe while peers or supervisors in the group take on those roles. The application of these ideas will be elaborated in the following section through an illustrative case example.

## **6.4 Making Use of Emotional Self-Awareness in Clinical Practice**

For attention to be developed, the object of attention must be salient. This requires that we make use of the information we acquire by noticing our emotional responses. Several steps, which may become compressed into intuitive response with practice and clinical experience, are taken along the path from awareness to use. Awareness begins with identification—What is the emotion? This poses the question, "How does it work with what the patient is doing?" Now awareness is expanded from the individual process to the relational process. We can now ask, "How does the resulting system relate to the patient's needs at that moment? What does it indicate about what the patient is feeling?" Often at this point in the process the principle of "projective identification" is useful to have in mind; if we consider ourselves as being

cast by the patient in the role they feel themselves typically playing in life, our reactions may be transformed into shared experience with the patient—an opportunity for empathy. We can ask, “What is it like to feel as this person does?”

Now the opportunity for a course of action presents itself. But how should we set our course? A further set of questions can be a guide. Is the patient in a position to develop insight (expressive/exploratory end of the therapeutic continuum) or is the patient in need of care (supportive/restorative end of the therapeutic continuum)? If the immediate goal is insight, we can help the patient articulate this by moving in a way that makes the patient reach in a more defined direction. We invite engagement, perhaps even by confronting the patient with a knowledge they are avoiding (though often it is enough and better to note to the patient the impression that *something* is being avoided). If the immediate goal is care and security, we can give the patient what they are reaching for or place it more within reach, be it comfort, communion, or even privacy. In practice, both processes are most therapeutic when they occur together, when the confrontation works also as a reassuring expression of recognition, becoming also a form of communion, when the reassurance and care feeds the patient and at the same time wakes them to new awareness, for example, of their need for care and ways of having avoided it, perhaps for fear of loss.

Here we present a case example to illustrate how emotional self-awareness can be elicited and made useful to a trainee. This example is created for the purpose of illustration and does not represent any particular patient or trainee.

#### ***6.4.1 The Clinician Is Frightened: Exploring the Emotional Experience***

Leo was a 50-year-old man who had been in pharmacological treatment for depression and anxiety in the outpatient psychiatric clinic of a large urban hospital for 10 years. He has struggled to keep a job for more than a year, often citing conflicts with supervisors and coworkers as a reason for quitting. From time to time, he would stop taking his medications consistently, as he felt they did not help much, but would then begin to feel worse. His doctors often scolded him, saying, “No medication works if you don’t take it.” At the clinic, each year, in July, Leo’s care was transferred to a new psychiatry trainee as the previous one moved on. On his first appointment with David, the newly appointed psychiatry resident, Leo entered the room, sat on the chair indicated by David, and boldly moved the chair two feet closer to David, in the already cramped office. David instantly reacted to this perceived intrusion into his personal space; his pulse quickened, he set his jaw, and frowning slightly he said firmly, “This seems confrontational; please move your chair back.” Leo shifted in his seat, and leaning forward responded in a tense, slightly raised voice, “I’m not being confrontational. Everyone does stuff like that to me all the time at work.”

During group supervision, although he had been working with Leo for several months now, David identified this first meeting as exemplary of the kind of difficulty he faced with Leo. To develop a fuller picture of the problem, he was encouraged to identify and verbalize the emotions he experienced during this first encounter with the patient. When asked what he had felt, however, David at first replied, “I felt like Leo needed to have clear boundaries established...maybe because he felt confused.” “Or out of control...” another classmate chimed in.

The task of identifying and verbalizing the emotions experienced with a patient can be surprisingly challenging for psychiatrists (and other clinicians) whose training may emphasize sharp observation of the patient, and composure and boundary setting as markers of professional behavior (all of which David implemented “correctly” in this interaction). Self-awareness and openness to acknowledging emotions toward patients can therefore be perceived by trainees as irrelevant to, or even interfering with, their capacity to maintain objectivity, strong boundaries, and a composed façade. Additionally, trainees often view supervision as an opportunity for supervisors to assess trainees’ knowledge and relative skill (and find them shamefully lacking). This is may be amplified by a group setting in which they are questioned in front of their peers. Accordingly, when they are asked about their feelings, psychiatry residents may be inclined to assume that there is a right answer, and feel anxious about their capacity to provide it. They may even feel pathologized and unduly exposed by questions about their subjective experience. This type of anxiety can render it difficult to adopt a curious and self-reflective stance conducive of self-awareness. Although asked about his own experience, in his response David refocused attention on Leo. In David’s case, all these factors probably contributed to this somewhat defensive stance when we asked him about his emotional experience during his first encounter with the patient. For this reason, it was necessary to clarify the task at hand, and emphasize that the question did not involve any assessment of skills or knowledge, nor a right or wrong answer. When asked “But how did *you* feel?” David replied at first “I felt OK, I was calm...well, maybe a bit annoyed.” We directed him to try to recall what he felt in his body. He noticed that in remembering the situation he could feel some tightness in his jaw and chest. Once David felt more comfortable reflecting upon his internal experience of the patient, he was able to comment on feeling “intimidated” by the patient’s move toward him. With validation from the supervisors, David was encouraged to explore what he meant by “intimidated.” His potential feelings were further explored. For example, frustration, anger, fear, and performance anxiety and their role in David’s response to the patient were discussed. More specifically, the role of David’s fear in his choice to label his patient’s behavior as “confrontational” was discussed. This allowed David to reflect on the aggression he felt toward his patient, and the need to reestablish his authority over him.

According to Muran et al. [19], encouraging clinicians to reflect on their emotional response to patients is a first and necessary step in helping them gain awareness of the relational matrix they are embedded in. Once David felt more comfortable owning his fear and experienced how he turned to controlled anger to mask it and regain his sense of agency, he was able to wonder what these emotions indicated

about Leo's emotional experience during the session and in life. We can see how, while all of the interpretations initially offered were "correct," capturing some truth about Leo and his behavior, they missed his underlying experience of vulnerability and dispossession, and would have even served to heighten it by casting him as a child in need of firm discipline. By connecting his own actions in the appointment to that feeling of intimidation he experienced with Leo, David was able to use his emotional reaction to the patient to collect information about the emotional reactions Leo may experience and resort to eliciting in others as well. As a second step, having found this examination of his own emotional responses helpful in thinking about the patient, David was also open to explore new ways of responding to Leo that would break away from the confrontational and controlling wrestling match he and Leo tended to become embedded in. This kind of breakdown in the relationship with the patient can be termed "a rupture in the therapeutic alliance."

#### ***6.4.2 The Clinician Is Frightened: Working with Role Play***

Let us look now at how role play was used to deepen David's emotional self-awareness and see how he might make use of it in his next meeting with Leo. In this particular role-play exercise, we asked David to play both himself and Leo. David was hesitant at first, and we explained that this was an opportunity to experiment with different ways of responding to the patient and see how they might feel both for him and for Leo. We discussed what it might be like to tell Leo he was intimidating, how David expected Leo might respond, and how he feared Leo would respond in the worst case [23]. This "worst-case scenario" question is very helpful to clarify a trainee's own motivations in an interaction.

What is described here is an application of *metacommunication*, as employed by Safran and Muran [23]. In their extensive work on the therapeutic alliance, Muran et al. [19] designed a series of strategies to address ruptures in the therapeutic alliance (i.e., breakdowns of trust and positive regard between patient and clinician, or disagreement about what the task at hand is, or how to go about it, or any combination thereof). Such ruptures are typically shaped and propagated by maladaptive relational patterns that clinicians and patients find themselves caught in. Strategies to resolve such ruptures and shift the typical relational patterns that drive them require clinicians to break out of the maladaptive relational cycle and expose their patient to a new way of interacting, also called a *corrective emotional experience*. Such experience can provide a first stepping stone toward establishing new and more flexible patterns of relating [19, 20]. One useful technique in this context is metacommunication; the clinician invites the patient to a collaborative reflection on the dyad's relational transaction in the moment. The focus is on the form of the interaction (e.g., arguing, playing hide-and-seek, and cautiously approaching) rather than the particular content of what is being said. This shift in attention can help an interaction break out of a stuck pattern, and thus serve as a first step toward a deeper collaborative exploration of the patient's underlying needs, or it can help consoli-



date a shift in the clinician–patient relationship already achieved in other ways. (For a deeper look at metacommunication and alliance ruptures, see Chap. 7.)

David remained reluctant to engage in the role play. His supervisors asked about this reluctance. David responded that it was “intimidating to be put on the spot.” His supervisors acknowledged that performing a role play in front of them and his peers may indeed be anxiety provoking, and invited David and his colleagues to elaborate on the fears associated with this type of performance. However, the supervisors did not coerce David to perform the role play and eventually offered to stage the interaction themselves. By doing so, they aimed at reducing David’s anxiety, demonstrating empathic attunement, and even more so modeling experiential learning to the whole group. The first role play involving Leo’s case was therefore performed by both group supervisors staging David and Leo’s first interaction in David’s office. The role play went as follows:

- “Leo”: Are you Dr. Gupta?  
“David”: Yes, I am, please come in.  
Leo scrutinizes David’s office, takes one chair and brings it in closer to David’s chair.  
“David”: Hi, Mr. Smith, nice to meet you. [pausing and speaking very gently] I see you brought your chair quite close to me – why is that?  
“Leo”: [stubbornly, but with a hint of surprise and hesitation] It’s where I want to sit.

The supervisors stopped here, to get feedback from the residents, and avoid overplaying the scene. The residents had two different reactions to this role play. While a minority reflected on David’s non-defensive and empathic stance, wondering if such an approach would help disarm some of their “confrontational” patients, the majority was adamant that “boundaries need to be set, otherwise you’ll never get out of it – you can see the patient is trying to bully him.” The supervisors invited residents to reflect on the fears associated with boundaryless sessions, and eventually offered the residents to try the role play combining boundary setting with a curious stance, perhaps using a metacommunication to do so. This time David volunteered to play his patient and himself in the role play.

- “Leo”: Hi, are you Dr. Gupta?  
“David”: Yes, I am.  
Leo scrutinizes David’s office, takes one chair and brings it close to David’s.  
“David”: Mr. Smith, I understand you want to move this chair, but please put it back where it was.  
“Leo”: I can sit where I want doc, you people are not gonna tell me where to sit.  
“David”: I understand you want to sit where you want, but it is not going to be possible.  
“Leo”: You all do that to me! You, the people at work.

At this point, David and his peers burst out laughing. David spontaneously shared that he identified strongly with “Leo” and felt very frustrated with what he experienced as “David’s” condescension. He added that he felt dismissed and unseen, and thought that as a patient he would feel scared to feel dependent on a provider whom he does not know, and who does not seem interested in helping him. Here, we see David making use of emotional self-awareness to gain empathy for his patient. Playing Leo had helped him mentalize Leo’s hurt from David’s lack of interest in Leo, his anger about the cold authority he imposed on him, as well as his fear of feeling so vulnerable in front of a stranger. The supervisors invited David to start the role-play exercise again keeping in mind his experience of the interaction as Leo.

- “Leo”: Hi, are you Dr. Gupta?  
“David”: Hello Mr. Smith, yes, I am Dr. Gupta. Please have a seat.  
Leo scrutinizes David’s office, takes one chair and brings it close to David’s.  
“David”: Mr. Smith, you’ve pulled your chair up quite close! [gently] Would you mind moving back a bit?  
“Leo”: Yeah doc, what’s wrong with it?  
“David”: Ehm, it’s not wrong, ehm, well, it feels a little bit too close to me.  
“Leo”: Really? You people are so sensitive. At work, they’re always in my face like that.  
“David”: That doesn’t sound pleasant for you.  
“Leo”: I guess not, but I have to take it! So when are you going to ask me all the questions about my meds and my depression, blah blah blah?  
“David”: I would like to hear about those things, but this actually seems like it might be important. What I mean is, like, so at work people are in your face, but you have to take it, and you think I should too maybe?  
“Leo”: Well... I think you should see how it feels... [moves chair back half-way]  
“David”: Thank you. Yeah, I guess you’re right – I mean, I really did need to see how it felt.

The supervisors offered to interrupt the role play at this point to reflect on David’s experience. David hesitated a moment and shared that he “almost felt tenderness toward Leo, like, he’s almost touching... I really felt curious about his story.” In this case, helping David forge a connection with Leo rather than engage in the kind of power play Leo often entangled himself in led to a dramatic shift in his emotional response to the patient, whom he could finally start experiencing as a vulnerable person in need of help. As a result, he developed curiosity about Leo, which, in turn, provided Leo with some satisfaction of the deep human need to be seen and to connect, and possibly creating a corrective emotional experience that modeled a more courageous and ultimately more satisfying way to relate.

## 6.5 Conclusion

Training in emotional self-awareness with judicious use of mindfulness meditations and role play may help trainees expand their empathic horizons and capacity for empathic engagement. Observing our emotional responses as they happen in interaction with a patient helps us understand the nature of the interaction. A kind and empathic approach to what we observe allows a kinder and more empathic approach to the patient as well. This helps us respond more fully to the patient's need and less to their response to that need. When we can do this, we can forge stronger, more collaborative relationships with our patients, and thus, better outcomes.

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# Chapter 7

## Getting on the Same Page: Introducing Alliance Rupture as a Path to Mutual Empathy and Change in Psychotherapy



Lauren M. Lipner, Di Liu, and J. Christopher Muran

### 7.1 The Therapeutic Alliance and the Significance of Rupture Resolution in Psychotherapy

Many factors have been found to contribute significantly to the effectiveness of psychotherapy. However, the therapeutic alliance is one of the most consistently identified robust predictors of therapeutic outcome across psychotherapy approaches [1–4]. Though originally discussed in the writings of Freud [5], the therapeutic alliance is most commonly conceptualized today in the context of Bordin’s transtheoretical tripartite model as the purposeful collaboration between patient and therapist on the tasks and goals of treatment, in conjunction with the development of an affective bond [6]. Questions such as: *Are we collaborating on a shared goal? Does the psychotherapy feel as if we are working toward a common purpose? Do we have conflicting ideas about the progress of psychotherapy? How do I feel about my client?* illustrate the utility of Bordin’s alliance definition as it pertains to clinical use [7]. Gaston [8] later added to this conceptualization the importance of the therapist’s empathic understanding of the patient as a distinct and essential component of a successful therapeutic alliance. Originally coined “therapist understanding and involvement” [9], this alliance component refers to the therapist’s communication of their desire to better understand the patient and to demonstrate rapport and respect. This chapter will focus on the perceived and true failures of empathic understanding between patient and therapist, often at the core of ruptures in the therapeutic relationship.

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## 7.2 Ruptures

Ruptures, thought to occur commonly within each therapeutic dyad, play a significant and critical role in the development of a weakened therapeutic alliance, which has been correlated with premature termination and treatment failure [10]. Consistent with Bordin's [6] definition of the therapeutic alliance, a rupture can be defined as a deterioration in the alliance instantiated by a lack of collaboration on the tasks or goals of therapy, or as a strain in the emotional bond between patient and therapist. Although the term "rupture" seems to imply an obvious deterioration in the therapeutic relationship, it is also used to describe subtle tensions or strains [11] within the dyad that may go easily undetected by the therapist.

Ruptures can be classified according to two basic types based on the behaviors the patient exhibits in the context of the rupture: withdrawal or confrontation [12–14]. A withdrawal rupture is thought of as either the patient moving away from the therapist (e.g., by responding minimally to the therapist) or moving toward the therapist and away from the authentic self (e.g., acting in an overly appeasing manner toward the therapist). The therapeutic relationship marked by the action of moving toward the therapist in this manner is often referred to as a "pseudoalliance" [12, 15]. Within the relational context outlined by Safran and Muran [15], a withdrawal rupture can be understood as the pursuit of communion at the expense of agency. Conversely, a confrontation rupture occurs when the patient moves against the therapist (e.g., expressing anger or hostility towards the therapist). In this case, the patient sacrifices communion in order to gain in agency [15].

It is worth noting to the reader that we are approaching the notion of empathy not as a stable and fixed process given in psychotherapy, but as a continuously evolving process toward which therapist and patient dyads are striving. In this way, the occurrence of rupture, or a misattunement between patient and therapist, can be conceptualized as a break in the mutual empathy thought to be a goal of psychotherapy process. In turn, the recognition and subsequent resolution of the rupture, in its efforts towards reattunement, can be thought of as process by which mutual empathy is achieved once again.

When ruptures are perceived and successfully addressed by the therapist, the opportunity presents itself for the treatment to get back on track and/or for the patient to undergo a corrective emotional experience, or the transformation of painful interpersonal conflicts into new and more adaptive ways of relating, as a result of working through the rupture. It is through these processes that ruptures are thought to have implications for outcome [12, 16]. The rupture resolution process can appear in myriad forms, with some interventions specific to the orientation of the practitioners (e.g., analyzing the transference in psychoanalysis or outlining the treatment rationale in cognitive-behavioral therapy), while others appear more implicit, a component of the "nonspecific aspect" of psychotherapy (e.g., validating the patient's defensive stance or clarifying a misunderstanding between the therapist and patient) [15]. The remainder of this chapter will outline and review the stage process model conceptualized by Safran and Muran [17] in a task analytic investigation of the rupture resolution process.

### 7.3 Stage Process Model of Alliance Rupture Resolution

The stage process model we summarize below is the product of an intensive task analytic investigation of the rupture resolution process [15, 17–19]. It is important to note that these models are not presented in a prescriptive or sequential manner, but rather as a guide for clinicians to improve their awareness and recognition of rupture process, and facilitate the resolution of the rupture. As such, rupture resolution does not *require* that every stage is completed, nor does it *require* that the stages are moved through in a specific order. Rather, the model highlights essential components of the resolution process in a probabilistic sense [15].

In its most simplistic form, the model suggests four stages for the achievement of rupture resolution:

- *Stage I: Recognition and Disembedding*  
The therapist recognizes (though not necessarily explicitly) some indication of a rupture event and attempts to disengage from it by inviting the patient to explore the event further.
- *Stage II: Exploration of Rupture*  
The therapist and patient explore their unique and individual perceptions of the rupture event.
- *Stage III: Exploration of Avoidance Maneuvers*  
The therapist and patient explore the function of patient's avoidance in the context of the rupture and the therapist's behavior (both expected and actual).
- *Stage IV: Clarification of a Wish/Need*  
The therapist recognizes (and empathizes with) the patient's underlying need for agency or communion (typically marked by an expression of assertion or vulnerability).

Stage IV of the model differs slightly when resolving a withdrawal rupture versus a confrontation rupture, given that patient behaviors in each of these contexts represent different needs: the need for communion at the expense of agency, and the need for agency at the expense of communion, respectively [15]. Further, within each of the outlined stages, numerous patient *tasks*, or interpersonal negotiations, are subsumed, each occurring in a fluid, cyclical, and sometimes parallel manner. However, equally important to the patient's behavior in the resolution, is the therapist's stance in engaging in the resolution process: the therapist must be willing to be the subject of the patient's negative feelings, acknowledge their own responsibility in the rupture process, and maintain a curious, nonjudgmental, and *empathic* stance throughout the stages of the resolution [15]. The absence of sustained empathy in this process forecloses the patient's ability to reach a vulnerable state within which they can explore conflicts and negative feelings impeding the therapy. The therapist's empathic stance paves a pathway for the ultimate goal of patient and therapist's *mutual empathy*.

## 7.4 Clinical Illustration: Confrontation Rupture

### 7.4.1 Stage I: Recognition and Disembedding

*Patient (P): I am not going to continue treatment with you. You are so young, you are a male, (Pause) and you are obviously not from this country. (Pause) I don't know how you can possibly understand my experience.*

*Therapist (T): You worry I might not be able to understand you because we are different in age, sex, and nationality. Can we, em, pause for a second and talk about what that feels like?*

*P: What do you mean?*

*T: I think it would be important for us to take a moment to get a better sense of your experience right now. Would that be alright with you?*

*P: Okay.*

*T: What is it like for you to sit with me, knowing that I may not be able to understand your experience?*

*P: It feels like wasting time. I want to get better, and, em, you can't help me.*

*T: (Pause) I feel a little stuck here, because we both want you to feel better, and yet, I hear what you're saying about us being different from each other in many ways. Does that fit with your experience at all?*

*P: Yeah, sort of.*

*T: Can you say more? Is there anything I'm missing?*

*P: I worry how much you can understand me because we are so different. We grew up in different times and different countries. It's also hard for me to talk to a man, because I can never talk to my husband, he never listens to me.*

Ashley begins the first session by expressing her concerns about the therapist and his ability to understand her experience and explicitly stating that she intends to terminate treatment. When the therapist attempts to explore and validate Ashley's thoughts and ambivalence, she circles back to the wish to terminate the treatment. The therapist responds by articulating his sense of the patient's anxiety and disappointment, thereby initiating the process of disembedding in the effort to help Ashley to more directly acknowledge her anxiety. By empathizing with patient's feelings, the therapist was better able to engage the patient in the process of further examining the rupture. Therapist also discloses his immediate emotional experience of "feel[ing] a little stuck" in order to invite the patient to explore the event further by disengaging from the potential power struggle emerging. Rather than focusing on the back-and-forth of whether to stay in treatment or to leave treatment, the therapist's communication of his own experience invites the patient to explore the interpersonal conflict on another level, opening the interpersonal space for the exploration of rupture.



### 7.4.2 Stage II: Exploration of Rupture

*T: I think I'm beginning to understand now. You feel I wouldn't listen to you, because your husband never did. What is it like for you to tell me that?*

*P: It's fine. You are so young. You don't know how hard life can get. When I was your age, I was so judgmental of everybody.*

*T: People who are young, such as myself, often judge you because we don't have enough experiences...*

*P: (Silence)*

*T: Can you say more? (Pause) How do you think I might judge you?*

*P: Em... You must think of me as total loser, who's married to an alcoholic with no money.*

*T: Wow, that's harsh. Did I say something that made you feel that way?*

*P: (Pause) No.*

*T: But what you're saying is that when you were my age, that's how you may have thought?*

Ashley worries that the therapist will judge her based on her age and socioeconomic status, which she relates to their difference in age. She also reveals a self-critical nature, related to her own thoughts of herself as a loser. Thus, the nature of rupture event evolves from a mismatch in age, sex, and nationality, to the fear of the therapist's judgment of Ashley as well. Rather than respond defensively to the patient's criticism, the therapist provides an empathic read of the patient's experience and concern about being judged. In doing so, the therapist provides the patient with an indication that it is safe to continue exploring the rupture in a more open manner.

### 7.4.3 Stage III: Exploration of Avoidance Maneuvers

*T: I'd like to play with this a bit more, to get a better sense of what's going on between the two of us in here, if that's okay with you. If you could imagine that I was an older white female, like your previous therapist, what might you be saying to me?*

*P: (Pause.) My husband is not working. I'm doing my job, but that's not enough. We might get evicted next month (patient becomes tearful).*

*T: I can see that was difficult for you to share.*

*P: Yes. We were successful before he lost his job. I didn't need to worry about money. I thought he was great when we got married, but now I realize I made a wrong choice.*

*T: I see your tears as you're speaking about this...can you say more about them?*

*P: This is so embarrassing...*

*T: Do you have a feeling that I must be judging you right now?*

*P: Yes.*

Ashley becomes more expressive, but still avoids the disclosure of her struggles with her husband and her finances because of her fear of being judged and misunderstood by the therapist. The therapist intervenes by making this fear more explicit. Through this process, both Ashley and the therapist became more aware of Ashley's avoidance.

#### **7.4.4 Stage IV: Clarification of Wish/Need**

*T: So if I'm getting this right, it seems that you were expecting me to judge you, because that's something you have experienced a lot from people around you, and maybe even yourself. Does that fit with your experience?*

*P: Well people don't know how hard it is. I work so hard to support my family.*

*T: I see. So, on the one hand, you wish to be understood and recognized; on the other hand, you worry I am going to judge you if you express more about yourself. (Silence)*

*T: Can you tell me a bit about what's going on for you right now?*

*P: (Pause) I think you might be right.*

*T: What was it like for you to hear me say that?*

*P: I feel... I don't know. I've never thought it that way, but I think it's true.*

The therapist pointed out Ashley's underlying belief that perpetuated her frustration and the confrontation rupture at the beginning. Ashley believes that her wish to be understood and recognized is not going to be met by the therapist, and that, instead, she will be met with judgment if she expresses herself. In order to avoid being neglected or judged, she decided to protect herself by expressing her hopelessness in a confrontational manner, and threaten termination.

### **7.5 Intersubjectivity and Rupture Resolution**

In the case illustration above, the therapist faces explicit confrontations from the patient on his professionalism, competence, and personal and demographic characteristics. The challenge for therapists and other providers in these instances is to resist the urge to withdraw from the therapeutic space in response to these attacks and instead remain present and engaged with the process. It is less about *what* the therapist says in response to the patient's expressions than *the stance* he maintains throughout: one of openness and nondefensiveness, in addition to one of genuine empathy and nonjudgmental curiosity. Within this context, the therapist explores the patient's willingness to articulate her concerns, elaborates on her fears, and responds with empathic listening, thus allowing for deeper exploration of the patient's experience and as a result, therapeutic growth.

The notion of intersubjectivity is the result of the integration of a number of perspectives and the seminal contributions of Jessica Benjamin [20–22], which provide a comprehensive understanding of mutual recognition and regulation in the psychotherapeutic situation [23–26]. Intersubjectivity is defined as the interplay and intersection between two subjective individuals [21]; it emphasizes the interaction between two distinct subjects (i.e., patient and therapist), as opposed to between one subject and one object. Within this framework, not only is the therapist expected to recognize the experience of the patient, but the patient must also recognize the therapist as a separate subject with his or her own intentions, feelings, and experiential world. The development of such subjective recognition is thought of as a product of the therapeutic process, which involves the recognition and continuous negotiation of the other as a distinct center of subjectivity. This concept is consistent with the modern experiential/humanistic orientation, where empathy is defined as involving a complex blend of cognitive understanding of and affective resonance with the other [27–30]. This clinical case illustration is also an example of how the patient struggles to recognize the therapist as a separate subject, who, even though he may have different thoughts, feelings, and experiences, can still empathize with her negative feelings.

A keystone in Safran and Muran's [15] rupture repair model is metacommunication. Metacommunication is both a strategy and vehicle to bring intersubjectivity (the negotiation of patient and therapist respective needs and desires) into relief, and thus promote mutual recognition and mutual empathy. Kiesler [31] first defined metacommunication simply as the act of communicating about the communication process. It can also be understood as a therapeutic principle that focuses on collaborative inquiry (see [12, 15, 32], for example). In the process of metacommunication, therapists attempt to observe the patient–therapist interaction from a curious, nonjudgmental vantage point, and subsequently self-disclose their own immediate emotional experience. It aims to expand conscious awareness in both patients and therapists with respect to the details of their experience. For instance, during Stage 1 (*Recognition and Disembedding*) of the case illustration above, the therapist self-disclosed his experience of 'feeling a little stuck', which not only is communication about the communication process (describing an impasse), but also aims to facilitate intersubjectivity and mutual empathy (the therapist is also vulnerable).

Metacommunication can also be understood as a form of mindfulness-in-action, and a means to facilitate emotion regulation [15, 33]. The immediate emotional experience of both patient and therapist, such as anxiety, frustration, disappointment, and so on, is often unformulated, which can result in difficulty with its acceptance and regulation. When metacommunicating, however, the therapist not only introduces a metaperspective on the patient–therapist interaction, but also invites the patient to collaborate on developing a shared perspective on the process unfolding between the two of them. With a collaborative stance, patient and therapist aim to observe, label, and accept their emotions together, leading to a position of greater understanding of the subjective experience of both self and other—a position of mutual empathy.

## 7.6 Conclusion

Ruptures in the therapeutic alliance are often a source of anxiety among mental health-care providers across multiple disciplines, and thus are often thought of as processes that should be avoided or indicative of failure. However, we suggest to the reader that rather than consider ruptures as therapeutic process to be avoided, that ruptures be thought of as critical therapeutic moments that present an opportunity for intersubjective negotiation between provider and patient, and as a result, for mutual empathy. The rupture resolution literature emphasizes the opportunities born out of engaging in the resolution process, defined in this chapter in the context of the stage process model [15]:

- *Stage I*: Recognition and Disembedding
- *Stage II*: Exploration of Rupture
- *Stage III*: Exploration of Avoidance Maneuvers
- *Stage IV*: Clarification of a Wish/Need

Previous research has demonstrated the positive impact rupture resolution has on treatment success, not only in preventing treatment termination or premature drop-out, but also as a change mechanism in its own right [15, 34, 35]. We suggest here that one of the critical pathways of rupture resolution is the active engagement in intersubjective negotiation, which serves to promote mutual recognition, and thus mutual empathy, between provider and patient.

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# Chapter 8

## The Empathy Seminar: Building a Strong Foundation for Caregiving Competency



James W. Lomax and Adriana E. Foster

### 8.1 Teaching Empathy in Healthcare

Empathy can be taught [1–3]. Processes and behaviors like self-awareness, self-reflection, identifying personal biases, perspective taking towards people who are different, and techniques to reduce clinician’s own anxiety can be nurtured in healthcare providers [4]. Verbal and nonverbal behavior to convey empathy can also be taught experientially [3]. Learning to communicate empathically with others while maintaining professional boundaries is already intricately embedded into healthcare professions curricula. However, in many healthcare professions, teaching empathy occurs at the beginning of the study program, while longitudinal reinforcement and feedback on empathic communication are inconsistent and may even be discouraged by the “silent curriculum” of medical education [3]. Clinicians in many healthcare professions (e.g., medicine, nursing, psychology, social work, clergy, to name just a few) are highly exposed to complex and difficult clinical situations in the process of patient care. Furthermore, internal threats (e.g., high workload, difficult balance between professional and personal life, highly competitive work environment, exposure to cynical peers or superiors) contribute to decreased empathy and high levels of burnout [5, 6]. Thus, teaching, assessing, and reinforcing empathy has an important role in clinicians’ professional development [7].

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**How Big Is the Problem?** There is ample evidence that empathy declines in the process of medical education [8–11]. Little attention is thus paid to how the formal and the “hidden” curricula contribute to the development of empathy or hamper empathy over time [7, 12]. Empathy is closely related to clinical competence, diagnostic precision, self-reflection (as related to medical errors), and imagination. To resolve the dichotomy between objectivity in medical diagnosis and physicians’ interpretation of patients’ experiences, values, and preferences, teaching empathy should be integrated longitudinally with biomedical teaching [7]. Including longitudinal testing of empathy and psychosocial aspects of care within the medical curriculum could also promote teaching empathy [13]. From their standpoint, students find role-modeling by clinical teachers to be the most influential element of teaching empathy [14].

**Empathy Is Related to Burnout** In a study of medical residents, increased burnout and reduced empathy were associated with increased odds of self-perceived error in the following 3 months [15]. Brazeau [16] found that higher medical student burnout is associated with lower medical student empathy and with lower professionalism climate observed in medical students, residents, and faculty. Students with high levels of empathic concern had significantly lower scores of burnout over time while students with high levels of personal distress component of empathy showed statistically higher scores of burnout over 3 years of medical school education calling for support and resiliency training during medical school and beyond, into practice [17]. It is thus clear that empathy and burnout are closely related in healthcare professionals. Empathy training is only one of the modalities that may modulate clinicians’ burnout; however, this dimension further strengthens the need for healthcare professionals’ access to learning, practice, and reinforcement of empathic communication.

**How Is Empathy Taught in Medicine?** Empathy requires deliberate practice [18]. Taking the time to practice is essential to achieve acumen in any field of study, with 10 years of intense training being accepted as necessary to acquire an acceptable level of proficiency in domains like professional sports and music. Translating the experience from other professions to healthcare, exposure to “empathy coaches” that can give constructive feedback helps develop experts who actively seek such feedback [18]. A substantial amount of resources are spent to teach the core competency of empathy to healthcare trainees. Empathy training in healthcare curricula utilizes patient narratives, experiential learning, patient shadowing, communication skill workshops, and wellness programs [19–22]. These interventions increase awareness of the role of empathy in caring for patients and are well received by trainees.

### 8.1.1 *Medical Students*

*Narrative medicine* was defined by Charon [23] as “clinical practice fortified by narrative competence—the capacity to recognize, absorb, metabolize, interpret, and be moved by stories of illness”. After completing a narrative medicine elective focused



on communication, collaboration, and professionalism, fourth-year medical students reported improved communication skills, increased capacity to collaborate and empathize, and enhanced ability to be patient-centered and to self-develop personally and professionally through reflection [24]. However, students perceived the pedagogical approach used in narrative training as a “counter-culture” vis-a-vis their biomedical training throughout the medical school curriculum. In broader sense, using *humanities, wellness, and spirituality* to teach empathy is effective and well received by medical students [25]. Participation in wellness sessions during medical school correlated with higher empathy and wellness scores, as did participation in both empathy and spirituality sessions [25]. A literature and medicine elective with eight small-group sessions discussing poetry and short stories about doctor–patient relationship, physical examination, listening to patients, pain, sexuality, cross-cultural issues, treatment adherence, and geriatrics led to medical students significantly increased empathy and improved students’ attitude towards the humanities [26].

*Communication skills workshops* involving lecture, role-play, and patient interviews followed by direct feedback given by faculty, effectively teach empathic communication [22].

*Patient experience* exposure, such as *patient shadowing* increases empathy and counteracts detachment from patients, thought to occur due to heavy workload and burnout [20]. Wilkes [27] developed an *experiential exercise* where volunteer medical students, prior to entering the clinical part of their training, were hospitalized. The treatment teams (i.e., nurses, residents, and faculty physicians) did not know that the students did not suffer of the conditions reported. The participating students reported loss of privacy and found the nurses to be “caring, attentive and professional”, in contrast with the physicians who were perceived as distant and cold. As a result of this experience, the students felt that communication and the human perspective of hospitalization will remain embedded in their own future practice.

Finally, *empathy training modules* have been developed. Riess [28] developed *empathy training* that addressed (1) the neurobiology of empathy, (2) communication of empathy, and (3) empathy towards the “difficult” patient, and its application in the process of delivering bad news. The modules were taught to residents in six medical specialties. Riess [28] found that patient-rated empathy improved in the intervention group and declined in the control group ( $p = 0.04$ ), although there was no significant difference in residents’ self-reported empathy. The study is unique in its assessment of cognitive, behavioral-communicative, and emotional dimensions of empathy self-assessed by the trainee with Jefferson Scale of Physician Empathy [29], by the patient with Consultation and Relational Empathy scale [30], and by objective measurement of trainee’s ability to decode facial expressions with Ekman’s Facial Decoding Test [31], as training outcomes. Foster and Lok [32–34] developed empathy training using virtual human technology that can teach and give feedback on empathy in *virtual human interactions*. Using one virtual human interaction session with immediate empathy feedback, authors demonstrated an increase in the number of empathic opportunities elicited by medical students in standardized patient interactions ( $p = 0.0005$ ) and a significant improvement in medical students’ ability to offer encouraging, supportive, and empathetic statements ( $p < 0.0001$ ), as rated by standardized patients, compared to a control group. Further, after virtual

human training with empathy feedback, students' empathy in standardized patient interactions increased, as assessed by expert raters ( $p = 0.027$ ), compared with a control group who did not receive empathy feedback [32]. Virtual human training elicits empathy levels that approach or match those achieved with live empathy training [32, 34, 35].

### **8.1.2 Nursing and Allied Health Professions Students**

Higher empathy increases job satisfaction, work engagement, and nurses' job retention [36]. However, the "emotional labour" of the nursing profession may create "emotional burden" if the nurse does not manage the emotional load [37]. Nurses must balance *personal distress* likely to develop when caring for very ill patients, with *perspective taking* and self-compassion to maintain empathy [10, 38–41]. Nurses' compassion satisfaction (i.e., the pleasure derived from being able to do one's work and helping others) positively associates with *empathetic concern* and *perspective taking* and negatively associates with *personal distress* [39]. Cognitive empathy, self-reflection, and organizational support protect against compassion fatigue [37, 41]. Therefore, empathy and the techniques that protect and foster it is an integral component of nursing education. Sharing empathic understanding, hope, humor, feelings, using silence, and nonverbal communication through touch are tools taught early in undergraduate nursing education [42]. In both undergraduate and graduate nursing, experiential methods of teaching empathy, including case-based learning, problem-based learning, and simulation, all of which involve clinical reasoning, are frequently used [2]. Realistic clinical scenarios and role-play, with nurses exploring roles (patient, caretaker) different from their own, are effective. Reflection on role-play offers the opportunity to consolidate newly learned skills [2, 37]. Hearing directly from patients and caregivers about the impact of nursing care on their experience and completing a self-learning assignment about the stress of acute and chronic illness helps nurses find meaning in their profession and facilitates transition to clinical experiences [43]. Creative reflection on the effect of mental illness on a patient and family whom nurses encountered during their clinical placement promotes empathy and reduced nursing students' stigma against mental illness [44]. Wikstrom [45] allowed nursing students to explore their personal knowledge of empathy using the painting "the Sick Child" by Edvard Munch. First-year nursing students studied the painting individually and answered questions about the portrayal of empathy in the picture, followed by a group discussion on "pros and cons" of using the picture to explore empathy. Nursing students found that exploring empathy through art offered a relaxed but rich opportunity to use imagination and personal experience and to communicate with their teachers about empathy. Overall, although a variety of interventions are effective in enhancing empathy as self-rated by trainees, patients, or experts, there is no consensus on their inclusion in medical, nursing, and allied health professions curricula. If included, the timing, duration, and reinforcement vary widely among institutions. The feedback (both formative and summative) on empathic communication lacks the structure that is historically dedicated to biomedical content.

### ***8.1.3 Psychiatry and Mental Health Trainees***

In counseling education, Orza [46] describes the use of movies as a part of a “training package to teach empathy” that also includes describing the concept of empathy and self-exploration and reflection on therapist’s qualities of flexibility, sensitivity, maturity, congruency, and being nonjudgmental. Orza’s exercise used a selection of psychotherapy scenes from the movie *Ordinary People* to exemplify qualities of a therapist including listening, using humor, confrontation, directness, and triggered counseling students’ desire to further understand the construct of empathy.

Lewis [47] developed a psychotherapeutic skills seminar focused on teaching psychiatry residents how to “[enter] the patient’s story” in an “exploratory” manner, as opposed to performing a “directive” (e.g., history-taking) interview. Lewis sequentially prompted the residents to respond in writing and then verbally to patients’ stimuli introduced via audiotapes and later via videotapes. This exercise was followed by videotaping the residents role-playing the psychotherapist, as well as the patient, in order to practice taking a non-directive stance and encourage empathy. Next the residents interviewed professional actors who acted as patients, being given brief identities to portray. These interviews were recorded and then played to the group, with residents being assigned to observe: (1) the interviewer’s empathic response to patient’s affect, (2) the patient’s narrative themes, (3) the non-verbal behavior of both the patient and the resident interviewer, (4) patient behavior suggestive of defense mechanisms, and (5) evidence of interviewer’s anxiety and ways that the interviewer managed it. The feedback from the group discussions of these interviews facilitated acceptance of errors and missed opportunities in a supportive atmosphere and was later regarded by residents as a valuable learning experience [47]. Lewis’ visionary approach in teaching residents how to communicate with patients addressed all the fundamental elements of social communication: the capacity to perceive someone’s emotional state and convey their own emotional state, based on facial expressions and nonverbal gestures; perception and understanding of self—one’s own cognitive and emotional states, traits, or abilities; and perception of others including understanding of their mental states and the purposes of their actions [48].

Giordano [49] advocates using experiential learning to overcome moral obstacles and unresolved countertransference issues and help addictions counselors develop empathy for their clients. Role-play, the cornerstone of learning in addictions counseling, can be achieved with client actors paired longitudinally with student dyads (where the actor portrays the patient and the students alternate in the role of counselor and observer). This gives the students the opportunity to practice counseling micro-skills in the role of counselor, to provide feedback to their colleagues in the observer role, and to integrate the substance abuse principles learned in the classroom in their critique of the role-play exercises. Further, role-play allows active experimentation by offering learners the ability to pause the exercise and repetitively practice a skill until it is perfected. Television and film scenes that portray experiences of addiction, music with lyrics that evoke emotions related to active addiction, and non-fiction books that describe the concrete experience of addiction can all be useful to practice experiential learning [49].

Bell [4] enumerates creative modalities to teach empathy, all structured to include goal-setting, planning a purposeful activity, and guided reflection following the activity, with the latter component being of utmost importance for learning. Examples of activities are spending time in a wheelchair, serving food in a soup kitchen, attending a cultural event outside one's culture, role-playing a situation where the counselor's personal information makes it difficult for the counselor to treat the client, followed by personal and class reflection about the possible obstacles in connecting with clients. Mindful practice including guided meditation, yoga, and compassion-invoking exercises, movies, theater, and literature can also be used to increase empathy and prevent burnout. Bell [4] also advocates using tools to capture counselor's feedback as well as pre- and post-empathy assessment following each activity, to allow the improvement of the intervention.

### ***8.1.4 Spiritual Health Trainees***

Although empathy might be assumed to be an intrinsic characteristic of a cleric, it may require structured training. In addition to being "trait-dependent", empathy may be a function of personal orientation in religion. "Means-oriented" or extrinsic religiosity utilizes religion to attain social status. "Ends-oriented" religious clergy desire to help responds to the clergy member's own internal need to be helpful. "Quest-oriented" clergy, search for the ultimate religious truth, assume never complete answers, and respond primarily to the needs of the person who receives the help. In a study of clergy and their clients who rated pastoral counselor empathy, the clients rated end-oriented and quest-oriented clergy as significantly more empathic in the counseling setting than means-oriented clergy, while there were no significant differences between end and quest orientations [50]. Given the fact that empathy is closely related to counseling effectiveness, it is possible that means-oriented clergy may need additional training in the communication of empathy [50]. For the large cadre of hospital chaplains, listening is an important empathy tool. Listening was the subject of a qualitative study of chaplains interacting with ill people [51]. The themes that emerged were being at eye level in relation to the person they listen to; making eye contact; engaging with the others' emotions by listening to the body and its emotional signs; being calm and still; and distancing themselves from religion. These qualities need to be trained in the emerging hospital chaplains given the intensity and the possible conflicting ideology that the stories listened to may contain [51]. Doehring [52] emphasized the advantages of teaching theological care through interactive online theology courses focused on empathy. She proposed course enrollment of no more than 20 students, (who can form groups of five to interact in weekly discussion groups), readings on theological empathy and case study reflections, reporting on spiritual practices with emphasis on those employed when reading or hearing about others' intense suffering. She suggests using forums on micro-aggressions (i.e., instances of indirect, subtle, or unintentional discrimination against members of a marginalized group such as a racial or ethnic minority) to reflect on social privileges and disadvantages, using poetry, art, and music to lament

suffering, and utilizing interactive feedback and immediate grading [52]. In our own experience (JL), the Clinical Pastoral Education (CPE) programs, like those at Methodist and St. Luke's Hospitals in Houston, TX, (both accredited by Association For Clinical Pastoral Education, Inc.) which offer rigorous education for CPE clinical pastoral education residents of all faiths, can be augmented with specific empathy teaching. In addition to clinical, supervised encounters with persons in crisis, the CPE residents are asked to write verbatim reports of their encounters with the people whom they attend to in the hospital. These verbatim reports allow searches for empathic opportunities which are evaluated as part of the overall quality of a pastoral visit, in addition to a classroom-type seminar devoted to teaching empathy.

### ***8.1.5 Summary of Findings on Empathy Curricula***

Overall, empathy teaching methods have limitations: cross-sectional rather than longitudinal delivery, high cost of patient-actors for deliberate practice of communication skills, limited access to faculty supervision, and inconsistency of evaluation tools [3, 53]. Although empathy assessment occurs longitudinally as part of clinical skills exams in the health professions, the existing empathy teaching interventions are largely cross-sectional [22, 28]. To date, limited information exists about the direct effect of these empathy teaching methods on patient outcomes. To be effective, teaching empathy has to be reinforced throughout the curriculum and be graded in complexity in parallel with the gradual exposure to patient care. Furthermore, such a curriculum should provide immediate feedback on learners' empathy in real time and promote reinforcement of learning. Lastly, empathy needs to be reinforced post-licensure, throughout professional life [3].

## **8.2 The Baylor Empathy Seminar**

In the following section, we will present in detail the origins and evolution of the Empathy Seminar for first- and second-year psychiatry residents at Baylor College of Medicine.

### ***8.2.1 The Origins of the Empathy Seminar***

The General Psychiatry residency program at Baylor College of Medicine underwent a transformation in the early 1980s with new leadership that began to experiment with a new model of psychotherapy education. The Department had an ongoing desire to integrate physicians from diverse life paths, cultures, and ethnicities, selected in part because of their perceived empathic ability, into Baylor's training programs and nurture these physicians' psychotherapeutic competency. At this

time, the psychoanalytic environment was dominated by ego psychology [54]. Voices like that of Lewis [55] advocated balancing that heavily cognitive perspective with a more emotional way to relate to patients. Lewis recognized the limitations of the dominant theory and proposed finding a balance between being objective and detached vs. being aware of the patients' feelings and "staying" where the patient is emotionally. Lewis thought that there was an idealization of the objective and detached perspective and challenged the value of knowledge alone in effecting change. Therefore Lewis advocated better therapeutic outcomes would be a result of moving back-and-forth between the objective, detached perspective, and a professional, but emotionally intimate, empathic, and connected perspective [55]. Lewis' approach became structuralized as relational psychoanalysis on the one hand and later as mentalization-based psychotherapy. Baylor's curriculum was described in a 1990 article entitled "Psychotherapy Training for the Psychiatrist of the Future" and presented at national meetings [56, 57]. As did many other psychiatry residency training programs, Baylor operated a descriptive psychiatry Interview seminar and therefore added the Empathy seminar to address emotional understanding and how this aids in helping the patient [55]. At the same time, faculty members with empathic styles of relating with patients and trainees were charged with the leadership of the Human Development and Introduction to Psychotherapy seminars, creating great synchronicity and continuity through the didactic curriculum with the addition of an Empathy seminar. The framework for the seminar includes fundamental elements like experiential learning, deliberate practice, self-reflection, and a supportive atmosphere to process errors and missed opportunities as described in the overview that follows [4, 47, 49].

## **8.2.2 *The Structure and Flow of the Empathy Seminar (See Tables 8.1 and 8.2)***

### **8.2.2.1 Seminar Flow**

In its current iteration, the seminar has two parts and includes weekly one-hour sessions delivered in April through June of the first year of residency (Post Graduate Year-1, PGY1) and July through September in the second year (PGY2). The series begins with a specific statement of goals and objectives. The seminar progresses from watching a movie that portrays mental illness, to discussions of residents' videotaped interviews with patients whom they have never met before.

#### **8.2.2.2 Empathy Seminar Part I**

The first session of the seminar involves watching the movie *Ordinary People* which depicts the struggle of a young adult who suffers depression following a traumatic loss, and the role of psychotherapy in his life after trauma. The discussion focuses on empathic and non-empathic exchanges and their consequences as portrayed in

the film. The film is used as a referral point for subsequent meetings of the seminar. Throughout the following eight sessions, the residents are asked first to respond to emotions captured in photographs and put those emotions into words that the emotions evoke, followed by writing a sentence they might say if trying to communicate an understanding of emotions captured in a written statement from a patient interview. In the following two sessions, the residents are asked to formulate a verbal response to an audiotape of a patient communication. The second of these sessions intentionally focuses on provocative patient communications which typically lead to avoidance or suppressive/redirecting communications by the resident, instead of empathic comments. Finally, the resident is shown a first session of a taped therapy session by a faculty member involving a patient who seeks therapy after the patient realizes his adaptation to life has led to success in business but contributed to failed family relationships.

All subsequent seminar sessions have associated readings, which the residents summarize and discuss in the first 15 min of the seminar. The “Psychiatric Interview in Clinical Practice” [58] serves as textbook for this seminar because it covers interviewing principles, challenges related to interviewing broad patient categories, and provides an introduction to psychodynamic formulation. Each month, 1 week is dedicated to topics related to a series of fundamental concepts, including interviewing the violent patient, story-telling, and the search for meaning in academic medicine, patient advocacy, a demonstration of interviewing about religious and spiritual resources [59] and a discussion of “Sacred Moments” in clinical medicine [60].

**Table 8.1** Empathy seminar part I

<i>Empathy seminar part I</i>
The first part of the Empathy Seminar consists of ten weekly meetings from April to June in PGY1. The first meeting will consist of a group viewing of the movie, <i>Ordinary People</i> [61]. The following meeting will be devoted to a discussion of the film, focusing on empathic and unempathic exchanges and their consequences as portrayed in the film. This film will also serve as a reference point for the conference in subsequent meetings
This conference involves a substantial amount of interaction and the use of audiovisual material, all of which will require careful attention to punctuality for each meeting. Like all core didactic activities, participation in the seminar is a required part of the residency program
<ul style="list-style-type: none"> <li>• Viewing of movie <i>Ordinary People</i></li> <li>• Discussion of <i>Ordinary People</i>, goals of case conference</li> <li>• Slide stimulus, verbal response</li> </ul>
Residents split into two groups of six residents each
<ul style="list-style-type: none"> <li>• Readings on empathy</li> <li>• Audiotape stimulus, written response</li> <li>• Audiotape stimulus, verbal response</li> <li>• Simple videotape stimulus</li> <li>• Complex videotape stimulus</li> <li>• Preparing for the first therapy session</li> <li>• Feedback session (10 min with each resident): The time is also used to provide evaluation for this portion of the seminar by the residents, specifically asking for negative reactions or areas for improvement of faculty</li> </ul>

### 8.2.2.3 Empathy Seminar Part II

The second-year section of the seminar starts with a videotape demonstration of two additional patient interviews by senior faculty members. This demonstration allows the residents to observe senior faculty in the process of interacting with patients and to discuss the strategies employed in the actual interviews.

The following sessions are dedicated to viewing and discussing videotaped sessions of initial encounters between each first-year resident and a patient not previously known to the resident. Each session starts with a 15-min discussion of an article (see Table 8.3) that is chosen to deepen the residents' understanding of empathy in psychotherapy. The residents are asked to prepare a succinct report that highlights the most salient points of the reading. They are also asked to bring for discussion points that they found either interesting or confusing. The videotaped interviews allow the faculty members and peers to watch residents "getting to know" a patient for the first time while seeking an emotional understanding of the patient. Given the richness of each videotape interview, only a fragment of the interview is shown (approx. 25 min) and discussed during the seminar. Each resident is instructed to review and discuss the whole interview with his/her individual supervisor. To engage in self-evaluation, each resident is asked to complete and bring to their presentation a self-rating scale utilizing the "Empathic Interviewing and Case Presentation Competency Assessment Form" developed by Dr. Jacob Sperber for the Group for the Advancement of Psychiatry [57] (Sperber, 2009 Empathic interviewing and case presentation competency assessment form. Personal Communication. Group for Advancement in Psychiatry). This self-rated form is later used by seminar leaders as part of the seminar evaluation and feedback process. Residents have historically highly rated this seminar, which led to much of the seminar remaining unchanged over 30 years, aside from updates of the readings, the introduction of the concept of mentalization, and greater diversity of visual and audio discussion prompts.

**Table 8.2** Empathy seminar part II

<i>Empathy seminar part II</i>
<ul style="list-style-type: none"> <li>• The second part of the empathy seminar consists of 11 weekly sessions, 50-min each. The seminar meets as a large group during the first three sessions and then splits up into small groups in accordance with the schedule below. There will be a reading assignment associated with most sessions</li> </ul>
The residents are asked to videotape interviews with patients they do not already know. The very best situation would be for the residents to videotape the first interview with a patient whom they anticipate seeing for ongoing psychotherapy. Only departmental tablet computers can be used for the purposes of recording patient interviews for the seminar. Two residents will show their videotaped interview in each session according with the schedule below
<i>Part II session content</i>
<ul style="list-style-type: none"> <li>• Defining and following a theme in brief dynamic psychotherapy.</li> <li>• Orientation to psychotherapy education and the Baylor psychiatry clinic</li> <li>• Management of transference</li> <li>• Six subsequent sessions when each resident presents videotaped interview.</li> </ul>
Feedback session



### 8.2.3 Seminar Effects on the Residents

*The Seminar Sequence Facilitates Learning* by deconstructing the components of social communication [48]. This process occurs by having residents respond gradually in writing, then verbally, to an auditory stimulus, followed by assessment and

**Table 8.3** Readings on empathy

Reading	Brief description
A review of brief individual psychotherapies [62]	Reviews and contrasts four brief individual psychodynamic psychotherapies: Focal, anxiety-provoking, time-limited, and broad focus, with two other brief individual psychotherapies that rely less on psychodynamic techniques—Interpersonal psychotherapy and cognitive therapy
Transference love: an artificial rose [63]	Presentation and consequences of love at nodal points in psychoanalytic treatment and the process of internalization that allows termination of psychoanalysis
The inward eye: monitoring the process of psychotherapy [64]	An approach to monitoring one's own psychotherapeutic work that considers a focus on the affective component of therapy as well as on the work of detachment
Dying with friends [65]	While some life experiences that involve intense therapist affect may increase empathic capacity and represent a source of learning, other life experiences, in which the therapist feels helpless and confronted with his/her own mortality, may precipitate intense defenses against affect
The heart of treatment: the therapist and the transference [66]	Illustration of therapeutic transference being used to help patient recognize and resolve pathological behavioral patterns
The problem of self-disclosure in psychoanalysis [67]	A balanced view at self-disclosure vs. anonymity in psychoanalysis. The analyst should be guided by his/her perspective on neutrality when using self-disclosure
Lying in Psychotherapy Supervision: Why Residents Say One Thing and Do Another [68]	Lying and misrepresentation in psychotherapy supervision should be viewed as opportunity for the trainee to manage impulses and affect in more adaptive ways
What is mentalizing and why do it? Appendix to Chap. 8, "Psychoeducation," in Allen JG, Fonagy P, and Bateman A. <i>Mentalizing in Clinical Practice</i> [69]	This seminar session conveys that by mentalizing, one automatically interprets behavior as being based on mental states (e.g., desires, beliefs, and feelings). Mentalizing is described as being mindful of what others are thinking and feeling while being aware of one's own thoughts and feelings
Boundaries and benefits of psychotherapy [70]	A view at boundaries of psychotherapy, progressing in, gaining from, and leaving the psychotherapy process
Talk to psychiatrists, plenary presentation at AADPRT meeting [71]	This paper describes taking a journey and coming back different from the way the person was when he/she left; departing from critical thinking and allowing uncertainty to become an ally

response to visual stimuli and progressing to role-play, receiving and giving feedback to others in a supportive environment. The residents appreciated the seminar and offered consistently positive feedback throughout its 30-year course.

- (a) Residents noted it felt both familiar but also quite vulnerable to be observed and to observe each other during the stages of learning to communicate empathically and contrasted that with the experience of being observed while learning to do physical examinations which seemed like a more “objective” task. Residents also reported being embarrassed or reluctant to say the things that occurred to them; at times they were not sure whether that was what a real doctor/psychiatrist should allow themselves to say.
- (b) The residents appreciated being able to take the video and discuss it further with the individual supervisor; individual supervision helped residents to translate the concepts gained through experiential learning into specific patient interactions.
- (c) The seminar helped to introduce the issue of boundaries in physician–patient relationships [72]. The seminar allowed discussions of boundary issues and the distinction between boundary crossings which seem inevitable for humanistic care, and boundary violations which represent always a danger. For example, if a clinician is not mindful potential of boundary violations and does not have adequate personal resources to help him/her, they may be unable to avoid using dependent patients exploitatively or unprofessionally.
- (d) Residents are impacting patients and the community. The seminar leaders advocated translating one’s professional gifts as a psychiatrist into the community and social environment. Specific structures involved the Psychiatry Resident Outreach to the Public Sector (PROPS) elective for residents and building bridges with underrepresented minority faith communities. This outreach allowed the residents to elevate individual empathy to the social level.

## 8.3 Future Directions in Teaching Empathy

### 8.3.1 *Future Hopes: Sacred Moments in Psychotherapy*

A particular focus that emerged as a result of the subspecialty interest of one of the seminar leaders is how to make better use of the religious and spiritual resources of our patients through empathic contact with them. A case example is used of an anomalous or sacred moment experienced by a patient in psychotherapy, but not discussed in her treatment until a particular “moment” occurred in which she felt safe enough from anticipated ridicule to do so [60]. The case illustrates a fairly common phenomenon (contact with a deceased loved one) that is nurtured and becomes more useful to the patient following an empathic exchange. Historically, mental health professionals have been dismissive or even disrespectful towards our patients’ religious and spiritual resources. We hope that seeking empathic understanding,

even when the absolute or ontological “reality” of the experience being reported is unclear, can expand therapeutic competency by building a stronger therapeutic alliance. We are also interested in the potential benefits to the practitioner from this type of empathic encounter [73]. Our survey study of 58 mental health clinicians showed significant positive changes in several measures for the provider (perceived patient gains, therapeutic relationship gains, clinician gains, and work motivation), but not in burnout reduction.

One explanation is that there is no predictable clinical or educational “space” in which such discussions regularly occur because of residual stigma about religion and spirituality among mental health practitioners. Encouraging discussions about the spiritual dimension of the relationship between providers, clients, and the empathic connections formed in this way might help such experiences to have a larger positive effect on practitioners. Similarly, there is no clinical or educational space where discussions of the relationship between empathy, clinician well-being, and burnout can be housed in healthcare curricula [74].

In summary, to respond to the mounting evidence that relates empathy education with clinician well-being and a potential ability to reduce burnout, as well as patient satisfaction, empathy training should be an integral part of healthcare curricula. Healthcare education should include a structured approach to empathy training and that training should be reinforced by establishing safe, protected time for meaningful discussions of emotionally powerful clinical encounters.

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# Chapter 9

## Can Virtual Humans Teach Empathy?



Benjamin Lok and Adriana E. Foster

### 9.1 Virtual Patients Overview

#### 9.1.1 What Are Virtual Patients?

As health educators search for new ways to assist learners in developing empathy skills, virtual patients are arising as a potentially transformative educational tool. The term virtual patient has been used to describe a variety of systems, which can potentially lead to confusion [1]. In this chapter, we focus on *virtual standardized patients*, which Kononowicz et al. [1] describe as “a virtual representation of a human being using artificial intelligence technologies and natural language processing to train communication skills.” Figure 9.1 shows an example virtual human patient, named Vinny. Vinny is a 3D computer simulation modeled from a traditional standardized patient and presents a patient that has difficulty swallowing (dysphagia). Vinny was created for speech pathology learners to practice patient communication. Vinny can be accessed using any internet-connected computer. The learner can speak or type to Vinny about topics related to his dysphagia. Vinny responds through speech and gestures. The learner gets real-time and post-experience feedback on their interaction, including how they did on opportunities to empathize with Vinny. Virtual standardized patients involve an input component composed of sensors to capture user behavior, a cognition component composed of algorithms to understand and respond to the user’s inputs, and an output component

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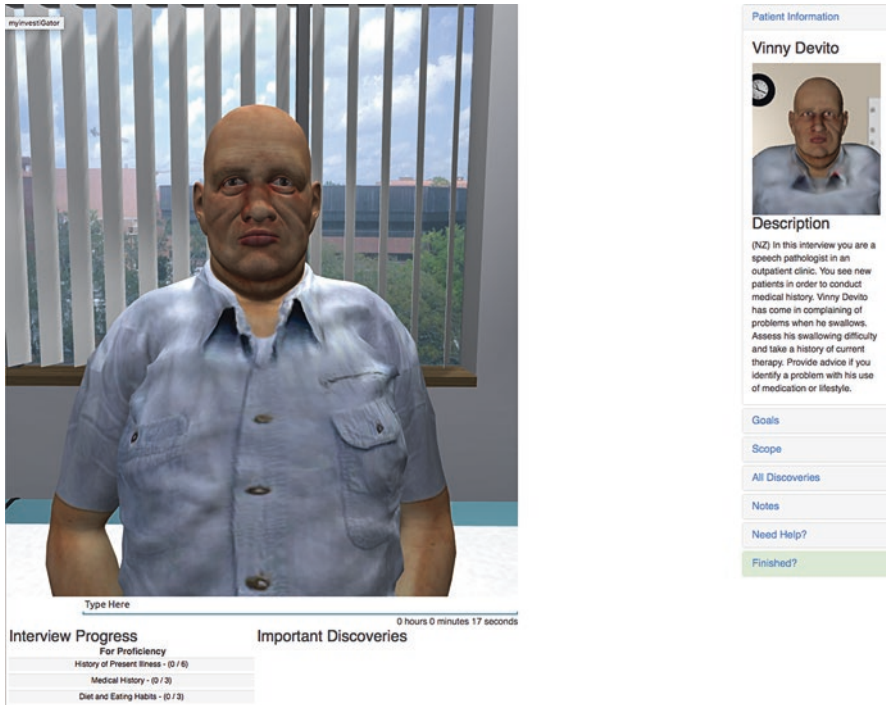
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**Fig. 9.1** Virtual patient Vinny DeVito

that includes hardware, displays, audio, and haptics that present the system's response [2]. In this chapter, we will discuss research and advances in using virtual standardized patients, such as Vinny, to teach empathy to healthcare learners.

### 9.1.2 Trends in Development of Virtual Standardized Patients

Improving communication skills using virtual standardized patients is a relatively recent research area, with most work occurring since 2005 [1]. From 2005 to 2011, isolated trial studies aimed to understand the capabilities and limitations of such a platform. Short (usually less than 30 min) virtual standardized patient interactions were created to mimic a standardized patient encounter around a single disease. The use of virtual standardized patients was limited to collaborations between researchers and educators [1]. Since 2005, the research into virtual standardized patients has focused on increasing the realism of the interactions, developing effective feedback, and studying the educational benefits. Research has explored how people interact with virtual human patients, noting similarities and differences when compared to interacting with standardized patients [3, 4]. Researchers have studied how the physical system (e.g., display size) used to present the virtual human impacts the



interaction, with a general understanding that increased levels of immersion (e.g., larger displays, immersive displays, higher quality audio) would create a more believable interpersonal interaction [5, 6]. While earlier work into virtual patients examined how they should be presented, including benefits and costs of using different display modalities, today's work attempts to understand the optimal placement and the learning impact of virtual patients in a curriculum [7].

### 9.1.3 Current Manifestations of Virtual Standardized Patients

Most virtual standardized patients in large-scale educational use are presented on personal computing devices, such as tablets, laptops, and desktops. Virtual standardized patients are accessed via the internet, usually with a standard web-browser. Laptops or desktops and web-browsers are used due to the goal of widespread dissemination with limited hardware and software requirements. Repositories of virtual standardized patients are available for educators to augment course instruction. Neurological Examination Rehearsal Virtual Environment (<http://nervesim.com>) is an example web-based platform that presents virtual standardized patients presenting with double vision due to cranial nerve conditions. The American Association of Medical Colleges' peer-reviewed open journal, MedEdPORTAL ([www.meded-portal.org](http://www.meded-portal.org)), hosts a number of virtual patients that can be downloaded for free for personal or institutional use [8, 9]. Commercial systems such as Shadow Health, Inc. <https://www.shadowhealth.com/> (co-founded by Benjamin Lok), vSim <https://www.laerdal.com/us/vSim>, and iHuman <http://www.i-human.com/> are similar platforms currently in use in thousands of nursing and medical school curricula worldwide.

*Virtual People Factory (VPF)* [2] is a virtual human platform that enables medical educators to author and disseminate virtual standardized patient scenarios. In VPF, progress through the clinical scenarios is based exclusively on the active interaction between the user and the virtual human [2, 10]. VPF supports multiple input and output modalities and stores de-identified log files of every interaction in a database. Users can use any combination of speaking, typing, writing, gesturing, eye gazing, and body movement interacting with the virtual character. VPF allows for rapid authoring, multiple interactive input and output modalities, ability to leverage commercial artificial intelligence and machine learning platforms, and scalability. VPF provides a web-based portal that enables scenario authors (i.e., clinicians, educators, or healthcare trainees) to create a clinically accurate dialog with a virtual patient and provides feedback to the authors on overall usage, user pathways through the script, and opportunities for scenario improvement. The active interaction is rendered in the Unity3D game engine, which presents realistic animated virtual humans that can speak and gesture to the user on a variety of platforms including web-browser, mobile phone, tablet, virtual reality head-mounted displays, and large projection screens. VPF uses an un-annotated corpus retrieval approach (i.e., uses natural language approaches to find a list of corpus stimuli that are most similar to

the input stimulus) [11]. VPF can pass the user's input into artificial intelligence (i.e., natural language processing, and machine learning platforms) as to determine the best-authored response to present back to the user. VPF is hosted on Amazon Web Service, a secure, scalable cloud platform that allows thousands of simultaneous users, while ensuring HIPAA and FERPA-compliant level of security.

Depending on the virtual patient system, the response is captured as words, audio, and/or the user's body language (e.g., using a web camera or Microsoft Kinect). Further, researchers investigated touch from human to a virtual human. Kotranza et al. [12] enhanced the communication of a mixed reality human (a mannequin instrumented with a co-located virtual human) with sensors that detect the user's touch and elicit speech, gestures, and facial expressions from the mixed reality human. The authors found that the virtual human-to-human touch was used for the same communication purposes as human-to-human touch and enhanced the learners' communication with the virtual human.

As presented in Fig. 9.2, once the learner observes the virtual standardized patient, asks questions, and is provided with responses by the virtual patient, a transcript of each interaction is generated. Each learner can read the transcript immediately after the end of each interaction. Furthermore, an instructor can retrieve the collective class transcripts and offer feedback to the class. Virtual standardized patients deliver content by means of a typical clinical case (e.g., chief complaint, history of present illness, medical, surgical, psychiatric, social, developmental, legal history, current medications, allergies, physical examination results, and test results). In addition, virtual standardized patients offer feedback by means of presenting the elements of history elicited by the learner during the interaction, in real-time, on the interaction screen. This way, the learner can monitor the progress of the interview (see "discoveries" illustrated in Fig. 9.3), as well as the full transcript of the interaction, available immediately after the interaction is completed [13]. The post-interaction feedback can be customized with a formal case presentation, and in some cases immediate feedback on the interviewer's clinical or communication skills [14–16].

In medicine, virtual standardized patients are described as multimedia interactive scenarios that allow safe practice and repetition and immediate feedback, help develop clinical skills, and can simulate rare but critical scenarios [7, 9, 10, 13, 17]. While classroom-based and online courses can effectively deliver course content, they cannot provide personalized learning for each trainee. Objective, individualized feedback given to each trainee is crucial for learning [9, 18, 19].

Virtual standardized patient development has expanded alongside the development of standardized patient simulation. A simulated patient encounter includes any medical encounter conducted for purely educational purposes that may or may not utilize the simulator's personal medical history. The standardization occurs when the simulated patient offers consistent response content independent of the learner [20]. The virtual standardized patients and standardized patient actors both offer content standardization and share many other characteristics, while they differ in some areas, as illustrated in Table 9.1.

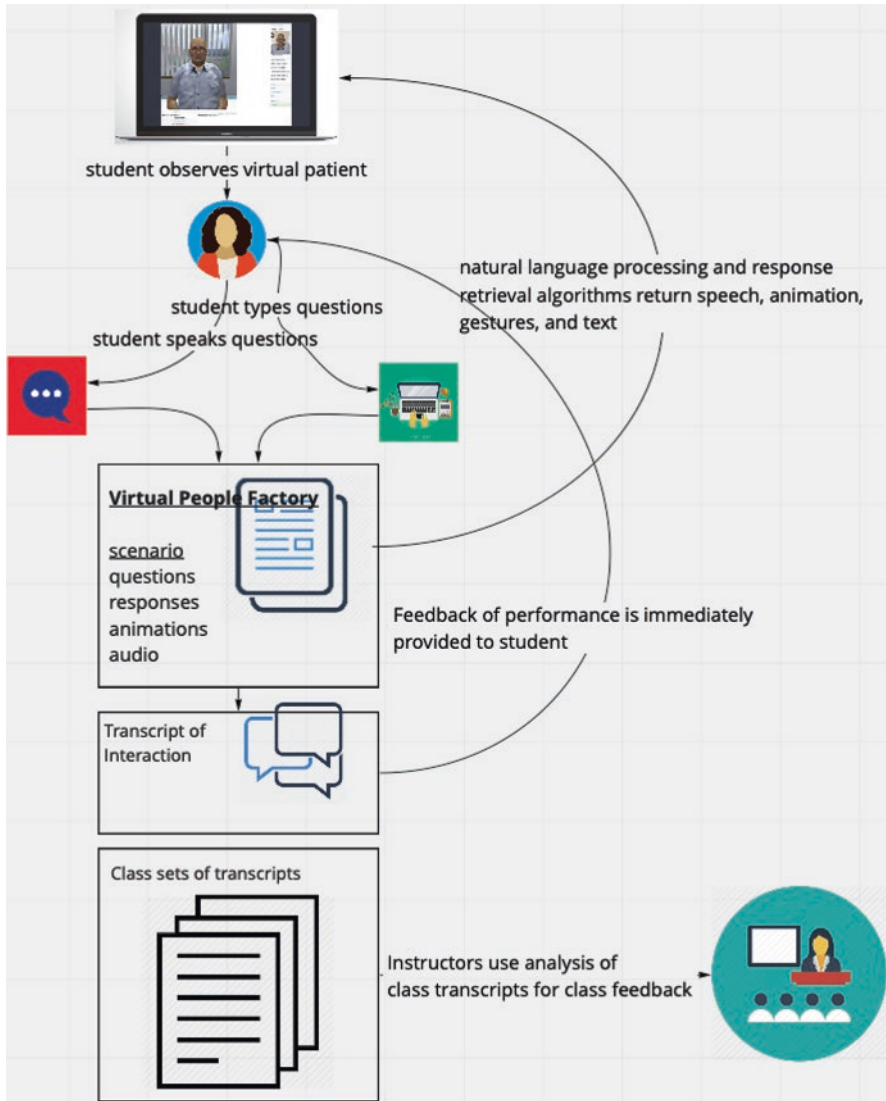
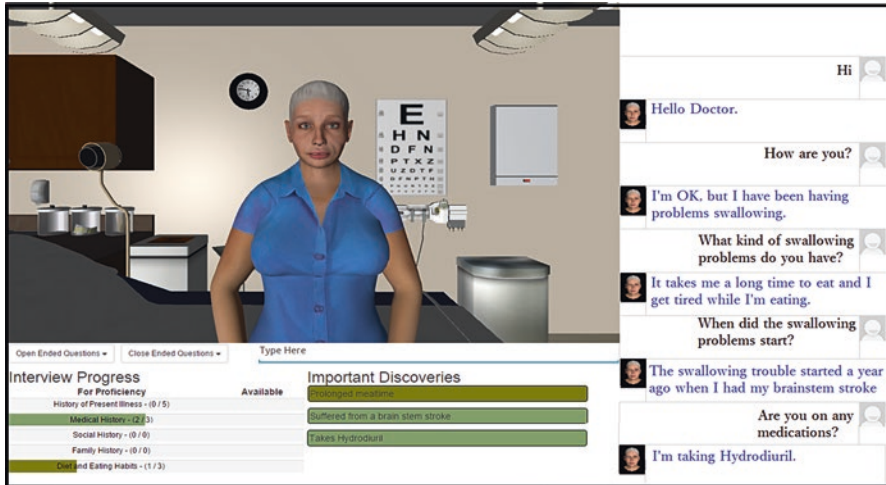


Fig. 9.2 Virtual standardized patient flow

## 9.2 Why Virtual Standardized Patients?

### 9.2.1 Motivation for Virtual Patients in Medical Education

Virtual standardized patient use has grown due to concerns of safety and expense related to standardized patients, emphasis on self-learning, and expansion of the distributed education model, calling for standardization of instruction for learners



**Fig. 9.3** Example of VP interaction and immediate feedback on interview progress and symptoms elicited during the interview (discoveries)

enrolled in the same educational program on distant campuses.

In medicine, virtual standardized patients are described as multimedia interactive scenarios that allow safe practice and repetition and immediate feedback, help develop clinical skills, and can simulate rare but critical scenarios [7, 9, 10, 13, 17]. While classroom-based and online courses can effectively deliver course content, they cannot provide personalized learning for each trainee. Objective, individualized feedback given to each trainee is crucial for learning [17–19].

### ***9.2.2 Where Do Virtual Standardized Patients Fit into Medical Education Curricula?***

In their early evaluation, Cook and Triola [22] proposed that virtual patients are best utilized to develop clinical reasoning skills, due to their versatility in depicting a mix of cases for deliberate practice and ease of standardization. Berman and colleagues [10] defined virtual patients as “an interactive computer simulation of real-life clinical scenarios for the purpose of healthcare and medical training, education, or assessment”. Berman and colleagues [10] saw additional advantages of virtual patients for learners: (1) expansion of medical knowledge through interactive learning, (2) mobilizing learner’s intrinsic motivation to learn, (3) applying foundational knowledge, and (4) ability to focus on specific competencies. For educators, virtual patients offer unique opportunities to analyze educational data [10]. We successfully used virtual

**Table 9.1** Characteristics of virtual standardized patients and standardized patient actors

Characteristic	Virtual standardized patient (VP)	Standardized patient (SP)
Definition	A virtual representation of a human being using artificial intelligence technologies and natural language processing to train communication skills	An encounter conducted for purely educational purposes, which may or may not utilize the simulator’s personal medical history and has consistent content of verbal and behavioral responses to stimulus provided by a student or examinee
Use in healthcare education	<ul style="list-style-type: none"> <li>– Interactive self-learning (e.g., in “flipped classroom” teaching)</li> <li>– Filling curricular content gaps</li> <li>– Deliberate practice of communication skills (including empathy)</li> <li>– Learning clinical reasoning through knowledge application with individualized feedback</li> <li>– Feedback fidelity (standardization)</li> <li>– Competency-based education and assessment (e.g., to reduce medical errors)</li> <li>– Repetitive practice to improve competence</li> <li>– Analyzing educational data</li> </ul>	<ul style="list-style-type: none"> <li>– Teaching physical examination and communication skills</li> <li>– Teamwork and inter-professional skills practice</li> <li>– Assessment of clinical competence through Objective Structured Clinical Examinations (OSCE)</li> </ul>
Development strategy	<ul style="list-style-type: none"> <li>– Case creation by educators or students for academic use</li> <li>– Technical support by software developers</li> <li>– Users test and provide potential questions and user inputs</li> <li>– Iterative process: repetitive use and editing process renders robust virtual patients</li> </ul>	<ul style="list-style-type: none"> <li>– Case creation by institutions</li> <li>– Actor recruitment</li> <li>– Actor training</li> <li>– Quality assurance</li> <li>– Continued actor coaching</li> </ul>
Implementation requirements	<ul style="list-style-type: none"> <li>– Coordination with other learning activities and assessments</li> <li>– Matching learner ability with VP content</li> <li>– Limited academic institution staffing requirements due to web-based availability</li> <li>– Staff to support users encountering technical issues</li> </ul>	Operational strategy: <ul style="list-style-type: none"> <li>– Centralized programs and staffing</li> <li>– Faculty development</li> <li>– Program cost and event space</li> <li>– Test/scenario security</li> <li>– Data management</li> <li>– Online database</li> </ul>

(continued)

**Table 9.1** (continued)

Characteristic	Virtual standardized patient (VP)	Standardized patient (SP)
Archives/case repositories	No mechanism of sharing exists virtual patients developed in academic centers, with the exception of virtual patients accepted by AAMC's MedEdPORTAL through peer review	Association of Standardized Patient Educators (ASPE) <a href="https://www.aspeducators.org/">https://www.aspeducators.org/</a>
Research potential	Which and to what level the following improve: <ul style="list-style-type: none"> <li>– Clinician's social, communication, and procedural skills</li> <li>– Clinical reasoning</li> <li>– Does teaching with virtual patients improve patient outcomes?</li> </ul>	<ul style="list-style-type: none"> <li>– Effectiveness of evidence-based communication skills teaching in SP setting</li> <li>– Utilization of checklists in high-stakes exams</li> <li>– Does teaching with SPs improve patient outcomes?</li> </ul>
Challenges	<ul style="list-style-type: none"> <li>– The cost of technological and content development and maintenance may prohibit widespread use</li> </ul>	<ul style="list-style-type: none"> <li>– High cost of development and maintenance</li> <li>– Risk of harm for SPs (e.g., suicide contagion, abrupt physical maneuvers) [21]</li> <li>– Quality of acting and feedback</li> </ul>

Table based on Adamo [20] and Berman [10]

To be noted that the table above does not include processes involved in development of commercial VP platforms

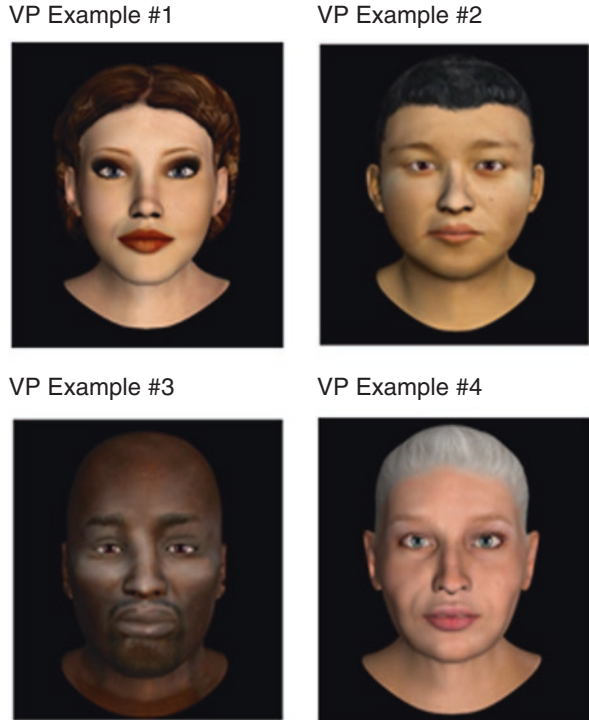
standardized patients to teach history taking, diagnostic reasoning, empathic communication [4, 5, 8, 14, 23], as well as suicide risk assessment [9, 17]. For example, a virtual patient which exposes learners to an actively suicidal patient ensures that a large number of learners (e.g., hundreds, in most medical schools) acquire basic suicide risk assessment skills before interviewing real patients [9].

## 9.2.3 *Strengths and Limitations of Virtual Standardized Patient Technology*

### 9.2.3.1 **Strengths of Virtual Standardized Patients**

More recently, commercial virtual standardized patient systems are available and in widespread use within some healthcare domains. For example, over one third of graduate nursing schools use virtual standardized patients in their courses. Educators have published broadly on their experiences with virtual standardized patients, learner perceptions, improvements in learner skills, and approaches to curricular integration [24–26]. Among areas covered by virtual patient simulation

**Fig. 9.4** Examples of virtual patient appearance



are on-demand, repeatable practice of clinical skills, clinical reasoning, critical thinking, communication, and decision-making in a broad psychosocial context [27]. As illustrated in Fig. 9.4, virtual standardized patients are customizable and can be created to present different races, ethnicities, gender, backgrounds, beliefs, personalities, and behaviors. Virtual standardized patient systems can provide individualized real-time and post-experience feedback on the learner's performance. Individualized feedback is critical to improving communication skills, and virtual standardized patients enable educators to provide such feedback to large classes. Since deliberate practice and feedback are thought to be essential in developing expertise [28], including repeated opportunities for users to practice certain skills (e.g., history taking, suicide risk assessment or empathy), with no risk for standardized or real patients is an important advantage offered by virtual patients. Finally, virtual standardized patients are inexpensive relative to providing communication skills training through standardized patients or clinical hours at hospitals and clinics. The costs of commercial virtual patient systems are aligned with the cost of textbooks. Thus virtual patients are widely utilized in undergraduate and graduate nursing programs [7]. Widespread adoption into medical student training has been slower. Possible reasons for this disconnect include limited breadth of virtual patients compared to the wide needs of the educators and relatively limited evidence of the virtual patients creating effective learning. Further, the lack of a uniform system for financial sustainability of virtual patients interferes with their adoption [10].

### 9.2.3.2 Limitations of Virtual Patients

Virtual standardized patients have limitations that affect their efficacy to teach communication skills. The primary (and obvious) limitation is that communicating with a virtual human is different from communicating with a human. A virtual standardized patient interaction involves both technical and psychological factors that are different from a human interaction. In conversations, such as a nurse or doctor talking with a patient, all the participants use both verbal and nonverbal cues. Subtle cues, such as tone of voice, touch, body posture, and eye gaze are difficult to reliably track and process by currently available computing systems. Research in this area is currently underway. Reeves and Nass [29] showed that people are polite to computers, react differently to computers with female voices than those with male voices and feel that large faces on a computer screen invade their personal space. Overall, however, computer-generated signals elicit social reactions that are similar to reactions people have to other humans [29]. These properties translate to the virtual human domain and offer a foundation for using virtual humans to elicit responses from users and teach empathy [23, 30]. Previous work has shown that learners react with virtual standardized patients similarly to standardized patients, discuss similar topics, and demonstrate similar levels of communication ability [3]. While research into systems that can capture and track the learner's verbal and non-verbal cues is progressing [31], many virtual standardized patient systems have the learner choose a question or statement to the virtual patient from a predefined list, as opposed to having the learner type questions, or convert the learner's speech to text that can be processed. Thus, although interactive, some virtual patients solely target medical content recognition as opposed to active communication. This approximation of interpersonal interaction can result in some learners' rationalizing that their performance was due to "talking to a computer" and not a reflection of one's true communication abilities. Having educators frame, the virtual standardized patient experience within the learner's educational experience and clearly delineating performance expectations will help mitigate some of the limitations of virtual standardized patients.

### 9.2.4 *The Future of Virtual Standardized Patients in Healthcare Curricula*

As allied health educators contend with increasing enrollment and clinical hour requirements, often with limited personnel and access to hospitals and clinics, the curricular need and market for virtual standardized patients will increase. Licensing boards have also established guidelines for replacing clinical hours with simulators (ranging from high-fidelity manikins to screen-based systems). Modernizing healthcare curricula includes a focus on self-learning. In this regard, virtual patients can have a role in "flipping the classroom" and teaching important clinical concepts



from the comfort of the learner's laptop [32]. Finally, virtual patient simulations have made their way into high-stakes licensing examinations in various healthcare professions [33].

### 9.3 Teaching Empathy with Virtual Standardized Patients

#### 9.3.1 *Can a Virtual Patient Be Used for Empathy Training?*

Empathy is a complex phenomenon with affective, cognitive, and behavioral components [34, 35]. Healthcare providers' support and empathy allows patients to express medical concerns, decreases anxiety, increases treatment adherence, and improves treatment outcomes [36–39]. Empathy is a fundamental communication skill for healthcare providers that includes understanding the patient's perspective, communicating that understanding verbally and non-verbally, and acting therapeutically on that understanding [40]. Empathy is taught primarily in live communication skills workshops and using patient shadowing, narrative medicine, and wellness programs [41, 42]. With respect to empathy in particular, virtual standardized patients have been demonstrated to elicit learners' verbal empathic responses [4, 14, 16, 23]. Accordingly, there have been attempts to correlate patient-rated empathy with clinician's non-verbal empathy cues, including facial affective mirroring of the patient. Deladisma [4] coded learner interactions including eye gaze, head nod, body lean, and empathy towards virtual standardized patients and real standardized patients with a 4-point anchored scale. While the head nod and body lean were significantly more pronounced towards the standardized patients, learners displayed empathy towards the virtual patients and learners' verbal empathy correlated with non-verbal communication. Challenges remain, however, when the learners try to express empathy to the virtual human, which may not be completely equipped to detect the verbal empathic responses and appropriately validate the learner's attempt to relate.

#### 9.3.2 *Integrating Empathic Opportunities in Virtual Patient Technology: State of the Art*

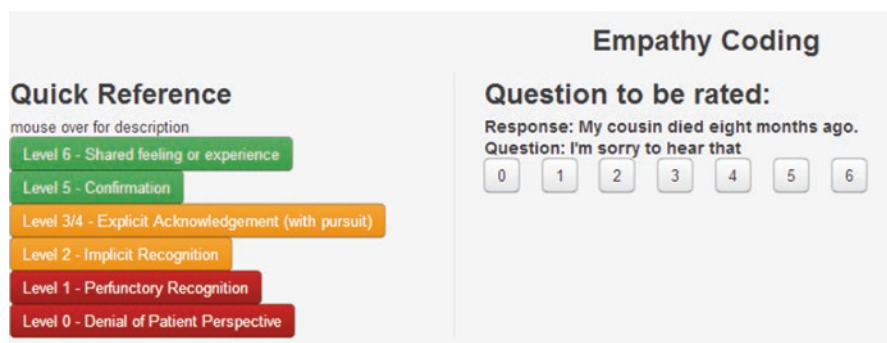
At the core of the virtual human empathic communication training are virtual patient scenarios with built-in *empathic opportunities*, which require the trainee to recognize and respond to the virtual human's concern [14, 43]. Currently, most systems are able to provide opportunities for the learner to respond with empathy, such as having the virtual standardized patient speak to the user about a sensitive topic. For example, the virtual standardized patient could say, "I'm scared this could be cancer. What if this is cancer?" [12]. The learner has an opportunity to first identify that

this is an opportunity to express empathy, and then he/she can respond. Algorithmic interpretation and evaluation of empathy is still in its nascent forms. Most systems simply provide a simplistic response to the user (e.g., “Thanks for saying that”), regardless of actual content. While not fully realistic, such an approach can cue the user that the system recorded their response as empathic or supportive and evaluated it positively.

### 9.3.3 Can Virtual Standardized Patients Evaluate Learner’s Empathy?

The initial approach to quantify empathy in virtual patient interactions included human evaluation of learner’s responses in real time, to provide immediate feedback on the quality of empathy. This approach leverages existing scales of empathy coding. This approach of human evaluation of empathy occurring in the background of the interaction, unbeknownst to the learner is termed a “Wizard-of-Oz” approach, as illustrated in Fig. 9.5. The “Wizard-of-Oz” approach is feasible in instances where the necessity of a system to support natural conversation outweighs the costs of human interaction and possible subjectivity and variance in virtual standardized patient responses [16].

VPF [2] allows automation of the empathy feedback given to users, based on ECCS, such that users can receive immediate feedback on their responses to the empathic opportunities presented by the virtual patients. To validate the virtual patient feedback, users’ responses to the predetermined empathic opportunities found in the transcripts of the learners’ interactions with virtual patients could be expertly coded with ECCS by reliable empathy raters. Finally, upon completion of



**Fig. 9.5** Rater interface for empathy coding in virtual patient interactions, using Empathic Communication Coding System [44]. From Borish, M., Cordar, A., Foster, A., Kim, T., Murphy, J., Chaudhary, N., & Lok, B. (2014). *Utilizing real-time human-assisted virtual humans to increase real-world interaction empathy: Proceedings of the 5th Kansei Engineering and Emotion Research International Conference* (No. 100, pp. 441–455). Linköping; Sweden: Linköping University Electronic Press <http://www.ep.liu.se/ecp/article.asp?issue=100&article=35>

the interaction and receiving empathy feedback, the learner can provide an assessment and plan, complete surveys, and conduct a review of their virtual patient interaction. Thus, the VPF platform is a well-suited and scalable method to teach empathy.

To evaluate learners' empathy, we built *empathic opportunities* into virtual patient scenarios [16]. These opportunities require the trainee to recognize and respond to the virtual human's concern. To help standardize the introduction of "empathic moments" into VP scenarios and to uniformly code the user responses to these "moments", we sought a reliable empathy-coding instrument [14]. Empathic Communication Coding System (ECCS) is a validated, expert-rated scale developed to code empathic opportunities, defined as explicit, clear, and direct statements of emotion, progress, or challenge by the patient. The ECCS also codes clinicians' verbal responses to these opportunities ranging from level six (shared feeling/experience) to level zero, denial of the patient's perspective. For example, an emotion expressed by a patient (i.e., "My sister died 3 months ago. I cry every time I think of her") could elicit a level-5 clinician response (i.e., "It is hard to go through a death of a family member") or a level-0 response, clinicians ignoring the empathic opportunity, (i.e., "Do you have any allergies?") [14]. ECCS was a sensitive measure of increased empathy in live physician-patient interactions 6 months after live empathy training and can discriminate a persisting effect of clinicians' empathy training on patients' satisfaction and health outcomes after 6-12 months [45].

### 9.3.4 Studies and Findings

#### 9.3.4.1 Virtual Patient Interactions with Empathy Feedback Increase Learners' Empathy

Virtual standardized patients can enhance verbal empathy by giving immediate feedback and teaching empathic communication [16, 23]. In our initial attempt to systematically evaluate and teach empathy with virtual patients, we adapted the virtual patient Cynthia Young [13]. Cynthia is a 21-year-old college student, referred by her campus counselor, who presents with symptoms of a major depressive episode. Her function declined, and she became depressed, hopeless and poorly motivated, following a personal loss. The scenario already contains predetermined empathic opportunities (e.g., "My cousin and I were like sisters. I cry every time I think of her"). Cynthia Young elicits users' empathic communication that is similar with learners' performance in interactions with standardized patients [14, 23, 46]. Using one virtual patient encounter with Cynthia, followed by immediate empathy feedback, we demonstrated a significant improvement in medical students' ( $n = 70$ ) ability to offer encouraging, supportive, and empathic statements ( $p < 0.0001$ ), as rated by SPs, in an interaction immediately following the virtual patient encounter, in comparison with learners who interacted with Cynthia Young but did not receive empathy feedback. The same virtual patient training significantly increased the

number of empathic opportunities elicited by medical students in SP interactions ( $p = 0.0005$ ). Further, post-virtual patient training with feedback on empathic responses, medical students' verbal communication of empathy in SP interactions, assessed by expert raters using ECCS increased significantly ( $p = 0.027$ ), compared with virtual patient interactions without empathy feedback [14].

#### **9.3.4.2 Learners Express Higher Levels of Empathy Towards Virtual Patients Compared to Standardized Patients**

One natural question that arises is how empathy with a virtual standardized patient is similar to, and different from, empathy with a standardized patient. Kleinsmith et al. [23] conducted research aimed at building this understanding by determining if learners can respond to a virtual patient's statement of concern with an empathic response. A study was conducted at the University of Florida College of Medicine in which third-year medical students ( $n = 110$ ) interacted with virtual patients in one session and with human standardized patients in a separate session a week apart [23]. During the separate interactions, the virtual and standardized patients presented the learners with empathic opportunities. Reliable expert raters later rated students' responses to these opportunities. The virtual patient interactions occurred on learner's laptop or desktop computer while the standardized patient interactions took place in patient exam rooms. The virtual and standardized patient interactions were counterbalanced to avoid order effects: in one condition students interviewed virtual patients before standardized patients and the order was reversed in the other condition. The results of pairwise comparisons indicate that empathic responses made to virtual patients were rated as significantly more empathic than responses made to standardized patients ( $p = 0.000$ ). In summary, the empathy expressed towards virtual standardized patients was higher than empathy towards standardized patients and the empathy level correlated with the length (number of words) of the students' responses. Even though virtual patients may be perceived as artificial, the educational benefit of employing them for training medical learners' empathic communications skills is that virtual patients offer a low pressure interaction, with less time restrictions, which allows learners to reflect on their responses [23].

***Patient Shadowing as an Empathy Teaching Tool in Virtual Patient Interactions*** Cordar et al. [15] introduced patient shadowing in virtual standardized patient interactions. Patient-centered care promotes the physician knowing the patient in the entirety of his/her social and cultural context rather than focusing solely on an illness or injury. Patient shadowing was described as "having a committed and empathic observer follow a patient and family through their care experience" [47]. Patient shadowing has been integrated in medical school curriculum and in patient safety and quality improvement initiatives in direct patient care. Patient shadowing interventions involve learners acting as "patient navigators" for patients during clinic visits or learner volunteers portraying physical symptoms and being cared for by residents who were unaware of the experimental nature of the hospital-

ization [48]. These interventions were successful, with the learners becoming intensely aware of the importance of empathy in patient care [48, 49]. Cordar [15] used virtual standardized patients to simulate patient shadowing by introducing cut scenes from the videogame *The Sims 3* (<https://www.Origin.com/games/the-sims/the-sims-3>) into pre-existing virtual patient technology, in order to enhance medical learners' empathy. The premise of this technological enhancement was that cut scenes could illustrate moments from the virtual patient's daily life to help convey the patient's struggle with their medical condition. Furthermore, by understanding the experience and perspective of the patient, the healthcare provider could show increased empathy towards the patient. The cut scenes introduced in the virtual standardized patient scenario with depression illustrated virtual patient Cynthia Young's [13] experience of low energy by showing her getting out of bed, starting an activity, and returning to bed soon thereafter, eating ice cream and taking naps, watching TV, and crying [15]. Eighteen medical students were randomized to interaction with the same virtual patient with depression that included cut scenes and 17 to a virtual patient without cut scenes, which they completed on a desktop computer. After interacting with the virtual patients, each student completed an encounter with a standardized patient representing a major depression scenario that took place in a patient exam room. In the virtual patient interactions with cut scenes, the learner asking about a symptom of depression (e.g., low energy, anhedonia, sleep, appetite, depressed mood, and crying) triggered each VP cut scene (see Fig. 9.6).

For example, if the learner asked about Cynthia's appetite or weight gain, the cut scene where she eats ice cream and returns to bed would play, after Cynthia's answer "All I do is eat and sleep". The standardized patients rated the learners exposed to the virtual patient with cut scenes significantly higher than the learners who interacted with the virtual patient without cut scenes on the following communication checklist items: (1) "The examinee offered encouraging, supportive, and/or empathic statements" ( $p < 0.05$ ) and (2) "The examinee appeared warm and caring" ( $p < 0.01$ ). The difference between groups approached significance for the item "The examinee developed a good rapport with me."

***Empathy and Perspective-Taking in Virtual Patient Interactions*** Empathy and perspective taking are closely connected [51]. Thus, Halan et al. [46] sought to explore if taking the perspective of a virtual patient could be used to teach empathy to healthcare learners. Taking the perspective of the patient is essential for healthcare learners to learn critical interpersonal skills including empathy. To study perspective taking and empathy, researchers conducted a semester-long user study with 24 healthcare students exploring the effects of having them create virtual patient agents, on subsequent virtual patient interviews. The authors hypothesized that learners who create and interview virtual patients of the same race will be significantly more empathic than learners who create virtual patients with a race discordant to their self-identified race. Early in the semester, speech and language pathology students in a Dysphagia Management course each created virtual patients of a particular race. The learners had to create the appearance and the conversational corpus. A virtual patient's conversational corpus includes the questions the virtual



**Fig. 9.6** Cut scenes reflecting patient’s daily life. Reprinted by permission from Cordar, A., Borish, M., Foster, A. and Lok, B., building virtual humans with back-stories: training interpersonal communication skills in medical learners. In Bickmore T., Marsella S., Sidner C. (Eds) *Intelligent Virtual Agents. IVA 2014. Lecture Notes in Computer Science*, vol 8637. Springer, Cham (copyright) 2014 [50]

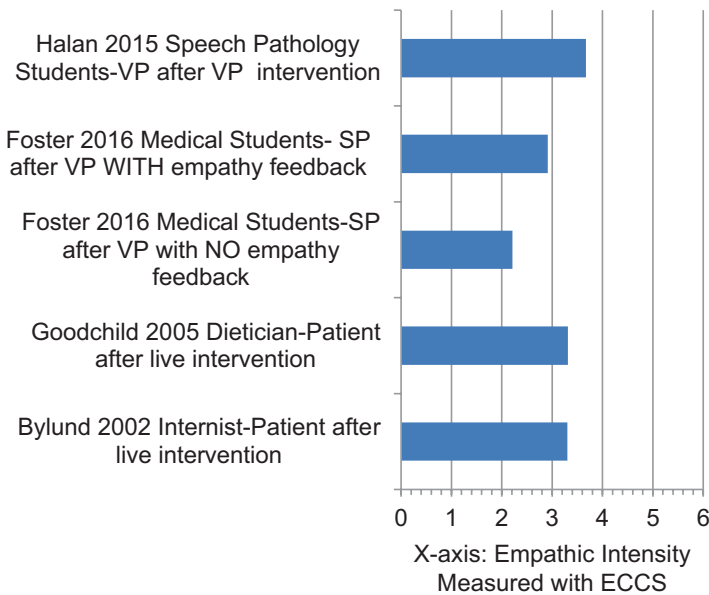
patient could respond to, and most importantly, the virtual patient’s responses to questions. For example, learners had to author virtual patient responses to common questions such as “what worries you about your difficulty swallowing?” and “how is your swallowing problem impacting your family?” This creation exercise provided learners the opportunity to take the perspective of the patient, including patients of a race that could be similar or different than the learner’s self-identified race. Later in the semester, learners interviewed virtual patients of the same or of different race as the virtual patient they created. The learners’ level of empathy with the virtual patient was measured through specific empathic opportunities where the virtual patient brought up an issue that required the learner to deliver both information and therapeutic communication. For example, a virtual patient named Marty Graw asked the learner several minutes into the interaction, “Doctor, imagine you being sick all the time. How would you feel about being sick and coughing while talking to your patients? My condition is the same. I am a chef but cannot even taste any of the food I’m cooking.” Results indicate that healthcare learners who created

and interviewed virtual patients of the same race were significantly more empathic than learners who created virtual patients with a race discordant to the one they interacted with in the experiment. These results could help the virtual patient creator to actively address any misconceptions or stereotypes that they may hold about a certain ethnicity or culture, as uncovered in the process of creation and interaction with the virtual patient.

## 9.4 Discussion

### 9.4.1 What Have We Learned?

Virtual patient training elicits empathy levels that approach or match those achieved with live empathy training. After virtual patient empathy training, language/speech pathology learners showed a mean empathy score of 3.7, similar to medical learners’ response to challenges faced by virtual humans (3.4) and similar with inter-nists’ live responses to real patients (3.3), after live empathy training, all measured with ECCS (0–6 points scale where 0 = denial and 6 = sharing of patient’s perspective). As shown in Fig. 9.7, these results illustrate reliability, as well as consequences and test–retest validity for the virtual patient empathy training [14, 44, 46, 52, 53].



**Fig. 9.7** Comparison of empathic responses after live or virtual patient empathy training interventions, followed by real patient, SP or virtual patient interactions. *SP* standardized patient, *VP* virtual patient, *ECCS* Empathic Communication Coding System

### ***9.4.2 Future Directions in Teaching Empathy with Virtual Standardized Patients***

Virtual standardized patients are a powerful tool for learners to practice, refine, reinforce, and receive feedback on empathy. Prior research has demonstrated that virtual patients can elicit empathy, help learners acquire best practices in expressing empathy, and provide opportunities for perspective taking and reflection [4, 5, 14, 23, 46]. Ericsson [51] established that deliberate practice leading to significant improvements in a certain skill occurs when “individuals are (1) given a task with a well-defined goal, (2) motivated to improve, (3) provided with feedback, and (4) provided with ample opportunities for repetition and gradual refinements of their performance”. Virtual standardized patients are well-suited tools for deliberate practice in learning empathy.

However, empathy is a complex construct. Although the virtual patient platforms allow integration and immediate delivery of feedback, much work remains in providing more nuanced, complex educational experiences. For example, concepts such as breaking bad news, end-of-life discussions, inter-cultural communication, and patient conflicts would require teaching empathy at a deeper level than current virtual patient approaches.

Teaching empathy at a deeper level will likely require a system capable of capturing, processing, and responding to the user in subtle and nuanced ways. Future work in sensing systems that can recognize a wide range of conversational cues, including tone of voice, prosody, eye gaze, facial expressions, emotions, and body language, will enable the system to understand the user’s intent, beyond simply the words being spoken. Such a system would also be able to present a virtual patient that could interpret the learner’s affect, such as where the learner was looking, or how she/he held their arms. Further, such a system would also be able to provide feedback on the learner’s empathic abilities, including crowdsourced real patients’ perception of learner’s empathy and expert-rated empathy feedback. Integrating this complex, multi-level feedback into a learning experience that can be assimilated by the learner is the subject of ongoing work. Lastly, the virtual patient potential for longitudinal reinforcement offers promise in helping develop empathic communication expertise. Such potential advances in deliberate practice of empathy, would revolutionize teaching and milestone acquisition in domains like delivering bad news, suicide risk assessment, and exploration of substance use or other self-harm behaviors.

The latest advances in artificial intelligence and machine learning will drive the understanding of affect cues and contextualized feedback. Artificial intelligence and machine learning will enable systems to effectively classify emotions by capturing the user’s facial expressions, understand nuance in communication such as concern and sympathy, and enable the virtual patient to respond accordingly to the user with speech, gestures, and emotion. As the technology advances, these innovations will allow educators to meet and expand their educational learning objectives for empathy by using virtual standardized patients.



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# Chapter 10

## Developing Empathy Through Narrative Medicine



Gregory Schneider, Marin Gillis, and Heidi von Harscher

### 10.1 Introduction

*Ms. Gomez is a 55-year-old woman with Type II Diabetes Mellitus, hypertension, morbid obesity, and recurrent urinary tract infections. Her work as a counselor for children with learning disabilities provides regular income, but her employer does not provide health insurance. Instead, she has purchased a high deductible, high co-pay marketplace insurance plan and sees her assigned primary care physician regularly. Her physician has placed her on guideline-appropriate diabetes and blood pressure medications, but she finds herself in the emergency room frequently with elevated blood pressures and blood sugars and repeated bladder and kidney infections. Frustrated with the care provided by her regular doctor, Ms. Gomez seeks out a new primary care provider.*

In her summary of narrative medicine, Rita Charon defines the endeavor as “medicine practiced with narrative competence.” Such competence, she elaborates, makes use of “methods such as close reading and reflective writing” that serve as inspiration and training for humane and effective medical practice. The techniques

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involved can help clinicians better appreciate four central “narrative situations: physician and patient, physician and self, physician and colleagues, and physician and society” [1]. Better coming to terms with these various situations fosters partnership between patients and providers, spurs kinship among providers, and helps clinicians better understand themselves and their own journeys. In this chapter, we focus on narrative medicine as an approach that can help learners and practicing clinicians to cultivate empathy and to provide a therapeutic context for patient care.

Within an increasingly complex health care system, the strength of the clinician–patient relationship remains one of the cornerstones of successful medical care. Competent providers exhibit a combination of knowledge, skills, and attitudes that help create a context for effective care. The crucial elements of that context involve (a) eliciting the patient’s story, (b) assessing the patient’s vulnerabilities and strengths, and (c) building a therapeutic alliance [2]. Empathy underpins that context, as does an appreciation of narrative, and the two are interrelated.

## 10.2 Empathy, Imagination, and the Therapeutic Alliance

The concept of the “therapeutic alliance” first emerged in psychotherapy to better delineate the type of relationship between therapist and client, regardless of the theoretical model of therapy, which best manifested trust, collaboration, respect, and care. When studied, this type of caring and respectful relationship has been associated with positive behavioral health outcomes [3]. Edward Bordin and others advocated for expanding the concept more broadly to medicine, maintaining the emphasis on the quality of relationship, no matter the type of intervention utilized [4–6]. Within relationship-centered care, empathy remains pivotal (Chap. 16). Empathic clinician–client relationships have been associated with better health outcomes, greater patient satisfaction, and increased adherence to recommended medication and treatment regimens [7–9].

As described earlier in this volume, empathy is a “mode of relating to another that facilitates mutual understanding and recognition” (Chap. 1). Its Greek word roots *em-* (into) and *pathos* (feeling) connote the sense of “feeling within” contained in the German *Einführung*, usually considered the predecessor to the English word [10]. Von Harscher and colleagues, in their research on burnout among medical students, highlight the multidimensional nature of empathy, having impacts on social functioning, self-esteem, emotionality, and sensitivity to others [11]. Janice Morse, in her comprehensive literature review on empathy, emphasizes four key components: emotive, moral, cognitive, and behavioral [12] (see Table 10.1).

At its best, empathy allows for an emotive and cognitive connection with someone else but without over identification or pity. Spurred on by altruism, it manifests in expressions of understanding that can be comforting and therapeutic for patients. For the provider, it can instill meaning in one’s work, even in the mundane. In their extensive residency professionalism curriculum, Markakis et al. purposefully inculcate empathy toward their residents, in the hope that the residents in turn will display empathy toward patients. Though not explicitly using Morse’s model, these

**Table 10.1** Morse's components of empathy

Component	Definition
Emotive	The ability to subjectively experience and share in another's psychological state or intrinsic feelings
Moral	An internal altruistic force that motivates the practice of empathy
Cognitive	The helper's intellectual ability to identify and understand another person's feelings and perspective from an objective stance
Behavioral	Communicative response to convey understanding of another's perspective

educators reflect on how a humane, professional, and empathic comportment provides dignity and meaning for patients and providers alike [13].

Conceptually, empathy has garnered controversy among researchers. Those who see empathy as primarily an act of emotive identification dismiss others who see it as a detached cognitive act. Those who conceive empathy as largely a reflective cognitive experience dismiss those who see it as largely spontaneous and emotional. Those who see it as primarily a communication skill emphasize the observable exterior behaviors it engenders and minimize the interior aspects, whether in the realms of feeling or intellect [14]. For our purposes, we will focus on empathy as a mode or comportment, as a way of carrying oneself, which relies on the faculty of the imagination. As such, empathy can include emotive, moral, cognitive, and behavioral aspects because it rests upon the distinctively human capability to form ideas, images, and concepts of external objects and individuals not immediately present to the senses.

The work of the humanistic scholars Hans Alma and Adri Smaling at Utrecht University helpfully conceptualizes the intertwined nature of empathy and the imagination. They define empathic understanding “as putting oneself imaginatively into the experiential world of another person with the aim to understand the other. Emotional resonance is not only an early phase of it, but also a basic facet.” In their framework, empathy unfolds in two interrelated dimensions. “The mental dimension refers to affective, cognitive, and interpretive facets or phases of empathic understanding and the social dimension refers to expressive, responsive, and interactive facets or phases of empathic understanding” [15]. Optimal empathic understanding, in this account, requires the imagination and vice versa. “Imagination is what, above all, makes empathy possible” [16]. As the cognitive capacity that allows us to entertain alternative possibilities, the imagination is what permits us to ally ourselves with other people, with other situations, with other stories.

In his foundational work on the therapeutic alliance, Edward Bordin centered his research on features of the clinician–client relationship associated with empathic understanding and with therapists noted for empathy by their clients. As such, empathy served as the theoretical underpinning of his model of effective psychotherapy. That research identifies three key observable features of an empathic relationship: “an agreement on goals, an assignment of task or a series of tasks, and the development of bonds” [4]. Empathy, his work suggests, spills out into mutually agreed-upon goals and tasks and a clear bond between therapist and client.

Operationally, he saw that the foundation of this kind of bond starts with “exploring [the patient’s] current experience and life history” [4]. In other words, therapeutic work begins with narrative.

### 10.3 Narrative Medicine, Imagination, and the Therapeutic Alliance

Rita Charon’s work on narrative medicine characterizes the discipline as an approach to medical education and practice that strengthens the ability of practitioners to fully appreciate the accounts that patients give of themselves. As mentioned above, narrative medicine employs narrative competence, “the ability to acknowledge, absorb, interpret, and act on the stories and plights of others.” It has much in common with the therapeutic alliance and can be thought of as proficiency in a set of skills that foster such an alliance. In this model, the physician with narrative competence will practice “with empathy, reflection, professionalism and trustworthiness” [1].

Attention to narrative can engender a trusting, empathic relationship because telling and listening to stories are so central to the clinician–patient encounter. Once doctors and patients meet, patients begin their stories, under the guidance of, and in response to, questions. The patient’s story includes not only words but also silences and gestures, and depending on the skill and concentration of the listener, more or less of that story comes across to the physician. The story will embody more than simply symptoms and objective information about an illness or a reason for suffering; it will carry the hopes and fears of the sufferer [1]. How a story is told and heard becomes central to the therapeutic act itself for the narrative exchange will define how exactly the ailment is defined, what treatments are recommended, and to what extent the disorder can be shaped and controlled [17–19].

To illustrate the central place of *listening* as an initial step toward a therapeutic alliance, let us return to the story of Ms. Gomez. Her new physician, who exhibits narrative competence, recognizes that appreciation of a patient’s story begins with an openness to the wider context in which a story unfolds. As such, he includes broad, open-ended questions, like “Tell me a little about your life”; “What things are most important to you?”; and “What worries you the most?”

*Once Ms. Gomez establishes a relationship with a new primary care physician, she is pleasantly surprised to meet a physician who asks about her life. She tells him about her church, her life in her native country, and the ups and downs of a marriage that ultimately ended in divorce but left her with an ex-husband she still considers a friend. She admits that her son, who lives with her, abuses drugs and that the situation weighs on her. At times, she enters a deep depression worrying about her son, and this worry affects her ability to care for herself.*

The typical physician, even one who is diagnostically astute and technically proficient and who gathers a full “social history,” focuses on a set of very specific

questions. These questions, while having utility and importance within medical tradition, may preclude the disclosure of crucial aspects of a patient’s situation. Most importantly, they may prevent patients from revealing their goals for treatment and engender a relationship only focused on the doctor’s goals. Narrative medicine implies an openness to the messier parts of people’s stories, including a more comprehensive social history, in addition to the usual doctor-specific aspects of an encounter. Such openness allows skilled clinicians to recognize patients’ goals, in addition to their own (see Table 10.2).

The provider’s role in this exchange, at its core, relies on the imagination. As Ms. Gomez’s physician follows her story, he imagines her situation in all of its complexity, attending to the biological, social, cultural, familial, and even existential dimensions involved. He attempts to enter the narrative world of his charge and to be moved by it.

Even if there are no obvious answers to the questions that emerge in these stories, the competent clinician can bear witness to people and their suffering, acknowledging the emotional, moral, and behavioral aspects of the narratives [1]. In this way,

**Table 10.2** Ms. Gomez’s social history: Typical plus narrative

Clinician-centered interview: social history questions aligned with clinician goals [20]	Narratively competent interview: additional social history questions that can elicit patient goals
Occupation—“I work as a counselor for children with learning disabilities. It’s only part-time.”	
Health promotion <ul style="list-style-type: none"> <li>• Diet—“On days I work, it’s a lot of fast food. Otherwise, mainly Colombian food: rice, beans, meat, soups, arepas.”</li> <li>• Physical Activity—“Not much. I need to do more.”</li> </ul>	Oh, you’re from Colombia. What was life like there?—“It was harder in some ways but easier in others. I miss the feeling that people would support you. Here in America, I always feel on my own. And I miss the food.”
Safety—“I wear a seat belt.”	
Health screening—“I think I’m up to date on my shots. I don’t know about anything else.”	
Exposures—“Our apartment is old. I wonder if there’s mold.”	
Substance use <ul style="list-style-type: none"> <li>• Caffeine—“Two cups every morning.”</li> <li>• Tobacco—“No, never.”</li> <li>• Alcohol—“Maybe on holidays I’ll have a drink or two.”</li> <li>• Drugs—“Never tried anything. That’s what’s made it hard with my son.”</li> </ul>	You mentioned your son and drugs. Tell me about him.—“He got in with these friends in high school. I don’t even know all of the things he does. I’m really worried about him.”

(continued)



**Table 10.2** (continued)

Clinician-centered interview: social history questions aligned with clinician goals [20]	Narratively competent interview: additional social history questions that can elicit patient goals
Personal <ul style="list-style-type: none"> <li>• Living Arrangement—“It’s just me and my son.”</li> <li>• Personal relationships and support systems—“My son takes care of me, and I take care of him.”</li> <li>• Sexuality (Orientation, Difficulty)—“My husband was the only person I’ve ever been with. When we split up, I guess I never had another opportunity.”</li> <li>• Intimate partner violence/abuse—“No. My husband cheated on me, but he never hurt me.”</li> <li>• Life stress—“Everything.”</li> <li>• Mood—“It depends on the day.”</li> <li>• Spirituality/Religion—“We’re Catholic.”</li> </ul>	Tell me a little about your life.—“Hmm. Well, I guess I would say that my life mainly consists of work, my son, and my church. I know that I should focus on my health more, but I don’t get around to it.” What about your church?—“Father Walsh really cares. He actually helped me get my job and sometimes brings us food. I volunteer there every week. I like being involved in something so I can forget a little about my own problems.” What things are most important to you?—“Definitely my faith and my son. I don’t know where I would be without God and Juan, well, he needs a lot of help.” What worries you the most?—“Juan. He did so well in school, but now, all he does is hang out with his friends. Sometimes I come home and I know he’s on drugs. I yell at him. I forgive him. Nothing works. I get so down. If he was OK, then I could concentrate on my own life.”
Health literacy—“Though I may not understand all of the details, I know about my medications and what they are for and I think I have a grasp on my diabetes and blood pressure.”	
Military service—“No.”	
Legal issues <ul style="list-style-type: none"> <li>• Emergency contact—“My son.”</li> </ul>	

the skillful, imaginative physician becomes akin to the skillful, imaginative reader of literature. By being attuned to the multivalent features of stories and of their own reactions, thoughtful readers draw upon memory, associations, interpretation, and experience to glimpse the world of meaning expressed in narratives. Thoughtful physicians do something similar in their approach to patients. They embody what Johanna Shapiro calls “narrative humility.” Such humility, Shapiro contends, involves an attitude of respect and empathy, manifesting in a compassionate and humble approach, and coupled with critical thinking skills, that allows for a better understanding of a patient’s truth [21].

## 10.4 Narrative Medicine As an Educational Approach

Medical educators, in attempting to instill empathy among learners, often turn to narrative medicine activities. Because narrative opens itself to all four components of empathy delineated above—the moral, emotive, cognitive, and behavioral—it

helps to mitigate the bias toward the cognitive that often pervades medicine and medical educators [22]. Narrative medicine as an educational discipline involves a guided set of practices—attentive reading and discussion of literature and film, creative writing or other creative work (often from the perspective of a patient), and reflective writing—that are tailored to medical practitioners and trainees. Well-constructed exercises for reading and writing stories can help students and practitioners appreciate a more holistic approach to patients and to patient care. Because our backgrounds are in medical education, we will focus on efforts to train medical students and residents.

In medical education, reflective writing exercises are a common way to begin. Educators at both the medical school and residency level employ such exercises as ways to encourage introspection among learners. These exercises allow participants to reflect on themselves, on their encounters with patients, on observations about the ways others practice, good and bad, and on the distinctive role medical providers play in society. Very often, these reflections touch on empathy either directly or indirectly. Shapiro and colleagues at the University of California—Irvine College of Medicine have conducted research on the impact of teaching empathy to first-year medical students through reading and discussing literature about patients' experiences and the doctor–patient relationship. They found significant improvements in medical student empathy after participation in a literature-based intervention [23]. At our institution, the Florida International University Herbert Wertheim College of Medicine, we have instituted Narrative Medicine Rounds in the required Family Medicine Clerkship for third-year medical students. Students participate in a facilitated discussion of encounters they have faced during their clinical rotations and then complete a short reflective writing exercise. In our experience, the most common themes noted during these rounds and in student papers relate to the importance of self-care, the importance of reaching out to those around you for support, and the importance of recognizing and addressing a variety of emotional responses to patient care. How students perceive their own empathy or lack thereof and how much empathy they do or do not observe in their preceptors lie at the core of many of their reflections [24].

As just one example among many on the Graduate Medical Education level, residency director Samir Johna has established an optional reflective writing program for the general surgery residents in the Arrowhead Regional/Kaiser Fontana Medical Centers in California. Similar to our experience, he comments on the astuteness of the learners' observations and the gratefulness of the participants for getting a chance to share their stories. Residents “are frequently asked to reflect on events of their choice that had a lasting impact on them, negative or positive, at any institution where they rotated.” He reports that he and his colleagues marvel at “the insight of the learners and depth of their reflective capacity in their quest for self-identity, ideals, and values as they enter the complex environment of medical practice” [25]. Along with honesty, integrity, and compassion, he lists empathy as one of the core attributes that contribute to healing and one of the primary reasons for offering narrative medicine experiences.

More advanced narrative medicine programs and experiences involve a wider range of endeavors centered on careful reading and on opportunities for creative writing and expression. The Division of Narrative Medicine at the Columbia University College of Physicians and Surgeons, for instance, hosts “humanities seminars for second-year medical students, writing seminars for staff members on in-patient wards, literature seminars for physicians, creative writing workshops for health care professionals, and writing seminars for mixed groups of clinicians and patients” [26]. Careful study of these activities reveals three core actions within narrative medicine: attention, representation, and affiliation.

In its fullest sense, attention describes actions involving observation, mindfulness, and concentration as a practitioner attempts to appreciate a patient and her situation. To cultivate attention, narrative medicine emphasizes *reading* as the core skill. Close reading, especially of literary texts of prose or poetry, can help participants develop clinical attention [26].

Representation, in its implication of speaking on someone else’s behalf or of portraying someone or something in a particular way, involves putting a form around impressions and channeling that form into a creative (or re-creative) act. Though representing can take the form of painting, sculpture, or other art forms, in narrative medicine, it typically emerges in various forms of *writing*. Participants can write in a variety of genres including poetry, short story form, letters, an obituary, or a prose paragraph, and then examine those writings with regard to both content and form. The process of writing combines the observer and the observed via a creative undertaking that challenges the creator not only to attend to the details of a story or a character or a scene but questions of meaning as well [26]. In that act of combining, writing envisions a connection between the seer and the seen.

At their best, narrative medicine activities culminate in affiliation. Here, participants move beyond the activities themselves into a position of connection. Physicians join with their patients; practitioners of different disciplines join with each other; citizens partner with providers. As Charon describes it, “Instead of lamenting the decline of empathy among medical students or the lack of altruism among physicians, narrative medicine focuses on our capacity to join one another as we suffer illness, bear the burdens of our clinical powerlessness, or simply, together, bravely contemplate our mortal limits on earth” [26].

*After their first two visits in the clinic, Ms. Gomez’s physician offers to make the third consultation a home visit. Ms. Gomez at first declines. She confides to her physician that her son’s drug use has escalated. The situation has made her home environment uncomfortable, as the son is often strung out and she does not know what to do. In hearing her story, the physician recalled a book for young adults he had read in his physicians’ reading group at the local university. Junior, the protagonist of Sherman Alexie’s novel The Absolutely True Diary of a Part-Time Indian, muses, “There are all kinds of addicts, I guess,” he says. “We all have pain. And we all look for ways to make the pain go away” [27]. Together, physician and patient try to think of ways to help her and her son.*

## 10.5 Harnessing the Imagination to Create an Effective Context for Care

Striving to create a context for effective care, we are suggesting, might include narrative medicine activities. These activities can aid practitioners in refining the imagination, and by corollary, their ability to provide care with empathy. As mentioned at the beginning of this chapter, it can be helpful to think of effective care as lying at the intersection of (a) eliciting the patient's story, (b) assessing the patient's vulnerabilities and strengths, and (c) building a therapeutic alliance [2], and narrative medicine can speak to all three of these components.

Eliciting the patient's story remains paramount for health care providers, for diagnostic reasons and beyond. The patient's perspective includes the story and associated assumptions, values, and beliefs, along with any variety of influences from the familial to the societal. Naturally, providers bring their own perspective into any encounter, and coming to terms with differing perspectives becomes part of the doctor-patient relationship. Physicians with better history-taking skills have been associated with better patient outcomes for physical health, mental health, pain control, and functional status [9]. David Thom and colleagues, in their work on trust in the clinician-client relationship, list "responding to patients' self-disclosures in a supportive and nonjudgmental way" as one of the key behaviors that foster patients' trust [28]. History-taking shares many similarities with careful *reading*, and narrative medicine approaches that inculcate reading skills can also augment history-taking skills. Learning to read the multiple dimensions of a piece of literature can be akin to the talents necessary to observe the multiple factors at play when a patient offers an account of an illness and its effect on his life. Practicing those skills in the confines of a narrative medicine reading group can spill over into the way a clinician reads her patients and their situations.

In her text on developing critical reading skills, Deanne Spears emphasizes how effective reading supports clear thinking and a better ability to appraise a situation. Some important reading skills include identifying the main idea and any overarching themes, making accurate inferences, and recognizing patterns [29]. Returning to Ms. Gomez and her physician, he was better able to appreciate his patient's situation, thanks to his physician reading group. In such a group, participants have the opportunity to read works of literature, paying attention to the structure, themes, and literary patterns involved. Though his group had read the Sherman Alexie young adult novel as a window into youth concerns and problems associated with addiction, the discussion had left an impression. They had discussed the protagonist's struggles with living in two worlds, the world of a reservation and the world of the white man. That sense of alienation resonated with Ms. Gomez's stories of her home country and living as an immigrant in the USA. The group had also focused on the language of the novel, which in its sparseness, in its emphasis on dialogue, and in its ironic tone, masked an intensity of anger, sadness, and loss. Something about Ms. Gomez's language, especially as she shifted between English and Spanish, also struck her physician. It reminded him of the protagonist's subtle

expressions that hid deeper pain. Those reminders prompted Ms. Gomez's physician to ask more about her pain, especially in relation to her son and his addiction, and work with her to discover new ways forward for her own health and her son's well-being.

Evaluating patients' vulnerabilities and resources requires an ability to imagine oneself in their situation and an appreciation of their background and life experiences. Reflecting on the breadth of factors involved in health—the biological, psychological, and social—involves an openness to alternatives that characterizes the imagination and that manifests in empathy. Systematically assessing for strengths and weaknesses might include screening instruments, open-ended questions about barriers and opportunities, or patient reflections on times when they have either succumbed to or surmounted difficulties in the past. It might also include providers engaging in narrative medicine *writing* activities. An act of representation, like crafting a short story from the patient's perspective, could help illuminate the prospects and challenges they face in a way that would allow for creative problem-solving.

The narrative medicine activities that we have outlined, centering on listening, reflective writing, critical reading, and creative writing, all offer different opportunities for clinicians to develop empathy with their clients. In distinct ways, these activities foster understanding and sharing of the feelings of another. To highlight some of the possibilities that can emerge through these types of exercises, we have placed a traditional medical history alongside a "short story" version of the same history, next to a reflective essay on that history, in Table 10.3.

Building a therapeutic alliance can involve multiple different approaches grounded in empathy. Accumulating evidence from patient-centered interviewing approaches has shown that certain clear statements of care, combined with appropriate non-verbal behaviors, can be relationship building. These approaches include the provider naming a feeling or emotion that they witness in a patient and offering statements that convey understanding, legitimacy, acceptance, and validation. Comments that show respect or praise, that demonstrate appreciation and acknowledgement of the client's plight, can also be therapeutic. In addition, declarations of support and indications of partnership can, in turn, foster collaboration and shared decision-making [30]. Certain narrative medicine activities, especially activities that involve group discussion, can also foster this spirit of affiliation. Grappling with a difficult text with colleagues or listening to a fellow physician share stories from their own practice can allow a clinician to see their own struggles, or those of their patients, with a new outlook.

*After an exercise in which her doctor reflected on her situation in writing, he meets with Ms. Gomez for one more appointment in clinic where they decide together on a plan of action. In collaboration with social services, they research substance use treatment options for which the family is eligible and arrange for a home visit. The physician and a social worker arrive at the home, to find that Ms. Gomez has confronted her son and he has agreed to enroll in an inpatient treatment program. While he is in treatment, she finds adhering to her treatment regimen easier and her*

**Table 10.3** Ms. Gomez’s Story, from three different perspectives

Medical history	A creative retelling	A physician’s reflection
<p>Fifty-five-year-old woman with history of hypertension, Type II diabetes, morbid obesity, and recurrent urinary tract infections who presents for follow-up. It has been 1 month since her last visit. Reports that her diabetes has not been well controlled. Only checks her blood sugars intermittently, in the morning, but when she does, they are typically in the 250–350 range. Reports polyuria, polydipsia, and some increased hunger. With the urinary frequency, wonders if she has another bladder infection. Denies chest pain, palpitations, or trouble breathing. Denies abdominal pain, nausea, vomiting, diarrhea, or constipation. No noted fever or chills. Denies dysuria, hesitancy, or hematuria. Some urgency.</p>	<p>When Ana came home from work, she knew that she should check her blood sugars. She had been going the bathroom all day. At one point, she even had to leave a counseling session with a client, something that she never does. Could it be another infection? She can’t have any more days off of work; her boss already made a snide comment that last time she asked for a sick day. She needs this job. Opening the door to her house, though, the sight that greeted her destroyed all motivation. Juan. Strung out again, he lay on the couch, passed out. The house reeked of pot smoke. And was that a needle on the coffee table? Ana collapsed on a nearby chair and started sobbing. Her baby, the one she has given everything, now disgusted her, scared her, made her feel despair for the first time in her life. When she could cry no more, she slowly stood up, walked to the kitchen, and opened the refrigerator.</p>	<p>Seeing the name Ana Gomez on my schedule makes me shudder. It is not a shudder of disgust, or anger, or even frustration. It is more of an acknowledgement of “what could have been.” She knows exactly what to do. She even tells me what she should be eating, how much activity she should have every week, what each of her medicines does. No, it is somehow more a matter of figuring out what else she needs in her life and what exactly motivates her. The more I think about it, it has to be her son. She lives for him. This next visit, I think I will focus on him instead of her. I should reach out to social work and try and get a list of drug treatment centers that are better for his age group. Maybe Ms. Gomez has some ideas of her own. I’ve never asked. It seems, though, that she will never take care of herself until he is better.</p>
<p>Chief Observations: Uncontrolled diabetes, both by symptoms and reported blood sugars; concerns for recurrent urinary tract infection</p>	<p>Chief Observations: Ms. Gomez’s motivations are tied to her interactions with her son. Her own health is suffering, and her son’s situation leads her to sadness and despair. Even her job might be threatened.</p>	<p>Chief Observations: Focus on a plan of care for the son; need to do further research, contact interprofessional colleague; recognition of Ms. Gomez’s strengths and knowledge about her condition</p>

*diabetes and hypertension come under control. She and her new physician strategize on ways to cope, depending on how her son does in treatment. With the sense of partnership they develop, she promises to follow up with her physician instead of the emergency room and re-engages with volunteer work at her church.*

## 10.6 Conclusion

How the clinician–patient relationship unfolds depends on a variety of factors, but the provider’s knowledge, skills, and attitude can either help build partnership and connection or increase social distance. These physician attributes, when they flow from empathy, manifest in a manner of relating to others that fosters understanding and recognition. The core of this mode of relating stems from the imagination and a well-developed ability to picture oneself in the situation of another.

Narrative medicine, as a discipline that hones the imagination through reading, writing, and conversation, can thus facilitate empathy. Creating an effective context for care includes skillfully eliciting a patient’s story and perspective, evaluating for strengths and weakness, and building a therapeutic alliance. These processes are akin to carefully reading and probing a work of literature, reflectively writing on the experiences of another, and connecting over stories with colleagues and patients from multiple perspectives.

Ideally, empathy involves the provider’s ability (a) to understand a patient’s perspective, story, and situation and any associated feelings and meanings; (b) to communicate that understanding to the client and check for accuracy; and (c) to act on that understanding in a way that the patient finds therapeutic [10]. The activities of narrative medicine also center on understanding and on communication and can reinforce the same skills that manifest as empathy. Teaching narrative medicine, then, teaches empathy and can have an impact that extends beyond the narrative medicine activities themselves. The approach has the potential not only to assist clinicians in becoming better readers and writers but in becoming better caregivers. In affiliation with their patients, narratively trained clinicians have the potential to reinvigorate their own sense of themselves as healers.

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# Chapter 11

## Teaching Cultural Humility: Understanding Others by Reflecting on Ourselves



Carissa Cabán-Alemán, Jordanne King, Auralyd Padilla, and Jeanie Tse

### 11.1 Cultural Landscape

The United States has an increasing number of racial and ethnic minorities, as is true of many nations worldwide. The Census Bureau projects that by 2044 more than half of all Americans will belong to a minority group [1]. Illnesses are not defined just by their pathology but also by the larger systems in which they develop and in which they are treated. These systems involve multiple social determinants of health that influence outcomes. One of those determinants is culture. Some have defined culture as an integrated pattern of learned core values, norms, behaviors, beliefs, and customs shared by a specific group of people [2]. Culture shapes how people perceive reality, how they feel and behave, how they understand others, and how they assign meaning to events. It can imply a sense of familiarity with others based on perceived similarities, or a sense of distance based on perceived differences. Culture also defines language, concept framing, the manner in which solutions or treatment are sought, and the methods for defining and measuring success [3].

Health-care institutions must adapt to address the needs of an increasingly diverse patient population as well as an increasingly diverse professional population

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[4]. Academic institutions, accrediting bodies, healthcare policymakers, and governmental agencies have been using strategies such as cultural competence to address diversity and health disparities. The term “competence” implies that there is a defined set of ideas, requirements, or skills that can be learned to comprehend the culture of a patient. The Substance Abuse and Mental Health Services Administration (SAMHSA) in the USA defines cultural competence as the ability to interact effectively with people of different cultures, which will help to ensure that the needs of all community members are addressed [5]. To ensure that this could be implemented broadly, discrete definitions and outcomes were defined. However, this system conveys a false idea that diversity can be condensed into a finite body of knowledge. Even more problematic is the idea that a single person can not only learn but also somehow master this finite body of knowledge.

## 11.2 Cultural Humility

Cultural humility is a concept created by Tervalon and Garcia [6] to avoid the pitfalls created by trying to “master” culture in health care. Instead, the concept is based on the understanding that providers should instead commit to engage in a continuous process of learning and understanding in which they recognize how their own cultures and assumptions influence the provider–patient relationship and, potentially, patient outcomes. It requires that providers continually engage in self-reflection and self-critique. By embracing their knowledge limitations regarding patients’ cultures, providers can create and maintain mutually respectful and dynamic partnerships with patients. This is the beginning of empathy: a recognition of the space between provider and patient attunes the provider to the patient’s unique emotional experience of illness and recovery, and the meaning the patient assigns to their experience, which exists in the context of the patient’s culture. The provider humbly shares in the patient’s uncertainty regarding the care experience, and seeks to develop a greater understanding and connection.

There are the four basic principles of cultural humility, as shown in Table 11.1.

Although cultural humility is relevant across healthcare settings, let us examine a fictional case study of a hospitalized patient in a psychiatric unit to illustrate these principles. During hospitalization, a patient usually interacts with nurses, patient care technicians, phlebotomy technicians, doctors, residents, medical students, family members, friends, custodial staff, administrators, and other members of the hospital team. Many of those individuals will also need to interact with each other to provide care. It is important to consider that not only does the patient have their own set of values, expectations, and multiple cultural roles, but so does each member of that team. This leaves a whole host of possible difficulties in communication and expectations. However, if each person involved in this interaction is able to approach it with receptiveness and an understanding that perceptions will differ, some limitations could be mitigated.

### Case Study

You are an orthopedics resident consulting on a patient who has edema and decreased range of motion of the right hand after punching a wall in the psychiatric unit. The patient is a 19-year-old Hispanic male who was admitted for involuntary psychiatric evaluation after being aggressive with police.

Now ask yourself:

- What comes to mind about the patient?
- What comes to mind about his situation?
- How do you expect him to behave when you see him?

**Table 11.1** Key principles of cultural humility

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*Critical self-reflection:*

- Acknowledgement of personal assumptions and beliefs; thinking about multidimensional cultural identities; examining personal tendencies toward stigma and discrimination

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*Lifelong learning using patient-focused care:*

- Using patient-focused interviewing to continuously learn from patients, who are the experts on their own traditions, health beliefs, needs, goals, and values

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*Recognizing and challenging power imbalances for respectful partnerships:*

- Addressing provider–patient power imbalances through collaborative partnerships that are developed and maintained, not only with individual patients but also within communities and systems

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*Institutional accountability:*

- Undergoing a continuous improvement process in order to foster culturally humble practices
- 

Before a health provider has even met a patient, assumptions are made. Any information that a provider has about the patient, such as age, address, race, ethnicity, previous diagnoses, or chief complaint, can begin to paint a picture about the patient in the provider's mind, even before an encounter begins. Cultural humility begins here. Providers should be aware that their own culture, assumptions, past experiences, and beliefs can influence provider–patient relationships and might affect treatment outcomes. Also, the provider should recognize the potential influence of prior interactions between the patient and other providers. For example, how a consult or note is written can reflect the assumptions of another provider and their interaction with the patient and the team. In a similar fashion, the interactions and opinions discussed among providers can also influence rapport, assessment, and treatment decisions. Being aware of these factors may reduce the risk of making biased or inaccurate conclusions during the assessment and creation of a treatment plan. It can also have a significant impact on the ability of a provider to empathize with a patient and to maintain quality of care as a fundamental priority.

### Case Study, Continued

You enter the nursing station and look into the window of the seclusion room to observe the patient. You see a young, well-groomed Hispanic male, thin but not gaunt, with multiple tattoos including two full sleeves and full neck coverage. He is pacing the room, talking to himself angrily. A psychiatry resident approaches you and states that the patient is very angry and just punched the wall. He says the patient was a “frequent flyer” for drug abuse in the children’s unit. The patient was always disrespectful and aggressive. As per records, the patient was brought in today by law enforcement after becoming aggressive with his father.

You have the patient brought to the exam room by a member of staff who must remain per unit rules. The patient looks at you and says, “I don’t [expletive] need your help.” He refuses to look you in the eye and is cradling his right hand. Reflexively you take a step back. The patient suddenly explodes and states “What?! So you think I’m just some druggie too!” You ask the patient to calm down and explain that you just want to get to know him and examine his hand.

He explains that he was treated like a criminal by the police, without reason. Since he arrived at the hospital, the staff have talked to him as if he was still a child and assumed he was “high.” He was received by a group of staff as if they were prepared to restrain him. Frustrated, he then lightly punched the wall.

There are tears streaming down the patient’s face. You do not interrupt. Given the pause, the patient continues. He is frustrated because he has worked hard to change his life. He reports that after his last admission two years ago, he was sent to a rehab program and actually completed it, for the first time. He has been sober since that time and now even works as a peer specialist while he pursues an undergraduate degree. This is the first time the patient has been home since his recovery.

Here the orthopedics resident may take into consideration all the information gained prior to the meeting, but in the room, they engage in a more open, patient-focused interview. This type of interview was one of the four main concepts comprising cultural humility. The resident expresses empathy and uses reflective listening. The resident allows the patient to express his view of the situation at his own pace. This is a less controlling, less authoritative manner of interviewing, which attempts to create an environment that demonstrates respect for the patient. In this instance, the patient begins to indicate a more complex story than what may have been anticipated by the patient’s history and presentation.

Tervalon and Murray-Garcia [6] highlight how unique each person is: a composite of multiple cultural roles. For example, we know that the patient in the case study identifies as male, Hispanic, a son, student, peer specialist, and recovering drug addict. He may also be a part of a certain religious community, a resident of a

certain town, an immigrant from another country, a father or a spouse, a victim of violence, someone with some other chronic medical condition, and so on. Given all these intersections of roles, only the patient can be the true guide on who he is and how his identity affects his current illness. Humility is essential in this process. The provider should make attempts to cede control to the patient and be willing to learn from them in order to have effective health promotion and therapeutic strategies. They have to understand that the patient is a full partner in the therapeutic alliance. This applies not only to individual patients but also to communities and specific populations that providers target or work with to prevent, improve, or treat any kind of medical illness affecting them.

### **Case Study Continued**

The patient allows you to complete a full exam and develop a treatment plan. You go to communicate the treatment plan with the psychiatry resident, and also discuss the case with him and explore the rapport issues you have noticed. The resident points out that he has known the patient for years, even if the patient does not remember him. The patient has gang tattoos, multiple arrests and has even hurt staff members who have tried to help him. Now, as a chief resident, he feels responsible for the safety of his staff and he feels uncomfortable giving him the opportunity to hurt another staff member or patient. You point out that you did not see any indication of gang-like tattoos on the patient. In fact, during your physical exam, you and the patient discussed that he had multiple cover-ups to reflect who he is now. You explain to your colleague that the patient noted how much he regretted getting those tattoos, as they reflected on someone he is not. The resident, having grown up in a nearby community, is surprised to learn all of this. He recognized those older tattoos from gangs in his community and understands how hard leaving the gangs can be.

Here the psychiatry resident is trying to act with competence with regard to the patient. He has experience with this patient in the past, as well as with this community, and so felt he was acting in the most effective and professional way. He had not reflected on how his assumptions could be incorrectly impacting his current interactions with the patient. Extensive knowledge of the community and cultural background we serve is valuable, but without continuous self-reflection, we run the risk of settling into a false sense of security.

Cultural stereotyping often leads to miscommunication and gaps in patient care. This interaction also highlights how our own personal background may affect the interaction with the patient. The resident grew up in a nearby community and thus has an opinion based on those interactions outside the hospital system. This provider already has predefined views about the patient as a cause of the negative experiences in his community, as well as negative actions against his co-workers. Comas-Dias

and Jacobsen discussed how the cultural background of both the clinician and patient influenced the therapeutic relationship [7]. They defined interethnic transference as the patient's response to an ethno-culturally different clinician, and interethnic countertransference as the way an ethno-culturally different clinician may respond to a patient. Given the opportunity to examine how his own experiences and multiple cultural roles, traditions, and perceptions affect his interactions with the patient, this resident may have developed a deeper empathic connection with him.

### **Case Study Continued**

The psychiatry resident speaks with the patient and apologizes for his assumptions. The patient also apologizes, after realizing that his behavior in the past, as well as his angry effect on arrival, may have also played a role. The patient expresses that he has spent a lot of time trying to be a better person and that returning to the same situation with the same result was difficult. He reports that his father was physically and emotionally abusive to him growing up and that his minor sister still lives at home. He returned home to see if she was doing well, but was upset about how his father was treating her. With that information, the team is able to gather appropriate resources for the patient and optimize his treatment plan with his input, rather than without it.

After the patient is discharged, the case is reviewed in an interdisciplinary staff meeting. Among the attendees is the administrative director of the unit, who has been working collaboratively with colleagues and administration to improve their cultural competence training. The director mentions this case to the Chief Medical Officer (CMO) of the hospital and suggests that they incorporate the learned lessons from this experience into their plan to improve cultural competence training. The CMO agrees and proposes it during the administration's next Quality Improvement Committee meeting.

## **11.3 Teaching Cultural Humility**

The fourth tenet of cultural humility outlined by Tervalon et al. is that institutions must be held accountable to improve their procedures and foster humble practices. By providing training and addressing cultural misunderstandings, we can reduce healthcare disparities [8]. However, the idea of teaching others to be humble poses several difficulties. The concept is a paradigm shift for many providers and involves a constant process of practicing the principles discussed above. Cultural competence is usually taught through courses about normative or traditional values of various cultures, or through personal histories or interactions with representatives from

**Table 11.2** Institutional standards for culturally responsive care

Diagnostic and Statistical Manual of Mental Disorders (DSM-5) Cultural Formulation Interview	<ol style="list-style-type: none"> <li>1. Cultural definition of the problem</li> <li>2. Cultural perceptions of cause, context, and support</li> <li>3. Cultural factors affecting self-coping and past help-seeking</li> <li>4. Cultural factors affecting current help-seeking</li> </ol>
Substance Abuse and Mental Health Services Administration (SAMHSA) Culturally and Linguistically Appropriate Services (CLAS) Requirements	<ol style="list-style-type: none"> <li>1. Defining values and principles with demonstrated behaviors</li> <li>2. Attitudes, policies, and structures that enable effective work across culture</li> <li>3. Valuing diversity</li> <li>4. Conducting self-assessment</li> <li>5. Managing the dynamic of difference</li> <li>6. Acquiring and institutionalizing cultural knowledge</li> <li>7. Adapting to diversity and the cultural context of the communities the organizations serve</li> </ol>
Accreditation Council for Graduate Medical Education (ACGME) Common Program Requirements	<ol style="list-style-type: none"> <li>1. Communicate effectively with patients, families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds</li> <li>2. Sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disabilities, and sexual orientation</li> <li>3. Residents must have the opportunity to participate in inter-professional quality improvement activities. This should include activities aimed at reducing healthcare disparities</li> </ol>

particular populations. These experiences can be very helpful in developing providers’ awareness of how culture impacts patients’ experiences and their care. However, there is a risk that these courses may place the focus on how those communities differ from providers’ own traditions and beliefs. This sense of “other” can disengage and separate providers from the patients and communities they serve, rather than bringing them closer together. This gap may become wider as miscommunications feed those perceptions and interactions.

At least three major entities governing care provision and education have set standards related to culturally responsive care (Table 11.2). The American Psychiatric Association, in its Diagnostic and Statistical Manual of Psychiatric Disorders, 4th edition (DSM-IV), introduced the Outline for Cultural Formulation as a framework for including information about the cultural factors that influence an individual’s mental disorder and the social and cultural context in which it occurs [9]. In the DSM-5, the Cultural Formulation Interview (CFI) guideline was introduced as a systematic tool to help clinicians and researchers ask questions about race, religion, and culture in a non-judgmental way [10]. It consists of a 16-question interview guide, an informant module, and 12 supplementary modules that expand on each domain of assessment.



On an organizational level, the Substance Abuse and Mental Health Services Administration (SAMHSA) has outlined how administrators can create institutional frameworks for culturally responsive care delivery, policy and procedure development and administrative practices based on Culturally and Linguistically Appropriate Services (CLAS) [11] (see Table 11.2).

Similarly, the Accreditation Council for Graduate Medical Education (ACGME) set the expectation that residents in all medical specialties must show sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disabilities, and sexual orientation [12]. Training programs must ensure that their curricula prepare residents to practice in a culturally sensitive way. Teaching a set of ideas about different cultures may be straightforward, but training providers to cultivate lifelong learning and self-reflection requires teaching principles for providers to use within their process of developing skills in this lifelong practice. How do we instill these values into an approach that trainees can utilize when in the field? Below we describe examples of some existing teaching models.

### ***11.3.1 Existing Teaching Models***

A literature and internet search revealed four training courses or curricula. The *QIAN* (humbleness) curriculum was presented by Chang, Simon and Dong [13]. This model curriculum is based on the works of Chinese philosophers, Chinese cultural values, and contemporary Chinese immigrant experiences throughout the world. It includes the importance of self-Questioning and critique, bi-directional cultural Immersion, mutually Active listening, and the flexibility of Negotiation. The model focuses on enhancing patient-oriented communication skills and “aims to trigger the reflective minds of both healthcare professionals and patients regardless of cultural or ethnic labels.” They also note how this applies to health research within communities, as this approach generates mutual trust, learning, and respect beyond the scope of the research.

In 2012, Jefferson College developed a course titled “Teaching Cultural Humility and Competence: A Multi-Disciplinary Course for Public Health and Health Services Students” [14], provided for master of public health, medical doctor and master of public health, occupational therapy, doctor in pharmacy, and physical therapy students. The course was divided into three themes: (1) diversity, health disparities, and cultural competence; (2) self-reflection: values, beliefs, and behavior; and (3) application to practice. The course was intentionally multidisciplinary in order to develop cultural responsiveness across organizations.

In “Bridging the Gap: A Curriculum to Teach Residents Cultural Humility,” Juarez et al. created a yearlong diversity curriculum for second-year family medicine residents [15]. The curriculum included panel presentations, home visits, book discussions, video discussions, relationship-centered interview teaching, simulated patients, using art, exposure to the culture of local seniors, and self-reflection. They

evaluated the effect of the curriculum through trained observations of simulated patients with residents. Residents were more likely to seek a patient's perspective and to include the patient in decision-making after the training. The residents indicated high satisfaction with the learning activities and found the self-reflection exercises to be the most meaningful. The group highlighted three elements that lead to success: (1) grant-funded staff members who worked full time on the project, (2) protected time in the schedule, and (3) structured learning sessions. Lastly, faculty facilitators remained sensitive to resident experience and modeled humility when working with the learners.

The Auburn University School of Nursing found that when they began to partner with a local low-income public housing provider, their students found it difficult and stressful. They postulated that this was largely due to the divergence in the backgrounds of the students versus the patient population. In response to this challenge, they created a reflective journaling program [16]. The aim of this was to embrace cultural humility by developing the student's critical thinking, self-understanding, and self-reflection. They began in their first semester and continued throughout their training. The program found that early journaling allowed the students to recognize cultural differences. Later this grew into understanding how these differences were linked to healthcare disparities and how important culture is in the teaching of clients.

### 11.3.2 Teaching Methods

Common themes and methods from the training programs described above suggest a few essential components and considerations for a comprehensive course on cultural humility (see Table 11.3).

First, cultural humility training should be included in the core curriculum of training programs and have dedicated staff and protected time devoted to the topic. Education in cultural humility should follow the developmental trajectory of the learners and expand across the span of their training. In the initial stages of training, the focus should be on identifying the trainees' cultural background, encouraging

**Table 11.3** Cultural humility curricular suggestions

• Protected time and committed educators
• Continuity across training
• Tools to foster self-reflection
• Use of both real and simulated examples
• Multidisciplinary training using facilitated discussions

self-reflection, and developing an understanding of core concepts. Tools such as journaling can help trainees to be critical of their experiences and perceptions. Following this period of introspection, trainees should learn how to incorporate cultural considerations into the assessment and treatment plan. This includes learning how to provide education about medications and engage in shared decision-making with patients around medication choices in a way that seeks to understand the patient's beliefs regarding medication treatment. Use of real or simulated clinical encounters with patients of diverse backgrounds can help develop and evaluate trainees' attitudes and skills. Lastly, as much as possible, training should be provided in multidisciplinary settings. Training across disciplines creates organizational change, and also allows participants to reflect on how cultural background affects how people may interact in the group dynamics of patient care.

One training methodology that has not been explored as a means to teach cultural humility, but may support group learning regarding culture, is Visual Thinking Strategies (VTS) [17]. This training uses facilitated discussions of visual art, music, and writing to activate transformational learning. For example, a group will move through a curated set of paintings. The discussion may start with objective descriptions and grow to navigate the emotions elicited by the art. In these discussions, art acts as a canvas of multiple meanings that can be unpacked in a group setting. Reflection on the artwork helps develop the capacity of trainees to introspect and communicate [18]. The art also acts as an equalizing tool in multidisciplinary training groups, as there is no "expert" or hierarchy when it comes to personal reactions to works of art. Listening to the reactions of others and approaching their opinions with respect further develops the desired humble stance. With a trained moderator, participants can be taught to navigate discussions of very difficult, conflictual, and even traumatic themes in a safe space. Incorporation of these types of programs in medical schools has been shown to increase empathy, awareness, and team building [19]. This methodology might be effective in stimulating discussions around culture, for example, by examining ethno-culturally distinct works of art. VTS could create a learning environment in which cultural humility becomes an intrinsic part of providers' discourse, fostering respect, and empathy in healthcare settings and in larger contexts.

### ***11.3.3 Future Directions in Teaching Cultural Humility: Structural Competence***

Further, systematic studies are needed to evaluate the effectiveness of cultural humility teaching techniques. It is also important to assess how these methodologies might impact efforts to reduce health disparities and address inequality in health care. Cultural humility is a concept that strives to minimize cultural stereotyping and empower the patient in clinical encounters as a means to achieve health equity. However, some experts on stigma and inequality argue that cultural humility (narrowly defined) does not address the systemic socioeconomic and political

conditions that produce inequalities in health care in the first place [20]. The emphasis on cultural competence in medical education has been used to imply that by having the trained ability to identify cross-cultural expressions of illness and health, providers can counteract the marginalization of patients by race, ethnicity, social class, religion, sexual orientation, or other markers of difference. However, this implication does not take into account that marginalization and health inequity are systemic issues that go well beyond a provider–patient encounter in a hospital or clinic room.

Health inequity results from financial, legal, political, and ethical decisions with which medicine must actively engage if it wishes to help its patients clinically. For example, in the case discussed above, we have not considered the socioeconomic and political factors that predisposed, potentiated, or influenced this patient’s mental illness, delinquent activity, barriers in access to care, etc. Expanding cultural humility to recognize systemic power imbalances that go beyond the patient–provider encounter can serve as the basis for health-care professionals to engage in a process of further involvement in addressing the social determinants of their patients’ health. Metzler and Hansen propose re-articulating cultural presentations in structural terms in order to effectively address health inequity. They propose that this is necessary to counteract the common notion of culture in clinical settings, as familiarity with the values of different ethnic or demographic groups, without recognition of the deep ways in which complex cultural structures and systemic constructs of privilege and oppression produce inequalities and create barriers to inclusion [21]. There are three US psychiatry residency programs that have developed curricula to teach structural competency: New York University, Yale, and University of California, Los Angeles [22]. These training programs help residents understand patients’ experiences of illness in the context of structural factors such as unstable housing and violence, teaching them to address these factors at institutional levels by working with community and government agencies. Residents are involved in projects such as diversion of people with mental illness from forensic to clinical settings, testifying to legislatures on the association between housing availability and mental health, or developing community connectivity and collaboration with community leaders. One thing that may be taught or modeled in these programs is patience with the slow pace of change, while maintaining effort to address structural inequities.

## 11.4 Conclusion

Cultural humility can be a valuable tool to improve the quality of patient care and also to reduce health disparities. The principles of self-reflection, patient-focused care, and addressing power imbalances can foster a higher level of empathy among clinicians so that they can go beyond demonstrating interest in their patients and share decision-making with them. Cultural humility should be taught as a skill that requires continuous study and practice over time, rather than a definite set of rules

or instructions to follow. It is fundamental to provide dedicated time for this learning process and to go beyond didactic lectures, incorporating methods to stimulate critical thinking and conflict resolution in multidisciplinary group discussions, and allowing experiential learning through examples of real cultural interactions and clinical scenarios.

We note that the construct of cultural humility is not without limitations, as it does not directly address the larger social, economic, and political structures at play beyond direct person-to-person encounters. Teaching providers how to effectively address social determinants of health is an integral partner to cultural humility. At the core of these discussions is the potential of empathy to empower patients, improve outcomes, and promote equality.

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# Chapter 12

## Coaching Nurses to Care: Empathetic Communication in Challenging Situations



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### 12.1 Background

Empathy is the ability to perceive the meaning and feelings of another person and to communicate those feelings to the other person [1]. Many consider empathy to be a mostly a behavioral attribute that involves action on an understanding of the experiences, concerns, and perspectives of another person [2]. Empathy has a long history dating back to the 1800s with the concept originally developed by Lipps in 1897 [3] and has become increasingly recognized as a central component of the nurse–patient relationship since the 1990s [4]. It was not until the 1950s, using theories from other disciplines, that empathy first began to appear in the nursing literature. Hildegard Peplau [5], a widely recognized nurse theorist of interpersonal relations (1952) initially introduced the term empathy to nursing as “an ability to feel what is going on in a situation without specifically being able to discuss and to identify elements of it in its awareness” (1952/1991, p. 173). Other nurse scholars furthered the development of empathy within nursing frameworks [6–8]. Weisman [8] developed a holistic conceptualization of empathy for nursing practice to be conceptualized as a process, a way of knowing and a way of being. After decades of the refining the development of empathy by nurse scholars, its usefulness and applications for nursing, is now appearing in the literature.

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Empathy, a vital concept in nurse–patient relationships is initially introduced in basic undergraduate nursing programs and again in graduate nursing programs. While levels of empathy increase with the number of years of undergraduate study [2], empathy in the clinical workplace declines over time when there is no structured coaching or program. It becomes further eroded in critically challenging patient care units such as emergency rooms and intensive care units. It has been well documented that health-care providers in these intense environments rarely respond with empathy to the feelings of their patients and patients’ families [9–11].

Nurses providing empathy to their patients and patients’ families is critical for developing a trusting nurse–patient relationship, delivering quality care, and decreasing medical errors and nurse burnout [12–14]. Lacking empathy skills leads to poor communication with patients and families resulting in poor patient outcomes including sentinel events (unanticipated events resulting in death or serious physical or psychological injury, not related to the natural course of the patient’s illness) [15]. According to Wigert [16], when a health-care provider (doctor or nurse) has an empathetic attitude, there is considerable improvement in patient communication, outcomes, and in relationships with other staff members. This is especially true in emotionally intense environments such as intensive care units (ICUs), emergency rooms (ERs), and trauma centers where patients are in life-threatening critical conditions. However, most often these environments are busy and understaffed, with high stress levels leaving little time and missed opportunities for providing much needed nurse–patient empathy.

Further, many nurses and other health-care workers lack specific training in communicating empathically [17, 18]. This makes it difficult for them to recognize and respond empathically to emotions expressed by patients and their families especially in challenging situations. Ideally, a structured empathy training course for health-care workers designed for high-intensity environments is needed. Currently, there are very few if any structured empathy courses designed especially for health-care workers in emotionally intense environments. Nurses who have had empathy-related training have better overall empathy skills than those who have not had training [19]. Nurses, especially those working in intensive care unit and emergency rooms have reported a need for more empathy training when dealing with the emotional aspects of critically ill or dying patients [20]. One of the factors believed to increase the risk of nurse burnout and psychological morbidity in high stress areas is a lack in empathy training [21, 22]. Training courses in empathy techniques can significantly improve the empathy skills of health-care providers and their ability to respond empathically to patients’ expressions of negative emotions [22–24].

## 12.2 Nurses’ Empathy Education

Nurse educators are becoming more focused on the importance of teaching empathy mainly because this skill is critical in helping relationships such as nursing. In addition, nurse educators are aware that empathy is a teachable skill that can be learned through more than one educational technique [25, 26].



The most common techniques used to teach empathy to nurses include, interactive educational, narratives and stories, role-play, and simulations, among others (See Table 12.1). Educational methods most effective in improving empathy are learner-centered where students actively participate in a hands-on environment including practicing skills [27, 28] in combination with didactic and practical components. Studies have indicated that most of the educational techniques have positive outcomes and increases in empathy with nurses [29, 30]. Programs lasting from one to three complete days in total are more effective than briefer interventions [27, 31, 32]. However, the educational technique that has the greatest impact on improving empathy skills and the technique that has the longest-lasting impact remains unknown [33].

Empathy training directed towards nurses working in challenging situations (i.e., ERs, ICUs) is very limited, however. Educators teaching empathy to nurses in challenging situations understand that they are adult learners that come with a plenitude of nurse–patient experiences, and many of these experiences are unlike the experience of nurses from less challenging areas such as a clinical practice area. Because of these differences in nurse–patient care experiences, it is important for educators to develop empathy training courses that are relevant, and perceived as relatable to the learners’ (nurses’) real-life practice experience.

**Table 12.1** Educational techniques used to teach empathy

Type	Description	Outcomes	Studies
Case studies	A scenario followed by discussion to determine the appropriate empathic nurse responses Learner exposed to a single case study	Empathy levels improved when there are multiple case studies discussion sessions over an extended period or an unfolding case study Empathy levels did not change	Edwards et al. [34] Leinigen and Kelly [31] Mennenga et al. [30]
Interactive education	Small group discussions/ seminars, Didactic/video recordings, may include simulation, use of and role-play	Empathy levels improved	Bry et al. [11] Pehrson et al. [39] Ancel [32]
Narratives/ Stories	Learners gain an understanding of the characters. Leads to higher development of empathy and understanding with patients	Empathy levels improved	Johnson [40] Bramley and Matiti [42]
Role-play	Learners are taught how to put themselves in another’s place	Empathy levels improved	Baile and Blatner [45] Ancel [32]
Simulation	Learner engages in multiple simulated experiences. Can include interactive computer simulations of real-life clinical scenarios	Empathy levels improved	Teherani et al. [49] Foster et al. [50]

## 12.3 Techniques for Teaching Nurses Empathy

### 12.3.1 Case Studies

Case studies formulate a scenario followed by discussion to determine the appropriate empathic nurse attitudes and responses. A case study applies the teaching content and contextualizes it to a specific situation, closely aligned to a real-life clinical condition [34, 35]. There several types of case studies. A “one-time” case study scenario focuses on a presenting clinical problem or diagnosis. This type of case study allows the learner little opportunity for improving empathy towards the patient. However, an unfolding case study (also known as a longitudinal case study) is described by the National League for Nursing [36] as one that evolves over time in a manner that is unpredictable to the learner. New situations develop and are revealed with each encounter. Each unfolding case includes:

- A first-person monologue that introduces the individual or couple and the complex problems to be addressed.
- Simulation scenarios designed to help students practice assessing the function and expectations of their patient(s), with links to appropriate evidence-based assessment tools.
- An innovative final assignment that asks students to *finish the story*.
- An instructor toolkit with suggestions on how to use the various components of the unfolding cases and incorporate them into the curriculum.

These unfolding cases combine the power of storytelling with the experiential nature of simulation scenarios. This allows the learner to carry forward the feelings and issues presented the in the previous encounters and highlight changes in a clinical situation over time [37]. An unfolding case study is an effective way to teach skills and encourage empathy.

### 12.3.2 Interactive Educational Empathy Programs

Another technique to teach empathy is by an interactive educational empathy program. Eymard, Crawford and Keller [38], in their published work “*Take a Walk in My Shoes*”: *Nursing Students Take a Walk in Older Adults Shoes to Increase Knowledge and Empathy* use an interactive, educational program to teach empathy to health care workers. The program includes a short lecture, followed by four different simulation stations. Each station allows the participants to “take a walk” and experience physical ailments sometimes associated with older adults. This program is an effective method to teach empathy and participants will have an increase in empathy skills.

Bry et al. [11] developed an interactive empathy course for nurses working in the newborn intensive care unit (NICU) with difficult and challenging nurse–parent situations. The course consists of a 2-h interactive lecture and 1-day practical workshop. The lecture provides an overview of the communication needs for the parents including the importance of involving parents in the care of their infants, giving parents emotional support, identifying parents’ emotions, and responding to them with empathy. The workshop consists of small group discussions with three to four nurses and two facilitators. At the beginning of the workshop, the participants watch and discuss examples of video recorded communication situations. The workshop also includes discussing and practicing 16 difficult NICU scenarios based on actual cases. The scenarios are given to the nurses at the beginning of the workshop. After they read the scenario, the nurses suggest potential ways of responding. The nurses are also encouraged to express their feelings about the scenario. The course is learner-centered; the educators encourage the nurses to suggest and discuss ways to deal with these actual difficult situations. Bry et al. [11] found that before the course, the nurses responded to 12.9% of the empathic opportunities (expressions of emotions, stressors or concerns by the patient) with an empathic response, while after the course the percentage of empathic opportunities responded to increase to 42.9%. This method of teaching empathy improved nurses’ ability to respond to NICU parents’ feelings using empathy. The nurses also gained an increased awareness of the importance of communication in a stressful environment and improved their way of communicating.

Another interactive method of teaching nurses how to respond empathically to patients is the Communication Skills Training (CST) module [39]. The CST module was developed, implemented, and evaluated for use by nurses with inpatient oncology patients. The empathy module includes a 1-day didactic teaching of strategies, presentation of exemplary videos modeling the key strategies, skills, and process tasks, and a role-play session to practice the skills. Prior to the training day, a booklet is sent to participating nurses entitled, *Responding Empathically to Patients*, which includes relevant background literature on empathy and its importance in nursing practice, and detailed communication problems identified in research studies. The CST training has been shown to improve empathy skills.

### 12.3.3 Narratives

Johnson [40] developed the use of narrative fiction (stories) to improve empathic development and growth. Fictional stories allow learners the ability to relate to the characters in the story (understanding their backgrounds, their thoughts, and feelings) which ultimately leads to a greater understanding of their patients’ thoughts, feelings, and their situation and or condition when the stories are relatable to their patients. This understanding further develops the skill of empathy for the nurse [41, 42].

### 12.3.4 Role-Play

Role-play is a common method used to teach empathy. It is a holistic teaching method that facilitates the process of critical thinking. It allows the learner to experience realistic situations by interacting with others in a structured environment and to recognize emotion, learn to respond with compassion, and increases awareness of missed opportunities for empathy [43]. In general, role-play teaches the student how to put themselves in another's place [30].

Most often, learners using role-play are given roles to act out. They may be given specific instructions on how to act or what to say (e.g., an aggressive patient or a patient in grief). The learner will then act out the scenario, and afterwards, there will be reflection and discussion about the interactions, including other methods of handling the situation and opportunities to provide empathic responses. The role-play scenario can then be acted multiple times by adding changes based on the outcome of the reflection and discussion.

Jacob Moreno, a psychiatrist, developed a role-play technique called Action Methods [44]. Today, educational role-plays based on 'Action Methods' are used in many settings including health care [45]. These action methods include:

- Warmups: used to prepare a group for role-plays.
- Role-creation: used to create characters and immerse learners in their roles.
- Doubling: a method where students assume the role of another person/character which encourages further revealing of unspoken thoughts, feelings, and attitudes.
- Role-reversal: asking two individuals to switch roles, so they might experience a situation from another's perspective.
- Sharing: an element of debriefing when learners share feelings about what it was like to be in one or more roles.

Baile and Blatner [45] describe in detail the process of each set of the 'action methods' in their publication *Teaching Communication Skills Using Action Methods to Enhance Role-play in Problem-based Learning*.

Zavertnik et al. [46] used role-playing with nursing students to improve their communication, including empathy skills. The nursing students are given a scenario and asked to communicate with a trained standardized patient. One scenario was developed about communicating empathy with the family members of a patient that was recently admitted to the intensive care unit. After communicating with the family members, students received debriefing; informal feedback and coaching from the standardized family members, peers, and faculty. Role-playing has been shown to improve the student's empathy learning and is retained longer than using a lecture method [47]. Depending on the goal of the role-play exercise, the learners might role-play similar scenarios from their own experiences.

### **12.3.5 Simulation**

Simulation has been a part of clinical education since the 1950s. It is one of the most successful methods to improve communication skills especially empathy because it requires participants to be active, uses practice-based methods [45, 48] and realistic clinical/patient-based scenarios. There are different simulation models including the use of a manikin, standardized patients (trained actors who simulate real patients), screen-based/PC-based simulation, virtual patients, integrated models, and high-fidelity simulations.

The use of simulation provides a predictable, controlled environment which allows the educator to provide coaching and feedback, as appropriate. This contrasts with the clinical environment where the opportunities for learning empathy are not predictable. Simulation training provides participants the opportunity to practice and develop their skills and allows for additional educational processes that include debriefing, discussion, and reflection. It provides the learner time to understand the difficulties and the importance of communication, especially empathy [49–51]. Simulation training has been shown to improve empathy skills and helps students identify their own misunderstandings and misperceptions, allowing a better understanding of the patient’s perspectives [52]. The learner is able to develop their skills at their pace, which makes it more impactful. Researchers, Strekalova, Krieger, Kleinhessel, and Kotranza [53], examined the empathy skills used by undergraduate nursing students during simulated health history interviews. The nursing students interacted with a virtual patient where they encountered up to nine opportunities to respond with empathy; most went unrecognized. However, using simulation, these missed opportunities can be detected, allowing the learner to practice their skills repeatedly [51, 54]. Thus, simulation is one of the most useful educational methods to improve empathy skills [55].

## **12.4 Nurses’ Responses to Empathy**

Nurses working in challenging situations most often care for patients with higher demands for immediate information and who are more emotionally distressed compared to patients in a clinic setting. It is especially important for patients in these situations to feel their nurse genuinely cares about and values them. Responding appropriately using empathy during challenging situations may be difficult, and the nurse response to the patient may affect future communication and building a nurse–patient trusting relationship. Responding using empathy includes both verbal and nonverbal communication; both are equally important. Verbal communication consists of listening and speaking while nonverbal communication consists of perceiving and demonstrating expression. Verbal responses generally include a two-step response: (1) to clarify and have a clear understanding of the patient’s situation or feelings and (2) to communicate that understanding back to the patient. The

**Table 12.2** Verbal communication N.U.R.S.E. rubric

	Description	Example
<p><i>Naming</i></p> <ul style="list-style-type: none"> <li>• Name what the other person said</li> <li>• Name the emotion</li> </ul>	<ul style="list-style-type: none"> <li>• Repeat their words demonstrating full understanding of what they communicated removing any misunderstandings</li> <li>• Naming phrases should be suggestive rather than telling people how they feel</li> </ul>	<p>Understanding: “You are asking for the results?”</p> <p>Emotion: “It sounds like you are angry/frustrated.” “You seem very sad”</p>
<p><i>Understanding</i></p> <ul style="list-style-type: none"> <li>• Empathize with and validate the emotion</li> </ul>	<ul style="list-style-type: none"> <li>• Ask them what you can do to help them and show an understanding of their current feelings</li> <li>• Acknowledging that we do not understand everything makes patients feel they are heard</li> </ul>	<p>“This helps me understand what you are thinking” “I know this must be really hard for you but is there anyone I should contact for you?” “I can’t imagine how hard this must be for you”</p>
<p><i>Respect</i></p> <ul style="list-style-type: none"> <li>• Praise patient for coping</li> </ul>	<ul style="list-style-type: none"> <li>• Express your respect (praise) for them and how they are handling the situation. This demonstrates their emotions are important</li> </ul>	<p>“I think you have done a great job with this” “I can see you have really been trying to follow our instructions”</p>
<p><i>Supporting</i></p> <ul style="list-style-type: none"> <li>• Show/provide support</li> </ul>	<ul style="list-style-type: none"> <li>• Show the patient/family that you are there for them in their time of need</li> </ul>	<p>“I will do my best to make sure you have what you need”</p>
<p><i>Exploring</i></p> <ul style="list-style-type: none"> <li>• Ask the patient to elaborate on the emotion</li> </ul>	<ul style="list-style-type: none"> <li>• Ask open-ended questions to further the understanding</li> <li>• Encourage patient to talk to have a better understanding what patient is saying</li> </ul> <p>Use when not sure what patient is trying to express</p>	<p>“Could you say more about what you mean when you say that...” “Tell me more about what you are afraid of”</p>

N.U.R.S.E. communication rubric (See Table 12.2), supported by The American Association of Critical Care Nurses, is useful for communicating empathy with patients. Expressing nonverbal empathy is not as commonly taught as verbal empathy, but it does have an impact on our patients’ perceptions. Patients will have a sense of genuine nurse caring and support when there is an obvious display of empathic expression.

Nonverbal, together with verbal expressions of empathy encourage the patient to communicate their fears and/or concerns. Nonverbal communication consists of active listening (perceiving), eye contact, and body language (expressing) in a visible supportive manner (See Table 12.3). Nonverbal behaviors are most often very subtle and perceived without conscious awareness [56]. Developing a sharp perception of your own nonverbal behaviors (i.e., facial expressions, posture, affect, tone of voice) and also of the patients’ nonverbal behaviors will validate to the patient that our verbal communication is genuine and sincere.

**Table 12.3** Nonverbal empathy techniques

Active Listening/ Perceiving	Empathy requires we learn how to be active listeners. Most often, we are thinking how the other person is going to respond while they are still talking. Active listening means being totally focused on what the other person is saying. While the other person is talking, perceive: <ul style="list-style-type: none"> <li>• Think about what they must be feeling.</li> <li>• Think about how you would feel if you were in their situation</li> </ul>
<sup>a</sup> Make eye contact	Most often we do not make eye contact to avoid confrontation. Computers are another distraction in not making eye contact as many nurses are multitasking. To develop empathy nurses must: <ul style="list-style-type: none"> <li>• Take time to make eye contact</li> <li>• Pause between questions if charting</li> </ul>
Body language	A patient's body language provides nonverbal cues of how they are feeling even if they state otherwise. The patient may avoid eye contact or have an indifferent affect indicating they are not fine. Nonverbal cues are genuine and can be more accurate than words. Having an awareness of a patient's nonverbal cues is a critical step towards developing empathy

<sup>a</sup>Many Western cultures *maintain* eye contact while many Eastern cultures do not

A recently developed tool [57] for assessing nonverbal behavior uses the acronym E.M.P.A.T.H.Y. (E: eye contact; M: muscles of facial expression; P: posture; A: affect; T: tone of voice; H: hearing the whole patient; Y: your response). See Table 12.4. E.M.P.A.T.H.Y. is a valuable tool in identifying important aspects of perceiving and responding to patients' nonverbal behaviors/cues. Although, the E.M.P.A.T.H.Y. tool is used commonly in empathy training programs for residents and faculty physicians, and its usefulness for nurses is an area of development. The tool is easily applied for health-care professionals including nurses as a guide in remembering key components of demonstrating empathy in nonverbal communication.

## 12.5 Nurses in Challenging Situation Scenarios

### 12.5.1 Challenging Situation: Spontaneous Abortion

The following scenarios are examples demonstrating some of the possible responses using empathy in challenging situations using the N.U.R.S.E rubric:

A mother is 21 week pregnant. She arrived in triage with spontaneous vaginal bleeding. This is her second pregnancy. She has a healthy 4-year-old girl at home. A fetal ultrasound is performed to determine the status of the baby. It is determined that the fetus is no longer alive. In this scenario, the nurse places a blue or purple butterfly outside the mother's room to indicate to staff that the mother has lost the fetus. The nurse informs the mother of the results of her fetal loss in the privacy of her room. The mother asks the nurse "Did my baby die because of something I did?"

**Table 12.4** Nonverbal E.M.P.A.T.H.Y. rubric [57]

E: Eye contact <sup>a</sup>	Most often, first indication that the patient/person has been noticed
M: Muscles of facial expression	Recognizing facial expressions, specifically fear, sadness, and anger
P: Posture	Posture to express mutual respect and openness (e.g., sitting down with patients at eye level)
A: Affect	Make a conscious assessment of the patients' affective state to help gain their perspective
T: Tone of voice	Tone of voice should communicate genuine understanding and respect Try using a calm approach and being focused only on the patient
H: Hearing the whole patient	Focus completely on the patient
Y: Your response	Take a moment to reflect on the patient's current situation for an appropriate empathic response

<sup>a</sup>Many Western cultures *maintain* eye contact while many Eastern cultures do not

- Naming: It seems that you feel afraid that this is somehow your fault.
- Understand: It is very common to feel this way after losing a pregnancy; losing a pregnancy is common but it's hard and I can see it's very painful for you.
- Respect: You did a wonderful job making sure you took care of yourself while pregnant
- Support: We are here for you and your family.
- Explore: Could you tell me more about your concern that this happened because of something you did

While providing the patient and or patients' family empathy, be aware of your and the patients/patient's family's nonverbal communication (i.e., facial expressions, posture, affect, tone of voice). Using the E.M.P.A.T.H.Y. rubric for nonverbal communication as a guide is helpful. It is also important during a challenging situation (e.g., loss of an infant) to understand that this mother might feel tremendous guilt upon experiencing death of her fetus. These feelings of mourning and loss should be addressed with support and understanding that different factors could affect the severity of the mothers' grief, including number of children in the home, gestational age at loss, and age of the mother; each patient should be approached on a case-by-case basis. You should reassure the mother that there is likely nothing that could have been done differently, and avoid using the phrase "you can always try again." Empathetic, honest communication with the patient and families encourages a more open communication enabling them to express their own specific needs or concerns.



### ***12.5.2 Challenging Situation: Discontinue Life Support***

A 63-year-old patient was admitted to the Emergency Room after a head-on automobile collision. Upon being admitted, paramedics reported reviving and stabilizing the patient twice while being transported to the hospital. He is now stabilized with medication and oxygen therapy. A blunt head/neck trauma and severe trauma to the cardiothoracic area were found, and the patient was admitted to the Intensive Care Unit (ICU). Several times during his stay at the ICU, the patient presented with several cardiac arrhythmias in which Advanced Cardiovascular Life Support was provided. At shift change, the patient is on life support, is being kept in a medically induced coma, and his prognosis is not good. It is determined that all resources and methods have been exhausted, and the family is encouraged to discontinue life support. The family members display emotions ranging from shock to disbelief. A family member asks the nurse “isn’t there more you can do for him?”

- Naming:** It may be hard for you to believe this, but there is nothing more we can do for him.
- Understand:** What you are feeling is natural when losing a loved one; I know it’s very painful and hard to believe because it happened so unexpectedly.
- Respect:** This is a tragedy that is very painful and I see that you are handling it as best as possible.
- Support:** We are here for you and your family and we can provide you with resource that may help you through this.
- Explore:** Could you tell me more about what you mean when you asked “isn’t there more you can do for him?”

In this situation, it is very important to apply your nonverbal empathy skills (i.e., facial expressions, posture, affect, tone of voice) while providing the patients’ family with empathy. Use the E.M.P.A.T.H.Y. rubric for nonverbal communication as a guide. This challenging situation is an example of the nurse having the responsibility to take care of the patient’s family rather than the patient. When a patient death occurs unexpectedly, the family has not had a chance to mentally prepare for the loss; receiving the news can be traumatic [58]. The family will be highly sensitive and emotional, and compassion and kindness are crucial in preventing a violent reaction out of grief to the medical team. You should be expecting a variety of different emotions and reactions, as behavior response varies greatly from one individual to another [58]. Remember that they just were informed of the loss of a loved one from a tragic automobile accident. They may experience the initial stages of grief which includes shock, denial, and even anger [59]. Be understanding and willing to answer any questions they may have. Family members might refuse to believe that their family member has passed. Move as slowly as they need and be willing to repeat information if they need you to. Use compassionate and empathetic language while addressing the situation. Offer the family time to grieve and make them aware of the resources available to them. Try to gain an understanding of the family’s point

of view. Explain that all resources were exhausted, and that the team did everything they possibly could to help their loved one. Chapter 13, Teaching advanced communication skills to trainees caring for the critically injured describes a modality to teach empathy to trainees in emergency and trauma-related care.

### ***12.5.3 Nonverbal Situation-1***

A 35-year-old Hispanic woman is admitted to the hospital after a car accident in which she lost her 5-year-old daughter and husband. She immigrated to the US a few years ago and now does not have a support system. She was previously healthy with an unremarkable medical history. The nurse knows that the patient needs to take medications and other supportive treatment. The patient agrees with the treatment plan but is not motivated to do anything. As a nurse, it is perceived that the patient is not ready for learning and demonstrates empathy by “being there” for her, sitting with her at her eye level and being an active listener, and/ or simply respecting her request to be alone. The nurse includes in the discharge plan for a social worker to help the patient cope with her loss and look for resources, such as a support group and diversional activities.

### ***12.5.4 Nonverbal Situation-2***

A patient just received a bad prognosis (e.g., terminal cancer, need for an amputation, a grave and incurable illness). Using nonverbal skills, the nurse should assess if the patient’s smile is truly the patient’s genuine feelings of their situation. The patient may seem accepting of their prognosis, but they may not be revealing their honest emotion. As nurse, by being totally focused on them when they are talking, sitting at their level and making eye contact (if appropriate for the culture) can promote the expression of their feelings, which can help them to cope with their situation.

## **12.6 Conclusion**

Challenging situations such as a critical illness or death can be devastating experiences for patients or their families and can have lasting effects. It can be difficult for nurses to display empathy when caring for the patient and their families during challenging situations. Nevertheless, nurses can be a source of comfort to the patient and their families by providing empathy. However, it is common that nurses working in these challenging areas (ERs, ICUs, Trauma) have not developed the skills necessary to provide empathy. Limited empathy training courses and the lack of standardized

education techniques contributes to nurses in challenging situations being without developed empathy skills [60]. Although considerable resources are spent to train nurses in empathy before they enter clinical practice [61–63], it has been observed that nurses' empathy declines over time as they enter clinical practice [11, 64]. Nurses, once in clinical practice, most often are unaware of the destructive and painful effects unempathic communication has on patients and their families.

Empathy in health care has been shown to improve patient outcomes [65, 66] and reduces the risk nurse burnout [13]. In the absence of training, health-care professionals may lack the ability to recognize their patients' emotional cues for empathic response [9]. Nurse educators are encouraged to explore teaching strategies and to develop empathy training for nurses, especially in challenging areas [67, 68]. This is an underdeveloped area and one of need. Because different aspects of empathy require different training approaches, nurse educators need to recognize the various obstacles that nurses encounter when attempting to express empathy in high-intensity environments. Empathy is a skill that may be taught, and the data show that specific training courses are effective.

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# Chapter 13

## Teaching Advanced Communication Skills to Trainees Caring for the Critically Injured



Sangeeta Lamba, Anastasia Kunac, and Anne Mosenthal

### 13.1 Introduction

Modern care of a critically injured patient involves activation of an interprofessional and interdisciplinary team of physicians and nurses with expertise in Emergency Medicine and Trauma Surgery. Traumatic injuries are sudden and unexpected, and the medical team is focused on life-saving interventions for the patient at hand. Whether the patient survives their injury or not, families need support as they cope with these life-altering events. Furthermore, survivors may have pronounced physical or psychological impairments that require ongoing effective and empathetic communication. Herein we explore why these skills are not commonly celebrated and present a curriculum addressing communication skills in the trauma care setting.

### 13.2 Background

Care of the injured has historically been the province of the surgeon, and surgeons historically have not been celebrated for excellent interpersonal skills or for expressing empathy effectively. The history of surgery as a specialty lends some perspective to this.

If we consider surgery before the advent of anesthesia, curative interventions for traumatic injury were frequently more violent than the initial injury. Consider, for example, controlled and intentional amputation of the mangled extremity without

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anesthetic. The patient was required to suffer a second physically and psychologically grueling event while the surgeon had to maintain focus on the task at hand despite the disquieting screams of the patient. Surgeons in the era predating anesthetic agents were celebrated for being quick, bold, and free of emotional attachment to their patients. To cure, the practitioner was required to inflict pain, and the patient to endure it. An emotional surgeon could not remain calm while plunging a scalpel into the flesh of another suffering human. The art of surgery required “a kind of necessary inhumanity” [1]. Some may even argue that the profession itself selected for those with impaired empathy. Surgeons of the eighteenth century were lauded for the intellectual, verbal, and manual skill of being able to replace passion with equanimity and distance [2].

In accordance with the attributes lauded in surgeons of the past, members of the specialty continue to be described as aloof, severe, impatient, and impersonal. Many would argue that some level of detachment has always been required and continues to be required of any physician, not just the Surgeon. In truth, a purely emotive practice of empathy would be detrimental to any clinician. A physician who suffers alongside their patient would have impaired objectivity. However, a cognitive act of empathy, where the physician understands the patient and/or family concerns and fears, should result in an appropriate demonstration of concern without compromising clinical care [3]. Further, gaining understanding of the patient goals and values to guide medical decision-making that maximizes likelihood of obtaining the outcome the patient desires.

Let us also consider Emergency Medicine as a specialty as we explore the care of a critically injured patient. Established in the 1970s, Emergency Medicine is a newer specialty dedicated to providing immediate care and stabilization to patients in response to acute illness and injury. The same degree of focus and attention to life-saving interventions expected of the surgeon for a patient with traumatic injuries is necessary for Emergency Medicine providers, but Emergency Medicine practitioners do not harbor the same stereotypes as surgeons regarding interpersonal skills. Previous studies have suggested that Emergency Medicine is a “people-oriented specialty” as opposed to surgery which is a “technology-oriented specialty,” and as such, so called “soft skills” such as interpersonal communication and empathy may be valued in medical students selecting Emergency Medicine as a specialty [4]. However, the burnout rate in emergency medicine is perhaps among the highest of any specialty, with burnout levels in excess of 60% compared with a rate of 38% in physicians in general [5]. This high rate of burnout may in turn have a negative impact on empathy. Regardless of specialty focus, exposure to clinical practice degrades empathy scores for all students [4].

### 13.3 Empathy in Medical Education

It has been identified that the “hidden curriculum” often erodes trainee empathy for patients throughout their medical training years ([3, 4, 6, 7] and Chap. 15). The hidden curriculum includes the culture of a program, where frustrations with the reality of

the health system generate negativity in words and behaviors, and inadequate role modeling further exacerbates trainee distress and decline in well-being [7]. A burnt-out trainee who is suffering from a lack in their own quality of life is less likely to express empathy towards patients. Empathy is an important contributor to and component of “professionalism” in medical practice. The decline in empathy happens in the clinical environment and may be more pronounced in specialties with less patient contact or where the main training focus is on acquiring procedural and technical skills, such as surgery. An elitist view of having joined a select few may exacerbate the separation between clinician and patient, perhaps also contributing to a loss of empathy [7]. Empathy involves not only the ability to understand another person’s perspectives but also be able to communicate effectively (both verbally and non-verbally) with them. Therefore, empathic communication skills training may serve as the best tool to teach or recover empathy in trainees [3].

A review of literature reveals that most empathy teaching interventions are provided in medical school years [3, 4, 6, 7]. As with all skills, empathic skills may decay over time without reinforcement, and therefore such skills should be strengthened in residency and fellowship training. “Interpersonal and communication skills” is one of the six core competencies identified by the Accreditation Council for Graduate Medical Education (ACGME) [8]. The aspirational goal addressed within this milestone for general surgery trainees is that they should not only be able to deliver bad news but can “customize emotionally difficult information,” and the resident should be “capable of negotiating and managing conflict among patients and their families” [8]. To skillfully customize communication tailored to the needs of the patient, a trainee must display some level of empathy. It is not surprising, however, that in disciplines with a focus on learning technical skills, teaching and feedback to trainees on their communication skills is rare [9].

Therefore, programs are now emerging to explicitly target teaching, practice, and feedback on empathic communication skills in simulated and “safe” learning environments [10–16]. Learning objectives for this training are expected to target knowledge, skills, and behaviors and use of objective measures to assess outcomes of learning [17]. The best method to assess outcomes for teaching effective empathic communication skills is direct observation of trainee performance or via patient report [10–15]. Though some programs may use 360-degree resident evaluations that include feedback from patients, this is not the norm. An emerging format has been the Observed Structured Clinical Examination (OSCE) [10–15]. The OSCE format is extensively used in medical school and is now also being used in residency training. OSCEs allow for both direct observation and feedback from faculty, peers, and the standardized patient actor. Many studies also use self-report measures such as the Jefferson Scale of Physician Empathy (JSPE), to measure change in physician empathy [18]. Self-report measures have their own limitations by virtue of response-shift bias—training can alter the understanding of the construct that is self-reported, and thus the patterns of self-report, but nonetheless these validated tools help educators understand if learning objectives have been met [19].

### 13.4 Teaching Empathic Communication Skills in Trauma

Surgical trainees routinely deliver serious and often difficult news to patients in an empathetic manner; yet trainees often also express discomfort with breaking bad news, and struggle especially with conversations about death and end-of-life care, which carry particularly powerful emotional charge [9]. It is also clear that modern surgeons value effective communication skills as “critical” to their training and equally as important as technical or procedural skills [20, 21].

Historically, surgery uses a traditional tiered apprenticeship model of “see one, do one, teach one” to learn skills [9, 22, 23]. With competing clinical workloads and work hour restrictions, real-life bedside modeling of effective communication is decreasing, however [21–23]. Learning by a trial and error method has many limitations that are exacerbated by the fact that feedback on empathic communication skills is rarely provided [9]. This has prompted surgery residency training programs to explore other models of learning and teaching empathic communication [9].

Curricula developed to teach empathic communication in surgical and technical skills focused disciplines should take into consideration the unique challenges and barriers that face surgeons and emergency clinicians and the unique nuances in various settings [9, 13, 24–27]. For example, skills needed to break the serious news of a positive cancer result on a biopsy in an empathetic manner in the outpatient setting are different from breaking the news of trauma-related death to the parents of a healthy young teenager in a car accident. The patient receiving the biopsy result has a known lesion, has consented to the biopsy, and understands there is a possibility of receiving bad news even before the physician enters the room. In the setting of a sudden traumatic death, family and loved ones of the decedent rarely know anything more than the fact the patient was brought to the hospital. Additionally, there are layers of emotional, ethical, and trust issues surrounding the peri-operative setting especially when adverse or unanticipated outcome news from a surgical procedure is being shared, or there is an error that must be disclosed. The emotions of guilt and a sense of failure on the part of the surgeon and disbelief or crushing of the high expectations and hope on part of the family often complicate unanticipated or bad peri-operative outcomes.

Much of surgery communication skills training uses case scenarios to provide relevance. Scenarios that are clinically common are used and may include discussion of code status in the surgical intensive care unit setting or delivery of news of malignancy, such as a new diagnosis of melanoma, after a biopsy [9]. A recent literature review found gaps in certain areas such as delivery of news of unexpected death or unexpected change in prognosis in the intra-operative or trauma settings [9]. Most communication literature uses some form of framework or rubrics such as SPIKES (setting, perception, invitation, knowledge, emotions, and summary) [28, 29] to teach delivery of serious news. Such mnemonics are less frequently studied in surgical disciplines, perhaps because these may be too vague and not intuitively understandable, especially for trainees in disciplines where they routinely use and value concrete behaviorally defined steps [28].

A proposed curriculum to teach surgery and emergency medicine residents empathic communication skills would ideally include three features:

1. Targeted didactics with use of a flipped classroom format. The flipped classroom utilizes online/distance learning from home with practice working through the content in the classroom to decrease time away from clinical duties and to maximize use of in-class time [30].
2. Practice of empathic communication skills closely tied to patient care using simulation and role-play.
3. Robust assessment of communication skills using direct observation such as using an OSCE format with feedback on performance from the facilitator, the standardized patient, and even peers [31].

One such curriculum was used to teach trauma (surgery and emergency medicine) residents [10, 30]. The curriculum used the same format for learning activities in two phases. Phase 1 targeted junior residents (PGY1-2) from both disciplines to teach and assess skills in delivering difficult news of death and poor prognosis. Phase 2 built on this foundation and engaged the mid- to senior-level residents to determine advance directives and elicit goals of care for a critically injured trauma patient. The curriculum details include:

1. Video-based didactics that highlight the key communication steps and an overview of empathic communication skills (including the use of silence) and how to discuss goals of care with patients and families of patients with traumatic injuries. A mnemonic tool or pocket card that reminds the trainee of the “procedural steps” of communication was used. The ABCDE mnemonic, presented in Fig. 13.1, mirrors the familiar steps used in both cardiac life support and trauma life support resuscitation protocols and may thus be easy to recall for trauma trainees [30].
2. High fidelity simulation practice of trauma scenarios (a trauma resuscitation resulting in patient death and another resulting in severe injuries and uncertain prognosis). Trainees perform resuscitation in teams and then role-play communication with the simulated family of the simulated patient. They deliver difficult news of death and poor prognosis and work with the simulated family to delineate patient values and wishes.
3. An OSCE where each resident is observed for empathic communication with a standardized patient. Peers and faculty facilitator provide feedback to trainees.
4. And finally, an opportunity to debrief after the simulated practices and have the trainees self-reflect on their challenges, concerns, and barriers for empathic communication. This allows for discussion and validation of trainees’ emotions, coping mechanisms, and moral distress. This debriefing phase is a most important step to help trainees recognize that it is normal to experience feelings of guilt, anger, fear, or sadness if the patients’ trajectory did not go as well as anticipated. A feeling of personal failure in the event of a patient death is common and may contribute to moral distress with subsequent use of detachment as a coping mechanism.

**ABCDEs of COMMUNICATION in TRAUMA****Anticipate**

Know who your team is, what are all details of the case, and how you will speak with family (mentally rehearse)

**Be Aware (Self and Surroundings)**

Make sure you have a neat/professional appearance, find a quiet room, and ensure you and your team are safe

**Converse/Address Concerns**

Gather your team and start conversation with the family:

**Aacquaint yourself with family and ASK what they know****Begin with a warning – fire warning shot****Concise summary of events (most important and most relevant should come first)****Do not speak for a few moments after news (Do use silence) - Allow silence, give space****Empathize/Explain - Recognize family emotions, answer questions, and provide next steps****Debrief, Document and Dictate**

If this is a patient death, also notify the medical examiner, sharing network and do a discharge summary.

**End the Encounter**

Self-reflect – what was good/what could be better.

Anticipate family needs: Clergy, Palliative Care, Bereavement

**Fig. 13.1** Pocket card for empathic communication in trauma [32]

The role-play, debriefing, and didactics reinforce both non-verbal and verbal ways to express empathy. The verbal cues are actual words/phrases and sentences a trainee could use for empathic communication. For example, these could be queries or clarifications or responses to emotions such as, “Tell me a little more about that?,” “Help me understand...,” “What has this been like for you?,” and “I can see that you are...” This curriculum resulted in an increase in post-training knowledge (statistically significant) and trends for increase in confidence [10]. During the OSCE to assess resident skills, ratings were mostly concordant between the self-rating by resident and those by the standardized patient (SP). It is interesting to note that there was a slight but not significant trend for higher rating by SPs in all domains except “professional manner” in both scenarios as well as “expressed empathy” in the death scenario and “expressed understanding” in the poor prognosis scenario [10]. For these domains, the residents rated themselves higher than the SP rating, suggesting that residents’ perception of their own empathic communication skills is likely different than the SP’s perception.

The culture of making empathic communication skills an equally important and explicit part of the teaching curriculum [32] as procedural skills for surgery and emergency medicine residents is expected to have an impact on patient outcomes, though a direct effect is difficult to measure. We may also postulate that this

empathic communication training could potentially help trainees by building relationships with patients that in turn help provide meaning that may help reduce burnout. However, there have been no studies to demonstrate that this training actually helps in reducing burnout in residents. Since skills are expected to decay over time, future work in education may need to address when and how frequently should these empathic communication skills be reinforced. Finally, research on how best to measure impact of such curricula on patient outcomes such as patient satisfaction or building trust is needed.

### 13.5 Conclusion

While historically physicians caring for the critically injured may have had a lack of skill in empathic communication, modern traumatologists appreciate the need for effective patient-centered communication. Most medical student curricula include modules on physician empathy, but reinforcement of these competencies in a consistent manner is somewhat lacking in graduate medical education programs. The prescribed paradigm for teaching communication skills in trauma is an effective way to reinforce empathic communication skills during residency training.

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**Part III**  
**Empathy: A Systemic Perspective**

# Chapter 14

## Empathy and Implicit Bias: Can Empathy Training Improve Equity?



Javeed Sukhera

### 14.1 What Is Implicit Bias?

Over time, individuals build associations between concepts, ideas, and social categories through their experiences. Such experiences may include formal education, but also more tacit learning. These associations can be described as *biases*. Commonly, such biases often involve associations between and among different social groups. Such biases are referred to as “inter-group” biases. For example, one may be inclined towards or against one social category or another. There may be a bias towards a group that is visible such as biases towards or against racial groups. Another example could be if an individual may favor others who belong to the same group as them or view members of outside groups with skepticism or even, hostility. While many biases are explicit, and can be obvious to all involved, many others are subtler, yet remain intentional and deliberate.

In contrast to explicit biases, implicit biases form through both direct and indirect experiences yet work outside of conscious awareness. Implicit biases are natural categorizations that afford the human brain an opportunity to consolidate experiences and organize complex information. Implicit biases can be positive or negative. Some biases promote safety and help health professionals learn to make complex diagnoses through heuristics and shortcuts, which facilitate clinical decision-making. Implicit biases can be useful but also have the potential to be harmful. Among the most problematic implicit biases are those that perpetuate discriminatory behaviors and dehumanizing attitudes towards vulnerable patient groups.

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Social psychology research suggests that implicit biases work through two distinct processes. First, activation of a bias occurs when an individual is categorized as belonging to a specific social group. Once this categorization is applied, beliefs or biases about that group can become applied without awareness and despite best intentions [1].

Research on implicit bias in health care has demonstrated how implicit bias influences unequal treatment. For example, several minority groups experience biases that contribute to health disparities. A study by Green, et al., in 2007 found that despite explicitly denying a preference for White versus Black patients, doctors implicitly perceived Black patients as less co-operative regarding medical procedures. Those doctors who demonstrated increased levels of implicit biases were more likely to choose thrombolysis for white than for black patients they diagnosed with heart attacks in otherwise identical vignettes [2]. Similar research has found that implicit biases contribute to racial disparities in pain treatment and adversely influence several patient groups including racial minorities, sexual minorities, individuals with mental illness, obesity, and lower socio-economic status [3–8]. Research suggests that underserved groups often experience bias in healthcare settings that results in inequitable treatment. Such disparities can also exist at the organizational or systemic level, leading to poor outcomes [3].

We also know that implicit biases lead to behavior that undermines trust and erodes empathy. Groups that experience discrimination experience a profound negative effect which leads to self-reinforcing cycles of distancing and disconnection between patients and professionals. Individuals who encounter implicit biases can gradually begin to apply these negative biases towards themselves. Eventually, members of certain marginalized groups might begin to conform to such biases through their behavior and interactions [4], paradoxically reinforcing existing biases.

One problem with implicit biases is that they influence health professionals without their knowledge. Implicit biases may perpetuate discrimination by health professionals even when they are well educated about equity and disparities, and consciously attempt to suppress stereotypes [9]. Social psychology researchers have suggested that implicit biases represent a unique form of racism that is inherently complex and includes ambivalent attitudes that are more challenging to address than traditional racism [10]. Given their unique nature, broad and multi-layered strategies are required to mitigate the negative impact of biases.

One such strategy involves education. Several authors have described a process of bias education that involves promoting awareness and fostering behavioral change [11–14]. Educational efforts are constrained, however, by research that suggests that clinical learning environments may not only perpetuate existing biases, but increase them. For example, the CHANGES study conducted over 4 years across 49 medical schools in the United States found that hearing negative comments from faculty about Black patients, or having favorable versus unfavorable experiences with Black patients may predict increases in negative implicit biases [15].

## 14.2 Implicit Bias and Empathy

For the purposes of this chapter, we focus on empathy in clinical contexts. As described in other chapters, cognitive empathy involves intentional perspective taking while emotional empathy reflects compassion [16–18]. While empathy can be conceptualized in various ways, understanding its relationship with implicit bias is facilitated by thinking about empathy as both a *skill* and a *process* involving how one views themselves, others, and relationships between health professionals and patients.

**Case example** Jane lives in a rural area a few hours outside a major North American city. Her son, Trevor, was born healthy and at full term. Jane has several visible tattoos and brightly colored pink hair. In her community, Jane’s physical appearance is unique. She is keenly aware of her differences and often notices that she is judged by others within her community. Every time she has needed to seek health care for herself or her son, Jane perceives others to question her intelligence and stereotype her in various ways.

A few months after Trevor was born, Jane noticed that he would often seem unwell. He would become floppy or lethargic on several occasions, leading her to present to the local emergency department. The first time she brought him to the hospital, she felt that the nurses and physician dismissed his symptoms as an upper respiratory infection. She felt denigrated when she was repeatedly told that she was “over-reacting” and being “dramatic.”

While Trevor’s symptoms waxed and waned, Jane began to fear going back to the hospital. She knew something was seriously wrong with her son; however, she began to stereotype those working within the health system as un-caring and judgmental. One evening, Trevor seemed to lose consciousness, and when she called an ambulance, she learned he had extremely high intracranial pressure and needed emergency surgery.

Jane’s experience highlights a process of care that involves experiences which perpetuated implicit biases on both sides of the clinician–patient relationship. Not only were biases influencing health professionals’ attitudes and behaviors towards Jane, biases were also influencing Jane’s attitudes and behaviors towards health professionals.

At each step in Jane’s journey, empathy and bias were intertwined with one another. For patients to feel listened to and valued, they must feel understood and accepted. Empathy is what makes this possible. Clinicians must have skills to ensure they are understanding and responding to patients’ needs [19, 20]. Empathy also facilitates connection between patients and clinicians, especially when authentic emotions are expressed [21].

In our research, we explored the social process of implicit bias towards individuals with mental illness within an emergency department. Through semi-structured individual interviews with several different groups, we learned that physicians and nurses were unintentionally and automatically labeling patients with mental illness

as “unfixable” leading to avoidance behavior that patients and caregivers perceived as judgment and discrimination. When we asked participants how to break the cycle of labeling, they argued that empathy is the key. Our participants suggested that fostering empathy through intentional perspective taking exercises may help to reduce the adverse impact of implicit bias [22]. Empathy mitigates the adverse influence of bias because having empathy towards a group is associated with positive attitudes towards that group [23]. Measures of empathic processes often correlate with positive attitudes towards groups in general [24, 25].

Despite these connections, the relationship between implicit bias and empathy is not straightforward. Some research has found that empathy and bias are intrinsically related [26]; others suggest that the relationship is more complex than a simple association between the two [27]. For example, there are multiple studies that associate empathy and explicit rather than implicit biases while others suggest that fostering cognitive empathy may perpetuate anxiety and social distancing when stereotypes are salient. Consider this example: two groups are interacting with one another and one belongs to a traditionally dominant group, while the other is a minority. When empathy is initiated during their interaction, research has found that individuals with higher levels of bias may still disparage members of minority group. Negative implicit biases towards certain groups are therefore so strong, that even empathy does not change their influence [28]. These findings are important when designing empathy training programs, so that unintended consequences do not arise.

## **14.3 Addressing Implicit Bias and Empathy Through Education**

### ***14.3.1 Early Versions of Cultural Competence Education***

To address the role of health professionals in perpetuating disparities through cultural or gender-related biases, accreditors for undergraduate medical programs in both the United States and Canada include standards related to cultural competence and bias. The Liaison Committee for Medical Education states, “Medical students must learn to recognize and appropriately address gender and cultural biases in themselves and others, and in the process of health care delivery [29, p. 11].” In Canada, accreditation standards specify that faculty must ensure that undergraduate curriculum prepares medical students to “recognize and appropriately address personal biases and how these biases influence clinical decision-making and the care provided to patients [30].”

Over the past several decades, the concept of cultural competence has been adopted as a strategy to address health disparities and advance equity. While definitions of cultural competence often vary, the notion can be described as “a set of congruent behaviors, attitudes, and policies that come together in a system, agency

or amongst professionals and enables that system, agency or those professionals to work effectively in cross-cultural situations [31].” An example of cultural competence includes standards established by the United States Department of Health and Human Services for Culturally and Linguistically Appropriate Services (CLAS) for minority groups [31]. Other cultural competence interventions range from language-appropriate health education to increasing minority recruitment, or teaching health professionals how to care for patients from diverse cultural groups [32–34]. Traditionally, cultural competence training programs aim to improve awareness, knowledge, and skills, working towards improvements in health professional behaviors and higher quality patient–professional interactions.

While cultural competence education has gained momentum, academics have expressed concern regarding stereotypic teaching strategies, such as treating minority ethnic groups homogeneously [35]. Other criticisms include lack of attention to socio-economic issues and system level structures [36, 37]. In their critique of cultural competence, Kumagai and Lypson critically analyze cultural competency, proposing that fostering critical consciousness of the self, others, and the world within safe learning environments may facilitate moving beyond cultural competence. They write, “The development of critical consciousness involves a reflective awareness of the differences in power and privilege and the inequities that are embedded in social relationships—an act that Freire calls “reading the world”—and a reorientation of perspective towards a commitment to social justice [38, p. 783].”

### ***14.3.2 Implicit Bias Recognition and Management Curricula***

The topic of biases in health professions education was initially described in relation to research on clinical decision-making and diagnostic error [39–42]. Over the years, authors have advocated that implicit bias education should involve addressing biases by promoting awareness and enhancing conscious efforts to overcome these biases. Some suggest that conscious deliberation on complex problems can help overcome initial biases [43], while other authors recommend focusing on egalitarian goals [44], and some have proposed using checklists to mitigate the adverse impact of implicit bias from clinical decisions [45]. Examples of checklists could include semi-structured interviews to ensure that topics that may be missed are addressed. More specifically, a checklist could include items to cover during an interview with a patient who may need an interpreter, or a discharge checklist to ensure the socio-economic needs of a patient who is homeless are addressed. In addition to checklists, educational interventions represent another tool that may have potential to mitigate bias.

Several educational interventions related to implicit bias include use of the Implicit Association Test (IAT), which is available online. Developed by researchers in the 1990s, the test measures response times to track implicit associations between certain concepts [46]. The IAT has been researched extensively and found to be insensitive to procedural variation [46, 47] and less susceptible to faking [48]. The

IAT has also demonstrated solid internal consistency [49–52], and high test–retest reliability [53]. The experience of taking the IAT involves using a web-based platform and clicking keys in response to visual depictions of specific word categories. For example, concepts such as “black” and “white” could be associated with “good” and “bad.” Individual response latency is then calculated and used as a proxy for the strength of implicit associations between categories. Once completing the test, individuals are provided feedback regarding the degree of their associations. For example, they may show a low, moderate, or strong association between concepts, or no association at all. The test has been used as a measure of bias, and also as a trigger for self-reflection and discussion [14, 54].

Tackling implicit bias through education offers a unique approach. Several authors argue that the process of recognizing and managing implicit biases requires thinking beyond existing models for cultural competence education which emphasize over-simplistic thinking about prejudice. For educators to suggest that there are “good” people who can educate “bad” people to stop their discriminatory behaviors perpetuates stereotypes by attributing undesirable attitudes and behaviors to a social group that no one wants to identify with. Therefore, rather than pursuing the goal of eliminating bias, literature suggests that interventions that address implicit bias should emphasize the responsibility for learners to acknowledge the potential negative impact of bias on patient outcomes and take responsibility to overcome these negative effects.

We recently proposed a six-point framework for integrating implicit bias recognition and management into health professions curricula [55]. Key ingredients include a safe learning environment, fostering empathy, teaching learners about the science of implicit bias, demonstrating how bias influences inequities, and patient-level outcomes, increasing awareness of an individual’s implicit biases, while enhancing conscious efforts to overcome biases. We also emphasize that any training regarding implicit bias should consider the power dynamics and socio-cultural context in which structural biases may influence teaching and learning.

### 14.3.3 *Implicit Bias Training and Empathy*

As described above, enhancing perspective taking and empathy is an essential ingredient in implicit bias recognition and management curricula [56–58]. Evidence suggests that encouraging the use of *cognitive empathy* or intentional *perspective taking* to appreciate the situation faced by a particular individual or group reduces activation of negative stereotypes about that group [59–61].

Few studies have explored whether empathy training might reduce implicit biases. In the teacher training domain, Whitford, et al., argue that lack of empathy regarding disparities faced by students of color would lead teachers to react negatively and punish students of color for perceived behavioral defiance. They suggest that increasing teacher empathy facilitates stronger teacher–student relationships and positive academic outcomes. In response, they designed an empathy training

intervention that included personal narratives of explicit racism faced by black students while they encouraged participants to think about these students and imagine themselves in their shoes. When compared to a control group, they found that a brief empathy-soliciting intervention had a statistically significant effect on reducing negative implicit bias towards black individuals, as assessed by the race IAT [26].

In contrast, Burke, et al., examined if social contact and empathy mitigate bias towards gay or lesbian individuals among heterosexual undergraduate medical students. They found empathy training was associated with a reduction in explicit bias, but not implicit bias. They suggest that more research is needed in this area [27].

### ***14.3.4 Common In-Group Identity***

A further strategy employed within implicit bias recognition and management curricula involves facilitation of a common in-group identity. The common in-hypothesis was first proposed by Gaertner and Dovidio who described how efforts to manage bias would benefit from a shift away from “us” versus “them” discussions by emphasis on the shared “we.” They found that bias may be reduced when people who are perceived as belonging to another social group are re-framed as members of the same group as the participants [62]. They also proposed that common in-group identity may be achieved by increasing an intentional focus on common membership, goals, etc., [63]. Facilitation of a common in-group identity has been found to increase the bonds and sense of oneness that facilitate perspective taking exercises [61] and the arousal of empathy [64].

### ***14.3.5 Mindful Practice Training***

Another educational strategy related to both empathy and implicit bias training is mindfulness or mindful practice training. Mindful practice training involves training individuals to pay purposeful attention in the present moment, with a non-judgmental perspective.

Mindful practice training has the potential to increase empathy [63] while increasing compassionate responses to suffering [65, 66] and fostering feelings of social connectedness [67]. Evidence suggests that mindful practice training may reduce the likelihood that implicit bias will be activated [68], while reducing stress and cognitive load [69–73]. Burgess et al. argue that mindful practice training also facilitates implicit bias management by enhancing self-regulation [70, 74, 75].

An example of a mindful practice intervention could include didactic material, mindfulness meditation, narrative exercises, and facilitated discussion. In their sentinel study, Krasner et al. used these components with 871 family physicians over 8–10 weeks. They used the Jefferson Scale of Physician Empathy and found total empathy improved (effect size, 0.45; 95% CI, 0.24–0.66;  $p < 0.001$ ), with standing



in the patient's shoes (effect size, 0.36; 95% CI, 0.11–0.60;  $p = 0.003$ ), and perspective taking (effect size, 0.38; 95% CI, 0.16–0.60,  $p = 0.001$ ) demonstrating significant positive changes [69].

## 14.4 Emerging Research on Implicit Bias and Empathy

Our research on reducing mental illness stigma through implicit bias education has found that fostering empathy is an essential ingredient of implicit bias recognition and management curricula.

Early in our journey, we witnessed the biases demonstrated towards individuals presenting with mental illnesses in an acute healthcare environment. Well-intentioned physicians and nurses were labeling patients and their caregivers, and implicit bias was linked to avoidance behaviors, helplessness, and frustration. Patients and caregivers perceived such behaviors as discrimination and prejudice, leading to further helplessness, and perpetuating disconnection.

Using these findings and integrating existing literature on implicit bias recognition and management [55, 76], we designed a curriculum that included didactic lecture, group discussion, role-play, debriefing, and self-reflection exercises. The curriculum was initially implemented through a 4-h training workshop delivered to physicians and nurses. Our learning activity was designed to bring implicit biases into conscious awareness, while fostering critical reflection and enhancing conscious efforts to overcome biases. The first portion included both individual and group reflection on how culture and history influence the development of individual biases. This exercise was followed by teaching on the science of implicit bias which emphasized how implicit bias influences individual behaviors and patient outcomes in the context of an emergency department. Next, we designed a role-play activity targeted towards enhancing perspective taking and fostering empathy. Towards the end, we included case discussion to increase relevance of the topic within the clinical context where attendees worked, and the activity concluded with a group discussion.

When we followed individuals after they completed this training over a period of 12 months, we found that participants experienced frustration when they learned about their biases and returned to their workplace. They struggled with the information that there are biases that influence them outside of their control, and despite their best intentions. This led participants to critically question how the socio-cultural environment within their workplace perpetuated their biases in the first place. As these individuals gradually reflected on their biases, they began engaging in explicit behavioral changes. Eventually, openly acknowledging that they are vulnerable to influence from their biases with one another reinforced this change and they began to perceive change in themselves, while becoming change agents in their workplace culture. One of participants, who worked in an emergency setting, described the training by acknowledging the core function of triage and how the

care of acute health problems in emergency settings could perpetuate the problem of biases. They shared,

I think that's what the workshop was really good at, opening people's mind to the fact that maybe not everything – maybe they do need to be self-analyzed a little more because maybe a lot of these ingrained habits are not based on the ideals that they would necessarily want them to be based on...if there's any kind of patient that is not being seen as timely as another patient, I always look through the lens of why this could be happening...So every time I see that happening, every shift that I have, I think to myself 'Are we being biased against this patient?' [77]

#### ***14.4.1 An Integrated Theory of Implicit Bias Recognition and Management***

Our research adds several new insights to the understanding of how education might be effectively applied to the problem of implicit bias and empathy. When our participants were confronted with their biases, their reflection was drawn back to their identity. Having bias meant they did not belong, because this knowledge conflicted with an idealized version of themselves that they aspired towards yet struggled to achieve [78]. In contrast with previous research on feedback, their experiences of self-doubt and their emotional reactions did not appear to distract from their learning and the process of behavioral change that was triggered. There were also important variables in the feedback conversation that likely influenced their engagement with bias-related feedback. Among these influences are psychological safety (e.g., when individuals feel the environment, they receive feedback is safe) [79] and actionable steps to remediate the new information they learned.

We found that feedback seeking, role reflection, goal setting, and role modeling can be supported and sustained through sharing and dialogue. Recognizing and managing implicit biases also requires a balance between striving for ideals while accepting shortcomings. The process cannot be achieved by individuals alone. Figure 14.1, below, depicts a synthesis of all findings as an integrated theory of implicit bias recognition and management.

Our findings advance existing knowledge by introducing a previously unexplored dilemma related to implicit bias and empathy: *How do we break bias without breaking ourselves?* While we know that bringing an individual's implicit biases into conscious awareness may also have unintended consequences, during qualitative interviews, our participants described deeply emotional reactions. When they were challenged to look in the mirror, they were confronted with a vulnerability that they were not expecting. The resulting reflection, reconciliation, and behavioral changes related to the tensions between who they are and who they strive to be. This research introduces a challenge to the relationship between empathy and implicit bias by suggesting that self-empathy is a key ingredient in implicit bias recognition and management curricula.



Fig. 14.1 A model for implicit bias recognition and management

## 14.5 Future Directions on Bias and Empathy

### 14.5.1 Empathic Strain and the Need for Self-Empathy

Training individuals to manage their implicit bias may require attention to the idea of fostering empathy for the self. While much of what we know regarding empathy education involves training that fosters empathy for others, there may be unintended consequences. For example, when you place a health professional who works within a highly perfectionistic environment in a training activity designed to foster empathy, this may increase the pressure they place on themselves. Increasing rates of burnout demonstrate the constant challenges faced by clinicians across geographic jurisdictions and practice environments. While burnout syndrome is a distinct concept, empathic strain is an important contributor to burnout. Working within challenging clinical contexts can lead to vicarious trauma or compassion fatigue when individuals begin to internalize their patients' distress or experience shame and guilt in regards to their action. Risk factors for empathic strain include workplace factors and self-neglect. Therefore, fostering self-empathy, self-forgiveness, and self-compassion are important techniques that may buffer against the risk of empathic strain and improve empathy.

An increasing number of organizations are encouraging self-care and introducing interventions to cultivate self-empathy. Through programs that include peer-support initiatives and offer destigmatized counseling and therapy services, recognition is growing that empathy for others requires empathy for self.

### ***14.5.2 When Empathy and Instinct Collide***

In my several years of teaching implicit bias to medical learners and practicing health professionals, there is growing critique about the concept of bias and whether implicit bias training achieves tangible and sustained outcomes. While many agree that the topic of implicit bias should be subjected to greater theoretical and empirical scrutiny, there are also concerns about how discussing issues relating to privilege may provoke defensiveness and divide groups from each other, thus eroding empathy instead of enhancing it.

Despite this challenge, implicit bias provides a unique way to discuss divisive issues because biases are something that all of us share. When discussing bias there is no *us* versus *them*. Learners who belong to traditionally privileged groups are just as susceptible to the influence of their hidden biases as those who experience oppression and marginalization. Learning about implicit bias recognition therefore introduces a challenge that relates to empathy. If every individual may exhibit bias, then every individual may experience its negative effects.

Many residents and practicing health professionals are raising concerns about fostering empathy when they experience hostile racial prejudice in the workplace. I am often asked, “How can I demonstrate authentic empathy for someone who does not want me to exist?” Such experiences describe the challenge when empathy and instinct collide. Asking someone who is being victimized, harassed, or discriminated against to practice unconditional compassion and forgiveness may lead towards an unrealistic goal. Despite these challenges, fostering empathy through implicit bias education may present a unique way to normalize experiences of bias as both perpetrator and victim. As described earlier in this chapter, striving towards an impossible ideal must be balanced with acceptance of our flaws, vulnerability, and shared humanity.

## **14.6 Conclusion**

In this chapter, we describe the concept of implicit bias and how it relates to empathy. Through a review of educational strategies to address implicit bias, we highlight that fostering empathy is an essential ingredient for any education involving implicit bias. Our research on implicit bias also demonstrates a unique challenge when training for empathy through implicit bias recognition and management curricula: the importance of cultivating empathy for self while fostering empathy for others. Addressing both implicit bias and empathy therefore requires striving for self-improvement while practicing self-acceptance.

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# Chapter 15

## Empathy, Burnout, and the Hidden Curriculum in Medical Training



Rabia Khan and Maria Athina (Tina) Martimianakis

### 15.1 Introduction

In its most colloquial sense, “empathy is a reaction of one person to the experience of another.” [1, p. 688] In medicine, an empathetic encounter between a clinician and a patient includes communicating an accurate understanding of the patient’s experience [2]. A long-standing concern of the literature has been whether empathy is a “trait” [3] or a “state” [2], meaning, is it an intrinsic quality of the individual or a valued skill that can be taught. For a health system, if empathy is viewed as a trait, the educational imperative becomes one of selecting naturally empathetic individuals for the caring professions. In other words, it is an issue of concern for admissions committees. If viewed as a state, however, the educational system is responsible for ensuring that the curriculum supports the socialization of trainees to view empathetic behavior as an expected norm for future clinicians. When empathy is seen as both trait and state, then empathy resides both within the individual and within medical schools, who remain responsible for teaching empathy to their trainees. However, how medical schools ensure trainees go on to become empathetic practitioners necessitates further exploration.

In this chapter, we will focus on how the hidden curriculum in medical training can reinforce (or diminish) empathetic behaviors in clinicians. The hidden curriculum can be thought of as “that which the school teaches without, in general, intending or

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being aware that it is taught” [4, p. 5]. For instance, aspects of the hidden curriculum like inadequate role modeling will be discussed to illustrate how such curricular effects can create distress in trainees and subsequently lead to lack of empathy and breaches in professionalism. By drawing on the concept of the hidden curriculum, we will also examine what happens when responsibility for empathy and self-care is placed on individuals instead of that responsibility being placed on the educational system to reform structures that impede the capacity of trainees to engage in empathic care. In the health professions, the education system goes beyond the traditional classroom setting. Competing interests between an educational mandate and the *business* of providing health care (which is informed by billing practices) can influence the hidden curriculum. It is the aim of this chapter to address how the hidden curriculum acts as both scapegoat and mediator for the relationship between distress and empathy within medical education and thus how the hidden curriculum can be harnessed to positively affect change within this system [5, 6].

## 15.2 Physician Empathy in Medical Education

Biomedical approaches dominate inquiry into the relationship between patient health and empathy. Biomedical studies of physician empathy attempt to associate empathy with improved patient outcomes [2]. Such studies are used as evidence that empathic physicians are therapeutically beneficial for patients and thus “empathy” should be a necessary quality for a physician to have. The rationale for investigating the relationship between physician empathy and the delivery of patient care is evidenced in the ongoing dispute regarding whether empathy decreases over clinical training. Many studies of undergraduate medical students contend that empathy declines in the third year of medical training, based on quantitative, self-report studies [7–9]. This time-point corresponds with the first year of patient interaction for most students in North American medical schools. Similarly, in studies on residents, empathy is found to decrease in the early stages of post-graduate training [3]. Thus, “lack of empathy in trainees” is viewed as a danger to patient care and permits a medical gaze that centers on the patient–physician interaction. Yet, little is understood about how empathy might be taken up or understood by students and faculty themselves. Furthermore, little or no exploration is given to how medical education can modulate empathy and its consequences within clinical practice [6].

Consequently, such studies form the basis of an imperative that empathy be taken up institutionally. For instance, organizations like The Institute of Medicine (now the National Academy of Medicine) describe empathy as one of the six factors necessary for achieving patient-centered care. They state patient-centered care requires “qualities of compassion, empathy and responsiveness to the needs, values and expressed preferences of the individual patient” [10, p. 48]. In medical education, “physician empathy” has been an educational objective in the United States [11], Canada [12], and Switzerland [13] for many years and has been incorporated as a focus for training in their competency frameworks. As an overarching educational

objective, physician empathy is typically described as a combination of communication and caring competencies. Medical students are taught that it is important to pay attention to the patient's story, appreciate and understand the specific situational issues that relate to the patient's health, communicate back to the patient their understanding of the patient's circumstance to ensure its accuracy before proceeding to act on this understanding in a caring, therapeutic way [12, 14, 15]. The responsibility to orient to the patient in this way is captured under the umbrella of "professionalism." In Canada, for example, both the 2005 and 2015 iterations of the CanMEDS framework describes the competency of professionalism as follows:

...exhibiting appropriate professional behaviours and relationships in all aspects of practice, demonstrating honesty, integrity, humility, commitment, compassion, respect, altruism, respect for diversity, and maintenance of confidentiality...[and] demonstrat[ing] a commitment to physician health and well-being to foster optimal patient care [16].

While this description does not mention "empathy" specifically, it forms the basis for a formal curriculum on professionalism, such that empathy is institutionalized as an educational objective, funneling resources to medical training and assessment of empathic skills in trainees.

In addition, situating physician health within the professionalism competency expands the notion of physician empathy beyond the clinical encounter, to a medical culture that requires physicians to have self-empathy and to show empathy for their colleagues in order to champion their own health needs. This addition to the most updated version of the CanMEDs framework reflects the Royal Colleges' acknowledgement that physician health and wellness is a problem, and that, as trainees' enculturation begins at the undergraduate level, this may be where intervention can be most effective. However, demonstrating physician empathy and performing the role of an empathetic physician are two different things. The former requires that individuals have the psychological capacity to perform this role, whereas the latter requires that physicians be housed in institutions and environments that reinforce empathetic performance both formally and through the hidden curriculum.

### 15.3 The Hidden Curriculum

To be viewed by an institution as empathetic requires that health professionals exhibit empathic behaviors in day-to-day practices. To be able to approach clinical duties in an empathic way requires institutions to move away from simply issuing value statements and to instead establish the overarching structural and cultural conditions for empathic care models to flourish. For trainees, the enculturation of empathy as a norm occurs during medical training, through both the formal and hidden curricula. Hafferty and Franks propose that "medical training is at root a process of moral enculturation, and that in transmitting normative rules regarding behavior and emotions to its trainees, the medical school functions as a moral community" [17,

p. 861]. They acknowledge that only a portion of medical culture is conveyed within the formal curriculum and that most of what medical students accept as the values, attitudes, beliefs, and related behaviors is learned through the hidden curriculum. For instance, if a trainee is taught that empathy is important to patient care by a supervisor during a clinical encounter and subsequently witnesses that same supervisor making derogatory comments about that patient, the trainee may be conflicted on whether empathy really matters or is just “for show.” Thus, studying the learning environment may be key to understanding how empathy is being taught well (or poorly) and may help explain why empathy is reported to decline in trainees during their clinical years.

Specifically, the clinical years mark a transition from the classroom to health-care or hospital settings. Students are especially vulnerable to the hidden curriculum’s effects because they face conflicting demands as learners and health-care providers. It is in this environment that lessons of professionalism are put to the test. What is learned in the classroom is now either reinforced or undermined by what is observed as accepted and rewarded practice in the workplace. It is not surprising then that in studies of distress in trainees, the hidden curriculum effects are particularly important for appreciating the interrelationship between personal attributes, attitudes toward patients, and the actual behaviors and actions of health-care providers. Students want to succeed and receiving mixed messages can complicate their training careers, causing distress and worry. This includes messages related to how to care for patients, with compassion and understanding, without compromising their well-being. In addition, health professionals speak about the tension of not being able to work in a way that reflects their personal and professional identities. In other words, they find themselves caring for patients in ways that they feel are inappropriate or contrary to how they would have wanted to approach their clinical duties. They juxtapose their value systems with the values of an organization that is concerned with the allocation of resources, efficiency, and outcomes, at the expense of relationships with their patients. The implications for training are a potential misalignment between what is taught as important and espoused by individuals as part of their professional identity, and what is actually practiced. Thus, the hidden curriculum may be the source of confusing enculturation messages that contribute to trainee distress and failure to enshrine empathy within medical trainees. However, paradoxically, it is also the hidden curriculum that may hold the key for ensuring that empathy is preserved as distress is minimized, for it can also ensure appropriate alignment between educational imperatives and the realities of the clinical workplace [18].

## 15.4 Physician Empathy and Burnout

The decline in empathy observed across years in training is often attributed to distress among health professionals [2]. The term “distress” is used broadly and includes a taxonomy of sweeping social and phenomenological conditions including

a low sense of well-being, reduced quality of life, depression, and burnout. Distress is said to significantly influence self-assessed empathy in medical students and residents [2]. Of the many forms of distress experienced by health professionals, burnout is particularly relevant to the educational setting. In its broadest definition, burnout can be thought of as an occupationally acquired stress syndrome. In its earliest iterations, burnout was synonymous with emotional exhaustion and was therefore seen as psychological distress arising from work [19]. Studies attempting to link burnout with empathy in medical education observe an inverse correlation between empathy and burnout among medical students as they begin participating in clinical encounters. Specifically, while students' empathy is said to decrease with years in training, burnout is believed to increase [20, 21].

What is known about the relationship between burnout and empathy in the health professions mostly stems from quantitative studies of physicians and nurses. In their review of the relationship between burnout and empathy in physicians and nurses, Williams et al. contend "although there is evidence to suggest a negative relationship between empathy and burnout, it remains unclear as to how they interact" [22, p. 334]. Three plausible theories have been proposed regarding the relationship between empathy and burnout [21], as illustrated in Table 15.1.

As the study of burnout itself began in health professionals who experienced prolonged exposure to patient care, the explanation for why a lack of empathy may contribute to burnout makes intuitive sense. Burnout has been linked to compassion fatigue, i.e., "caring too much and for too long," which creates the conditions for erosion of empathy [19]. However, a loss of empathy further exacerbates burnout as health-care providers lack the capacity to connect with patients and can no longer derive meaning from their work. In trainees however, occupationally acquired burnout cannot be ascribed to time in service alone, as many are just beginning clinical care. Instead, a lack of clarity between what constitutes clinical empathy and how

**Table 15.1** Studies reflecting interaction between burnout and empathy in physicians and nurses

Interaction between burnout and empathy	Theoretic explanation	Studies
Empathy creates burnout	Compassion fatigue theory (being too compassionate for too long leads to burnout) Emotional dissonance theory (emotional dysregulation that arises when the emotions an individual feel are in conflict with the emotions they express because of expected social and/or professional norms)	Wilkinson et al. [21] and Lamothe et al. [23] Tei et al. [24]
Burnout decreases capacity for empathy	In nursing, lower empathy is seen as a defense mechanism against human suffering In physicians, lower empathy is attributed to work overload and emotional exhaustion affecting physicians' motivation to empathize	Astrom et al. [25] Ferri et al. [26]
Empathy is a protective factor against burnout	Professional achievement is felt by more empathic physicians and nurses thus generating personal satisfaction in job performance	Zenasni et al. [20]

this differs from affective empathy may explain empathic deficits in trainees. Clinical empathy occurs during a physician–patient interaction where the physician demonstrates understanding for the patient’s situation, communicating that understanding and asking if it is accurately understood and offering the patient help, often in the form of the therapy being provided [14]. Trainees who mistake affective empathy (physicians feeling the same feelings as their patients) for clinical empathy may experience greater distress than those who learn and practice clinical empathy [2]. Trainees may lack the self-regulation required to distance themselves from (but not depersonalize) their patients.

In studies on physicians and nurses, where burnout is said to lower empathy, the work environment is viewed as culpable in this relationship. For physicians, higher burnout may be due to workload, and the corresponding emotional exhaustion experienced as a consequence. However, in trainees, a poor sense of personal accomplishment and depersonalization may affect their ability to empathize, rather than workload or emotional exhaustion [20]. Upon entering the clinical practice phase, trainees confront a number of potentially jarring realities of health care, including the following: (1) illness, human suffering and death that may heighten feelings of vulnerability; (2) increased responsibility for patient care in the face of an inability to always find a “cure” for patients illness and a lack of clarity about what is the “right thing” to do; (3) a medical culture that promotes “perfection,” stoicism, and self-sacrifice; and (4) limited social support to manage feelings of uncertainty, vulnerability, and fear of academic failure [2, 27]. At the same time, students may shift focus to technology and objectivity (organs, molecules, and “data”) rather than the humanistic aspects of patient care [2, 28]. Given that demonstrating understanding of a patient’s illness and offering help (in the form of treatment) are essential components of clinical empathy, when trainees lose confidence in their professional abilities in this way, it may render them unable to demonstrate empathy during subsequent patient encounters. Furthermore, while navigating these realities of clinical learning, as a means of self-protection detachment and depersonalization may arise due to a trainee distancing themselves from their patients in order to restore a sense of psychological well-being, thereby also reducing empathy [2, 20].

A third potential interaction between burnout and empathy is that empathy may prevent burnout [29]. Engaging in empathic clinical encounters may foster greater workplace satisfaction and help health-care workers find meaning in their professional activities [29]. For trainees, by learning how to be clinically empathic and demonstrating this skill in clinical encounters, they may build confidence and satisfaction in their professional abilities [30]. Furthermore, as trainees develop skills in clinical empathy, they also develop emotional regulation skills. The result is an improved capacity of the trainee to be aware and attend to their own emotions in relation to their patients, thereby allowing them to understand a patients’ experience without being overwhelmed by it. As Halpern articulates, “being empathic supposes awareness of negative emotions, and requires the physician to practice self-reflection, and to accept negative feedback; [and that] these skills are resources against stress and burnout” [20, p. 346]. This reasoning is the basis for reflective practice as a means to self-awareness that promotes pro-social and humanistic qualities in medicine.

The existing articulations of the relationship between burnout and empathy have (unintended) implications for health professionals. For instance, if depersonalization leads to low empathy in patient encounters, physicians and trainees are seen as providing poor patient care (being “bad doctors”). Furthermore, if being too empathic is seen as leading to burnout, health professionals may be viewed as culpable in their own adverse health (being “bad patients”). Faculty labeled as “burnt out” may be seen as unable or unwilling to empathize with patients and thus unlikely to teach this skill by role modeling empathy’s associated behaviors (“bad teachers”). Similarly, “burnt out” trainees are seen as coping poorly with the demands of their training program (“bad students”). For faculty, it becomes each individual’s responsibility to seek treatment and become better, not just as caregivers but also as teachers [31]. For trainees, a failure to deploy the “right” form of empathy within the clinical encounter becomes subject to assessment by an education system that oversees the occupational space as an educational one. As such, good health becomes a professional and educational imperative.

To date, interventions to improve professionals’ health (e.g., wellness programs, mindfulness, resiliency training programs, and Balint groups) have remained at the level of individual practitioners and learners [2]. Resiliency training programs in particular are designed to teach trainees how to bounce back from unexpected events and adapt to changes within their training environment. However, as these programs are predicated on the notion that the individual has responsibility for their own self-care, they fail to consider the way the health and education systems impact empathy and burnout, either positively or negatively.

In considering these system-level effects, aspects of the hidden curriculum including mistreatment of trainees, inadequate learning opportunities, and problematic training environments [2] are frequently cited as factors negatively affecting trainees’ health and their ability to behave empathically. Implicit in these studies is a narrative that students are victims of the hidden curriculum and its effects [18]. In the next section we will explore this dominant discourse that the hidden curriculum is a means by which empathy is eroded and distress perpetuated. We will also explore how the mediating effects of the hidden curriculum (including role modeling and institutional change) can be harnessed in a positive manner to strengthen humanistic qualities essential to medical practice.

## 15.5 Burnout, Empathy, and the Hidden Curriculum

Over 20 years of medical education scholarship has documented the socializing mechanism of the hidden curriculum; the ways in which learners must quickly pick up what is accepted and not accepted as germane practices in order to be successful [4]. The most intuitive place wherein this occurs is within the educator–trainee relationship. Chuang et al. argue that the hidden curriculum in medicine is one where “each attending physician is a role model and each medical student an impressionable learner. This learner will see the physician’s positive and negative attributes.



In any one-on-one interaction, the learner will consciously and unconsciously pick up cues from every word, every action or inaction, every smile, smirk, and roll of the eyes” [32, p. 316.e2]. Most research in the hidden curriculum has focused on the desensitizing effects of negative role modeling [18]. Students have reported numerous instances where their faculty have role modeled, and in the process normalized, what students have been taught constitutes (un)professional behavior toward peers and patients [2, 33]. In the most overt example, the issue of mistreatment of medical students by superiors has been shown to dishearten and shape negative attitudes of trainees toward themselves and their co-workers [2]. It would be difficult to expect students experiencing situations where mentors or superiors belittle, humiliate, sexually harass, or discriminate against them [7–9] to demonstrate empathy during times of distress.

However, it would be disingenuous to attribute the hidden curriculum’s effect solely to supervisors’ role modeling (un)professional behavior. The educator–trainee interaction does not occur in a vacuum. Rather, it exists within a complex health-care system in which competing interests (efficiency, humanism, self-care, etc.) exert their effect on daily practice. For instance, trainees may learn in a formal curriculum that empathy involves taking time to listen to a patient’s history and reflect an understanding of how a treatment option may affect their quality of life. However, in the context of a health system that defines “quality” as efficiency of time (e.g., minimizing wait-times) and cost (e.g., reducing hospital stays), systemic constraints limit time for patient–physician interactions overall. Thus, students may experience a cognitive dissonance around what is being taught and what is being seen in practice as they watch their teachers trying to fulfill work expectations. In an ideal world, health professionals would have sufficient time to learn and demonstrate empathy under conditions free from competing interests. As these ideal conditions do not reflect the realities of practice, the value placed on “empathy” as a skill to be learned and demonstrated will invariably relate to how empathy is viewed by the broader education and health system within which role modeling occurs. To interrupt this negative socializing mechanism requires considerable adjustment of health-care workflow and practices. The notion of formal curriculum then is expanded to include how the aspirational values of our current educational competency frameworks can be used as starting points for reforming workplace environments. It requires re-thinking what we mean about faculty development. It is not only about ensuring that teachers know what to say to medical students but also working toward structural reform so that what they show medical students is aligned with what they are teaching them [33]. We need teachers to think of themselves as change agents and thus making teaching a collaborative effort between learner and teacher in negotiating conflicting imperatives. Aspirational values need not always be realizable. Teaching students how to navigate complex health-care systems requires teaching them to appreciate how clinical empathy is different from affective empathy, how aspirational values can be a platform for advocating for workplace reform, and how self-care is a communal effort.

This is further exemplified by considering how empathy and burnout are reified within health professions education research and practice. The reliance in clinical

medicine on the putative objectivity of the natural sciences and the scientific method reinforces the notion that objectivity and certainty are expected and primary competencies of physicians [28, 34]. As a result, clinical competence (comprising a body of knowledge primarily derived from quantitative research) is viewed as essential, while professional competence (comprised of a code of conduct derived from a “subjective” set of social norms) is considered as merely facilitative to the patient experience. Currently, despite an established link between empathy and patient outcomes [2], empathy is not seen as a necessary component of clinical competence but rather framed as a desirable quality of professional competence. The placement of “empathy” and “physician wellness” as professional rather than clinical competencies promotes the implicit belief that humanism is secondary to scientific knowledge [28, 34]. Frameworks within the health professions that perpetuate this notion thus create the hidden curriculum that devalues empathy. Addressing this hidden curriculum effect requires addressing the source of the problem, namely the conceptual and practical decoupling of professional behaviors from the performance of expertise. Students need to be rewarded equally for treating patients with empathy and compassion as they would for demonstrating understanding and appreciation of a clinical problem [30].

However, simply reforming current frameworks will be insufficient to mitigate the negative effect of the hidden curriculum [35]. Rather, better teaching of professionalism and ethics, increased attention to faculty development to encourage better role modeling, stronger regulation of unprofessional behavior, incorporation of reflective practice and incorporation of arts, humanities, and social science teaching are necessary to address the “ills” of the hidden curriculum [18]. However, to what degree this can be achieved in the current health-care climate is yet to be determined. As Kuper, Whitehead, and Hodges explain, the hidden curriculum is more about workplace institutional culture than anything aimed at the individual. Thus, a true transformation requires a greater capacity for *institutions* such as hospitals to “understand themselves” and to address problematic organizational practices at the source [36].

Kuper, Whitehead, and Hodges outline that “...framing conduct and *professional behavior* as characteristics of individuals will have to give way, at least in part, to understanding how the choices made by individuals are shaped and constrained by *institutional culture*—which has important implications for assessment” [36, p. 50]. Specifically, they believe that this change is possible but requires a change in how we approach the study of the hidden curriculum itself:

...[it] will, therefore, be necessary to [1] make the hidden curriculum visible; [2] make the hidden curriculum “strange” by knowing our history and adopting a certain historical humility towards current practice; and [3] take responsibility for the hidden curriculum at an institutional and organizational level by engaging social scientists in our organizations and institutions...and by opening the door to a discussion about what forms of knowledge underpin medical and health professional competence beyond the strictly scientific [36, pp. 49–50].

Making the implicit explicit, the hidden curriculum is no longer something that remains misunderstood but guiding. Rather, it becomes something that can be

understood and transformed. In order to move from placing responsibility for teaching and learning solely on the individuals and the academic institutions that train them and toward the health system as a whole, future studies require consideration of historical, cultural, economic, and political underpinnings of socialization [37] that inform the hidden curriculum as it pertains to empathy.

## 15.6 Conclusion

In this chapter, we explored the interrelated constructs of burnout and empathy and how these constructs are mediated by the hidden curriculum in medical education. While there is evidence to suggest a negative correlation between empathy and burnout, the nature of this relationship is poorly understood. To date, natural science and quantitative approaches have dominated this field of inquiry. While some qualitative studies have been published in this domain [38, 39], further work that examines the nuances of the relational aspects of patient care will help us understand the sociocultural links between empathy and burnout. Furthermore, while it may be tempting to simply study the negative aspects of the hidden curriculum that contribute to distress, this inevitably leads to interventions that exclusively focus on individuals. Health system factors such as workplace culture must also be considered. Valuing empathy as a clinical skill through role modeling, and reinforcing this value by shifting workplace mandates to encourage taking the time needed for empathic encounters, are necessary first steps to ensuring humanistic values are learnt by trainees. Continuing to focus efforts at the level of the health system can help harness the positive aspects of the hidden curriculum toward the pursuit of compassionate and humanistic care.

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# Chapter 16

## Thwarting Stigma and Dehumanization Through Empathy



Aniuska M. Luna, Emily Jurich, and Francisco Quintana

### 16.1 Introduction

When human life begins and ends, whether corpses are human, and what human dignity is are few examples of concepts in the natural and social sciences riddled with definitional uncertainties [1, 2]. These uncertainties hinder the testing, measurability, and predictability of the phenomena represented by the concepts. Stigma and dehumanization are likewise definitionally fraught concepts, yet their immateriality and debatability do not lessen their individual and social impacts [3, 4]. Their presence in health-care contexts is particularly problematic because stigma and dehumanization can nullify the caring and inclusive aspects of healing, on the basis of group membership boundaries. In addition, the experience of stigma is repeatedly linked to the presence of dehumanization and vice versa [5]. In spite of that, the relationship between the two and how it facilitates or hinders healing and care were not found comprehensively explored in the literature reviewed.

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As a starting point of discussion aimed at possible future interventions, we review the interplay between stigma and dehumanization in health care. We begin with an overview of both phenomena, their definitions, and the challenges in studying them, and then describe how stigma and dehumanization manifest in health care. Empathy is discussed as a potential inhibitor of stigma and dehumanization.

## 16.2 Stigma and Dehumanization: An Overview

An early influential writer on the topic of stigma, Goffman, defined it as an attribute that marks and distinguishes the individual from others, discredits the person, and reduces their social status [6]. Since Goffman, numerous alternative and elaborated definitions of stigma have been offered. For example, more contemporary scholars, such as Link and Phelan, conceptualize stigma as the labeling, stereotyping, separation, status loss, and discrimination of a group, which occurs in a power situation [7]. Regardless of how stigma is defined, it is a socially constructed phenomenon that occurs in every society and has many negative consequences (e.g., social, physical, and psychological) for those who are stigmatized [8].

Similarly, the myriad of areas and levels where dehumanization manifests are also reflected in the diversity of its definitions. Dehumanization tends to be defined as a psychological phenomenon that facilitates aggression [9]. In that capacity, it denies human community and identity [10], and labels and characterizes others as non-humans [11, 12]. For Fiske dehumanization is a denial of mind in others, while Leyens define it as a degraded recognition of emotions in out-groups and in-groups that they termed “infrahumanization” [13, 14]. In most of these iterations, the phenomenon is attached to morality, positive and negative views of what being human is, and/or doing good and bad [15]. Negatively valuing and perceiving a person or group is also a part of stigma since innate or embedded negative characteristics rather than imposed or socially constructed ones are attributed to the stigmatized [16].

The shared themes and outcomes of stigma and dehumanization resonate, respectively, in two of their most cited examples: the experience of individuals affected by HIV/AIDS, and the groups targeted by Nazis during the Holocaust. The themes include a fear of contagion, prejudice, pollution, and immoral behaviors that could be transmitted to those who are unpolluted, clean, and moral [17, 18]. Categorizing individuals as HIV positive or as animals or diseases has resulted in their social, political, and economic isolation (e.g., the denial of shelter or access to health-care services) [19]. The protections and moral considerations that hindered their abuse are lifted through their negative branding in stigma, or their being perceived as individuals other than human in dehumanization [18, 20]. The historical marginalization of the lesbian, gay, bisexual, and transsexual (LGBT) community facilitated the negative branding of HIV/AIDS as a “gay disease” even though it can affect anyone regardless of race, age, gender, or sexual orientation [20]. The depiction of Jews,

Roma, Prisoners of War, and enemy soldiers as non-humans during the Holocaust and World War II was used to justify violence against them [17].

Many of the attributes and characteristics linked to dehumanization are similarly present in stigma. The following personal communication shared by an associate (“Amy”), who was diagnosed with bipolar disorder when she was 18 years old, highlights how the two phenomena may coincide:

Since my teammates, friends, and acquaintances knew me before my psychosis, I thought they would not judge me after it. But, I was terribly wrong. My friend on the soccer team refused to talk to me because he believed I was a witch. My best friend also terminated our friendship due to the fact that she was scared of me. In addition to my loss of friendships, another friend attempted to convince me that my psychosis was not a symptom from my bipolar disorder but from being possessed by a demon. Soon after I was labeled with these offensive stigmatizing names like “witch” and “demon,” I began to feel like my illness was my fault. I also began to feel as though I was an outcast from everyone but the few who have been hospitalized for a mental illness. I now understood that because I have bipolar disorder I am a completely different person to the people around me. To avoid feeling like the black sheep, I isolated myself from everyone but my parents for 2 years. (Quintana, Personal communication, 2018)

The previous recollection illustrates the experience of categorization, labeling, negative stereotyping, moral characterization, and demonization (e.g., “witch” and “demon”), and marginalization and social exclusion (e.g., “refused to talk to me” and “terminated our friendship”), described in the scholarly literature on stigma and dehumanization [12, 16]. In spite of this co-occurrence and the similarities between the concepts, the relationship between dehumanization and stigma has not been explored in depth in the scholarly literature [5, 21, 22]. More often than not, this relationship seems to be taken for granted. Bar-Tal [12], for instance, acknowledges that “the definition of delegitimization [as an extreme form of social categorization, with dehumanization one of its described means] complements Goffman’s analysis of stigmatized persons [6].” He does not explore the link further, however [6, p. 172].

Due to the dearth of more thorough texts exploring dehumanization and stigma, we struggled to define and differentiate stigma and dehumanization as phenomena when we started working on this chapter. Upon much discussion, writing, and further scrutiny of the literature, we narrowed the distinction between the definitions as follows (Table 16.1):

**Table 16.1** Defining stigma and dehumanization

Stigma	Dehumanization
Stigma is a type of violence, marked by the rejection of an individual (including the self) based on a real or imagined attribute deemed deviant, threatening, or immoral	Dehumanization is a meaning-making tool based on the framing or perception of an individual (including the self), group, or situation as human or non-human <sup>a</sup>

<sup>a</sup>Definition modified from Luna [4]



### ***16.2.1 The Link Between Stigma, Violence, and Dehumanization***

The rejection that sets the stigmatized apart from the stigmatizers represents an act of violence because of the harm it causes and the needs it maims. Regardless of the negative attributes, stereotypes, labels, prejudices, and essentializing present, stigma does not result just in the negative social categorization or valuing of someone. Stigma creates a boundary that separates those deemed undesirable or unacceptable from those embodying the opposite, more positive qualities [19]. That wedged separation maims the fulfillment of basic human needs [23], such as shelter or a sense of belonging/identity, which Johan Galtung [24]—known as the father of peace studies—also included in his definition of violence: “violence is any avoidable insult to basic human needs” [24, p. 34]. Amy’s testimonial illustrates how she is forced to redefine her social identity as her teammates and friends “outcast” and make her feel like a “completely different person to the people around” her. Her need to belong and be accepted by her peers is maimed through the stigmatization of mental illness.

Iadicola and Shupe, furthermore, state that “violence is any action or structural arrangement that results in physical and nonphysical harm to one or more persons” [25, p. 22]. Stigma is representative of nine of the ten principles of violence elucidated by Iadicola and Shupe [25] since: (1) it relies on power; (2) it can be used as an instrument of power to ascertain or create group boundaries by stigmatizers; (3) it permeates the structures of societies that are organized hierarchically; (4) it transmits power dynamics through social learning; (5) it can operate at different levels (e.g., interpersonal); (6) it is reinforced through these levels and hierarchies; (7) and can be legitimate or illegitimate [26, pp. 41–43, 37, p. 435]. Stigma, similar to the wider concept of violence, is present in every society and thus is an international phenomenon that transcends borders (principle 8), where it can also be legitimate or illegitimate in an international context (principle 9) [26, pp. 34–41].

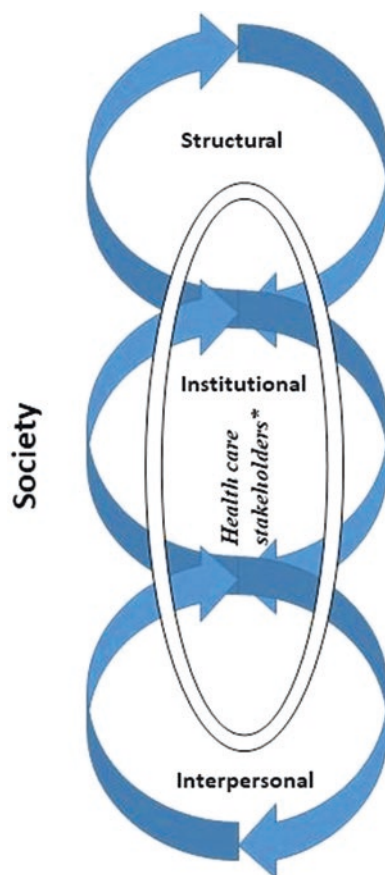
The tenth principle expounded by Iadicola and Shupe [25] looks at what causes violence at the international level [26, p. 42]. We believe that causality is a challenging relationship to determine as it relates to phenomena like stigma and dehumanization. That is why we do not attempt to draw cause and effect conclusions in this chapter. We emphasize the socially constructed aspect of both phenomena because we have seen it reflected in conflict and peace dynamics, and have experienced it professionally or in our private lives.

Dehumanization, in contrast, pervades meaning-making strategies and areas. Whether seen as a psychological mechanism that enables morally reprehensible acts, as an extreme form of stereotyping in delegitimization, or a denial of community and identity, dehumanization shapes and informs meaning made through perceptions, various communications (e.g., labels or propaganda), behavior, social organization, and other areas [12]. Dehumanization does not create the rejective boundary that stigma creates; it informs, shapes, enforces, and justifies it. For instance, medical experiments and euthanasia programs on the disabled, Jews, and

Roma under National Socialism and during the Holocaust were facilitated by Nazi propaganda framing these groups as non-human (e.g., parasites, vermin, rodents), undesirable, and unworthy [27].

The presence of a mark of rejection, with negative values, labels, attributes, and outcomes such as loss of status or discrimination permeates and constantly reinforces the different spheres of violence [28]. Once the mark exists, it supports the boundaries that exclude those who are stigmatized so that person-to-person interactions inform institutional interactions, which in turn support, de jure or de facto, the outcasting of individuals who are stigmatized. This is a systemic loop (see Fig. 16.1) since it reflects the relational nature of interactions from the micro (person to person) to the macro levels (e.g., cultural perspectives and social organization) [29]. The loop is similarly reflected in the dehumanizing meanings that have an impact on interactions and perceptions of group membership as humans or not, particularly in preparation for or in the midst of violence as treated in the conflict analysis and resolution literature [30, 31]. The systemic effects of stigma and dehumanization shape group membership, inclusion, and exclusion. Understanding this relationship

**Fig. 16.1** Systemic loop of violence and its levels.  
\*Stakeholders include patients, providers, support systems, organizations, etc.



between stigma and dehumanization may have an impact on nurturing cultures of health, their social determinants, and intervention strategies that can improve health equity [32]. The next section illustrates why this may be the case by looking at how stigma and dehumanization have been documented in health care.

## 16.3 Stigma and Dehumanization in Health Care

Dehumanization has been a topic of concern in health care for several decades because of the many areas, levels, and stakeholders it affects [33]. The concern in part emanates from the perceived disjunction between the expectations, needs, and ideals of the individuals involved in care, their contexts, and the institutions and models that frame health-care interactions [34]. Health-care professionals, such as nurses and physicians, navigate professions where the mandate is perceived to be that of healing and thus equated with caring [35]. Dominant instructional and practice models emphasizing emotional distance from patients, biomedical approaches, and the treatment of the body or illness rather than the person have been critiqued as dehumanizing because they facilitate the deconstruction of the patient as a whole person into pieces or conditions to be treated [36, 37]. Consequently, calls to humanize health professions, education, and practices to undermine reductionist traditions and empower patients and their support systems have increasingly been voiced over the past few decades [38].

### 16.3.1 *The Biomedical Model and Technology*

The deconstruction of the person into medicalized body pieces or systems resonates with critiques of the standardization of medical care as dehumanizing. According to Battin, standardization of health care is “the tendency of a system to treat people under its control in a uniform, regulated, unindividualistic way – robbing them... of the capacity to function fully as persons” [39 p. 59]. People affected by standardization include the health-care professionals *and* the patients [40]. Both must conform to the same established screening practices, treatments, management and time spent with patients for the sake of efficiency, lower bureaucratic and treatment costs, and maximization of profits that robs the patient–health-care professional of customized, authentic, and more human connections unique to each interaction [39, 40]. Such lack of authenticity in and control over care have been exacerbated by the technologies and treatments that mediate provider–patient encounters.

Although technologies in health care have enhanced the life-sustaining capabilities of treatment, they are also noted as tools of dehumanization because they can affect the quality of life and care [34]. Computers or devices used during a medical consultation that distract the care provider from engaging directly with a patient; the machines that artificially sustain life (e.g., a ventilator) are examples of the respective

dehumanizing lack of authenticity, alienation from the patient during interaction, dismissal of the person rather than the body part or ailment, and unnatural sustainability of life in health care [41, 42]. Furthermore, they can contribute to undignified care experiences that nullify personalized, natural, intimate, human connections and support systems among relatives, care providers, and patients [34].

### ***16.3.2 The Role of Institutions***

Dynamics and themes affecting the institutional and systemic experiences of dehumanization in health care parallel those of the conflict analysis and resolution literature. For example, patients' names are replaced with the names of illnesses that depersonalize and objectify them [43]. Hierarchies shape interactions with the care provider standing above the patient as a professional and authoritative expert in an unequal relationship where patients are presumably stripped of their power to make decisions regarding treatment options or their own bodies [44]. And in the inequalities that place the care provider above the patient, the technologies that mediate their interactions, and the bureaucracies that give them context, the worth, equality, and recognition of the humanity of the patients are denied. In violent contexts, these issues have been highlighted in unethical medical experiments (e.g., the 1932–1972 Tuskegee “Study of Untreated Syphilis in the Negro Male”) and aggression enabling behaviors [45, 46].

### ***16.3.3 Dehumanization as Adaptation***

In spite of the negative areas where dehumanization is noted, scholars and physicians also acknowledge it as an adaptive strategy for health-care workers [47]. Paralleling how dehumanization is linked to justification and adaptation strategies that facilitate aggression and acts otherwise deemed as immoral in war and genocide, dehumanization in healthcare is described as a tool that allows care workers to inflict pain or deal with the emotional burden of treatments in pursuit of healing [48, 49]. Dehumanization minimizes feelings of guilt, augments desensitization, and minimizes burnout in health-care providers [50]. Dehumanization in health care is reflected in areas such as end of life care [34], geriatrics and ageism [51], and psychiatry [52] besides education and curriculum development [33].

Similarly, stigma in health care can be found in diverse areas and can affect treatment seeking and adherence [53–55]. For example, a few years back, a client, “Martin” aged 56, went to one of the authors of this Chapter, Quintana, because he had been struggling with depression for over a year. He was experiencing significant problems at his construction job, had repeatedly missed work, and was reprimanded twice for poor performance. Martin who was the sole provider for his family feared that his boss would fire him if he found out that Martin suffered depression and was

seeking treatment. In addition, Martin feared he would be labeled as crazy or weak by his friends, coworkers, and boss. The stigmatization of depression led Martin to delay seeking help for almost a year.

Besides HIV/AIDS and mental illnesses, which are two of the most cited examples in the health-care literature, other conditions where stigma has been found include progressive neurological illnesses (e.g., Parkinson's), viral diseases (e.g., severe acute respiratory syndrome [SARS]), sickle cell anemia, some types of cancer (e.g., lung cancer), and rheumatoid arthritis [56–59]. Researchers have found that many health conditions such as leprosy, HIV/AIDS, Ebola, and tuberculosis, among others, are associated with a high degree of stigma [60]. The stigma carried by these conditions is also associated (like in Martin's example) with delays in diagnosis and treatment seeking, poor treatment adherence, or premature termination from treatment [53–55]. Moreover, even if people who are stigmatized are able to overcome these barriers in order to access health care, they are still at risk of confronting prejudice and discriminatory behaviors in this context, which can significantly hinder the quality of care. For example, there is evidence that people who either have a mental illness diagnosis often receive lower quality treatments for various physical illnesses, such as HIV, cardiovascular disease, and cancer, compared with people without a mental illness [61]. This lower quality of care can manifest itself in many ways including nurses and physicians spending less time with psychiatric patients, failing to refer them to a specialist, and misattributing physical symptoms to their mental illness. Thus, this suboptimal quality of care may partially explain why people with mental illness have a shortened life expectancy compared to the general population.

### ***16.3.4 Stigma, Dehumanization, and Mental Health***

Besides the internalization of stigma that hinders patients from seeking or accessing medical treatments and resources, survey results show that people are often unwilling to work next to, spend an evening socializing with, or have a family member marry someone who has a mental illness [62]. A lack of desire to be in the proximity of individuals who associate with sufferers or survivors of stigmatized conditions extends to the health-care providers [63, 64]. These preferences for social distance and negative attitudes—as in Amy and Martin's previously described cases—reported by the general public have not improved over time, despite greater public knowledge and education about some of these conditions [65].

The extent to which chronic health conditions are stigmatized appears to depend on whether the type of illness is physical or mental. Mental illnesses are not just mentioned often in the literature, they also have been shown to carry more stigma than other physical conditions [66, 67]. This explains why someone like Martin is more likely to fear disclosing his mental illness to his boss than risking loss of employment and his family's financial stability. Additionally, stigma toward those with mental illness is not exerted by a single group, but rather is a systemic and fluid

phenomenon as in Amy's testimonial [68]. In addition to cultural and societal stigma, strangers, [69] coworkers [70], family members [71], and health-care professionals [72] can simultaneously stereotype and show discriminatory behaviors toward individuals with mental health conditions.

Stigma emanating from care providers can be particularly problematic for several reasons. Unlike the general public, many care providers (e.g., psychiatrists, psychologists, and social workers) understand in depth the conditions that affect their patients and their psychological, emotional, and support needs [73]. Yet mental health consumers asked about their experience of stigma and discrimination have reported feeling the same level of stigmatization coming from mental health professionals [74]. Specifically, in a study by Wahl they complained that those who were in charge of their treatment made them feel incompetent and discouraged them from setting high expectations for themselves [69]. Mental health consumers and their families have also complained that their treatment providers tended to focus more on the disease than the person they were treating [75]. Furthermore, studies involving responses from mental health professionals support mental health consumers' contention that their treatment providers can be a source of stigma [76, 77].

The studies of stigma in health care reviewed highlight the role of power in creating the boundaries that separate those who stigmatize from those who are the objects of stigmatization. As noted by Link and Phelan [7] "stigma is entirely dependent on social, economic, and political power – it takes power to stigmatize... power... is essential to the social production of stigma" [8, p. 375]. In other words, it takes power to separate individuals, provide equal access to health resources, educate civil society, and create inclusive social programs that demystify and embrace those affected by stigmatized conditions and their support systems. Dehumanization in health care is affected by a similar dynamic as power shapes the dehumanizing perceptions, cultures, and experiences of the institutions and stakeholders that provide, receive, and support care [40]. Empathy can help break down some of these perceptual, cultural, and attitudinal barriers that are facilitated by stigma and dehumanization and supported through power imbalances.

## **16.4 Interventions That Address Stigma and Dehumanization**

### ***16.4.1 Empathy as an Instrument to Address Stigma***

Not unlike stigma and dehumanization, empathy is a widely defined and disagreed upon concept [78, p. 195]. But unlike the former, empathy is repeatedly acknowledged by scholars and health-care professionals as a key component of a good patient experience and better outcomes in today's evolving health-care industry [79, 80]. Going back to Martin's case, he recalled during his sessions with Quintana that a couple of weeks before, he had gone to see a primary care physician. Martin

described this experience as awful, cold, distant, and emotionally disconnected. He felt that his physician did not care or understand what he was going through. Upon realizing that Martin was suffering from depression, the primary provider asked him to fill out a checklist and prescribed medication. Martin never took the medication, or returned to see this physician.

Studies on perceptions of empathy support the relevance of empathy in care interactions such as Martin's. They have shown that perceptions of empathy in care workers contribute to patients' well-being, satisfaction, and quality of life. Empathy experienced during interactions with health-care workers has been noted to improve how patients manage their chronic conditions such as renal allograft rejection [81], and clinical outcomes in the treatment of diabetic patients [79]. In addition, empathy enhances understanding and management of ailments [82], conciliation between provider and patient in instances of medical errors [83], and is influenced by providers' stress that can undermine communication with oncology patients [84]. Furthermore, empathy improves communication and trust between care providers and patients, which is essential in initiating and adhering to treatment.

Educating medical and other care personnel to be more empathetic toward patients can have positive and negative outcomes. Minimizing empathetic responses allows care providers to treat patients and desensitize from additional pain they may exert or uncomfortable conditions [85]. On the other hand, recognition of a patient's humanity and emotional empathetic responses can contribute to compassion fatigue and burnout in medical personnel [86].

Empathy is not included as an intrinsic tool of interventions aimed at minimizing, undermining, and eradicating stigma in health care, particularly as it relates to mental health. These interventions tend to focus on education through awareness campaigns, which use national advertising public relations, social media, community engagement, and information resources, as well as training, and/or personalized interactions [87, 88]. The target audience for these initiatives tends to be health-care personnel, medical and college students, and the public in general [89, 90]. The Changing Minds Campaign (by the Royal College of Psychiatrists), the Time to Change program (both in the United Kingdom), and the Opening Minds initiative by the Mental Health Commission of Canada are examples of such efforts [91–93]. These anti-stigma initiatives have targeted lack of public awareness of mental health, negative attitudes, and discriminatory behavior, to name a few. Their successes have been promising, especially in changing negative public attitudes about mental illness and reducing discriminatory behavior. Thanks to the Time to Change campaign in England, for instance, participants with mental illness who were surveyed between 2008 and 2009 reported experiencing significantly less discrimination not only from family (53–46%) and peers (53–39%) but also in finding (24–16%) and keeping employment (17–13%).

Similarly, initiatives aimed at undermining dehumanization in health care have been aimed at education [35, 94]. Unlike anti-stigma approaches, anti-dehumanization efforts described in the texts reviewed were not found to be grouped under the latter label but rather emphasize humanism and a holistic vision of the body and the person in medical care, education, and treatment [33, 94]. The focus

on humanism is a reaction to the aforementioned critique of dominant reductionism, biomedicine, commodification, and the increasing prominence of technology in care by medical personnel and institutions [33, 38]. Watson's book *Human Caring Science*, for instance, embraces a holistic approach to the experiential, subjective, and contextual values and ethics of nursing as a caring profession [35]. In addition, organizations such as the Arnold P. Gold Foundation are committed to encouraging research and programs that promote humanism in medicine. Initiatives aimed at counteracting dehumanization in healthcare, therefore, aim to change ways of seeing and engaging patients as a way to preserve the humanity of the care worker and the patient, and to correct the philosophies that underlie medical education, technologies, and institutions that are shaped by dehumanizing practices and perceptions. In such a manner, the systems involved in health care and that affect the patient, care provider, support system, and health institutions are expected to fall in line with the idealized vision of care and their commitment to healing.

The single-levelness of the targets of anti-stigma and dehumanization strategies pose scope limitations. With a few exceptions [92], anti-stigma interventions have not been systems driven [16]. Their focus has been on person-to-person interactions rather than targeting the institutional and structural cultures. Anti-dehumanization initiatives have addressed cultures of health by shifting ways of viewing which influence interactions with patients through education (e.g., [36]). These approaches have been primarily undertaken in academic settings.

### **16.4.2 Future Directions**

Unfortunately, no combined interventions aimed at undermining stigma and dehumanization in health care were found. Considering the documented positive health outcomes of empathy, and its potential for undermining stigma and dehumanization, innovative interventions that can target all three can have micro and macro implications for patients, their health providers, and the health-care systems they navigate. To be effective, these interventions need to be both comprehensive and driven by interprofessional, collaborative, and systemic approaches to be reflected at the various levels of the service system.

On the patient level, for instance, emphasis should be placed on adequate identification, assessment, and treatment of those patients who, because of their health conditions or illnesses, have experienced stigma and dehumanization in the health-care sector or in their communities. On the workforce level, an educational-contact-based approach using both experiential (e.g., role-playing, group discussions, and self-awareness exercises) and non-experiential interventions (e.g., internet trainings, video-taped interactions between patients and care providers, and workshops) could help target negative attitudes and behaviors that perpetuate stigma, dehumanizing behaviors, and unempathetic responses on the part of health professionals. On the organizational level, healthcare settings should foster recruitment, hiring, and retention of healthcare staff with empathy-based training aimed at undermining



stigma and dehumanization. Standard recruitment and retention practices that prevent or alleviate compassion fatigue may help undermine stigma and dehumanization. Knowledge of these concepts should also be incorporated into standard practices (e.g., health assessments and interventions), and organizational policies to protect patients and staff from stigma-based prejudice and discrimination. Tackling stigma and dehumanization at these different levels makes their eradication more possible.

## 16.5 Concluding Remarks

This chapter illustrated how empathy can influence positive clinical outcomes in health care, reduce social distance, and improve communication between patients and care providers. Empathy may thus help thwart stigma and dehumanization in health care. The combined detrimental effects (i.e., violence) that result from experiencing stigma (e.g., miscommunications, harm, social distance, costs, limited resources, and continuity of care), and dehumanization as a meaning-making tool that permeates violence, need further investigation. The findings of future studies may help customize initiatives that promote anti-burnout strategies, equity, and cultures of health that can embody humanistic medicine in practice and theory.

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## Chapter 17

# The Lawyer on Your Side: The Power of the Interprofessional Team in Preventing Moral Distress and Empathy Erosion



Natalie Castellanos and Marin Gillis

### 17.1 Introduction

In this chapter we will introduce the ethical concept of moral distress, its sources, and how it connects to erosion of empathy in medical students and health professionals. Because some sources of moral distress are structural—that is, products of policies and decisions made by government and institutions—professions trained to navigate, enforce, and change policies impacting patient health can be valuable members of the interprofessional care team. Lawyers, though not traditionally thought of as partners on the health-care team, are equipped with the skills and knowledge necessary to advocate for patients and support health-care providers.

Around the United States and beyond, health-care institutions have begun to include civil legal aid services as a complement to health care, through medical–legal partnerships, which will be explained in greater detail in this chapter. We begin with the fictional story of Isabel to illustrate a common clinical scenario that may provoke moral distress in members of the health-care team and point to specific ways a civil legal aid attorney could help.

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### ***17.1.1 The Case of Isabel***

Isabel is a 57-year-old behavioral health patient at a community health center in Florida, where she has been receiving treatment for severe depression and anxiety for the past year. She had several recent “no-shows” for therapy sessions and when she came in this week, she told her therapist she has been feeling more depressed than ever because she was unexpectedly fired from her job last month. She spent most of the session crying, talking about how worried she was about her finances and was especially concerned she might not have a place to live because she had not paid rent this month.

Isabel lives with her 85-year-old mother who has dementia. They rent a two-bedroom apartment a few miles from the health center and pay \$1300 per month. Their landlord called Isabel earlier this week to let her know that if she did not pay rent by next week, he would evict her. Their only income at the moment is Isabel’s mother’s retirement check, about \$750 per month, and they receive no public assistance. Isabel has been a lawful permanent resident (“green card holder”) since 2000 and her mother is a naturalized US Citizen.

Isabel applied for two jobs but has not heard anything related to those applications, despite her attempts to follow up. She is concerned about being able to maintain a new job because her last employer made special accommodations for her to miss a few days of work every month when she was not feeling well or when she had medical appointments.

Isabel’s last job did not offer health insurance and she paid all encounter fees associated with her mental health treatment out of pocket. She ran out of medication 2 weeks ago. She shares the reason she missed her last appointment was because she could not afford the encounter fees, and she was only able to come in today because her cousin loaned her money. Isabel, who considers herself self-sufficient, does not like to ask for help, and feels even worse for needing to rely on family for financial support. Isabel leaves the visit in tears, with a therapy appointment for the following week and a new prescription for her medication.

In this scenario, the health-care team has approached Isabel’s care with diligence, yet there are circumstances—policies, laws, social norms—outside of their control posing barriers to her treatment. It is difficult to make progress on Isabel’s case given her social needs and the recent disruption in treatment, and it is possible Isabel will not be able to afford the prescription or come in for her next appointment.

There are a number of social determinants impacting Isabel’s health. First, Isabel is experiencing barriers to health-care access—she lacks access to medication, is having difficulty paying encounter fees, and based on the scenario it is not clear when, if ever, she has had health insurance. Due to her loss of employment, she does not have income at this time, and although she does not mention it to her therapist, it seems she does not have access to savings or assets to support herself and her mother while she lacks employment income. Caregiver stress is likely exacerbated by her circumstances. Additionally, Isabel is rightly concerned about her employability, given the special medical accommodations she may need. Her housing



situation is unstable as she faces a potential imminent eviction, a process which can take as little as several weeks in a state like Florida. Finally, Isabel's immigration status may pose some barriers to care, particularly if she is unable to work due to the severity of medical conditions and needs to apply for Social Security disability benefits.

The health-care team may be positioned to address some of Isabel's social needs, for example, assisting her in identifying lower-cost medication, assisting with insurance eligibility, locating resources to assist with caregiver issues, or potentially drafting a letter to support flexible employment hours or in support of a Social Security disability claim. Yet some professional and institutional constraints might challenge Isabel's health-care team's ability to offer support: they may not feel trained or competent to address her social needs; they may be limited by time constraints due to issues like understaffing; some members of the health team may be fearful of and misconceive what may happen if they attempt to advocate for a patient; or, they may generally feel powerless to impact issues like patients' housing, employment, and wealth status.

The health center where Isabel receives behavioral health services may have social workers or community health workers on staff who may be able to address some of her social needs. But there is another potential partner available: a lawyer specializing in poverty law. The right legal partner would be positioned to evaluate Isabel's housing, employment, income, immigration, and related needs to assess whether legal remedies are available.

For the housing situation, the lawyer would be able to assess whether Isabel has any defenses to eviction, or negotiate with her landlord. For the employment and income issue, the lawyer could assess whether Isabel meets the criteria for Social Security disability benefits—which provides monthly income and health insurance—and could potentially represent her through the application and appeals process. By addressing Isabel's social needs, the lawyer on the health-care team allows the health professionals to focus within their scope of practice, and holds the promise of relieving some of the frustrating aspects of modern health-care practice.

## **17.2 The Provider–Patient Relationship Under Pressure: Moral Distress and the Erosion of Empathy in Health Care**

The scenario presented in the case of Isabel though fictional is not uncommon, particularly in health-care settings serving low-income and vulnerable populations. One unexpected emergency like job loss can quickly compound, leading to a series of additional challenges, including poor health.

The challenges of poverty are connected to health and well-being, and regularly present themselves “downstream” in hospitals, health centers, and other health-care settings [1]. But what can health professionals do at the bedside to address poverty

and related social determinants of health? And despite professional and ethical commitments to patients, do the demands of modern health-care practice—with electronic records and burdensome but necessary documentation requirements, the challenges of navigating insurance and managed care, and working within resource-constrained, hierarchical institutions—allow health professionals to truly treat and heal?

Health-care ethics offers a useful framing of the frustrations impacting health professionals as they navigate the demands of the healthcare system and continue recognizing the impact of patients' social determinants of health, thanks to research around moral distress. The concept "moral distress" was first introduced in the literature by Andrew Jameton in his seminal 1984 work on nursing ethics, *Nursing Practice: The Ethical Issues*. He defined it as the negative experience "when one knows the right thing to do, but institutional constraints make it nearly impossible to pursue the right course of action" [2].

Jameton reported he was using moral distress to affirm the experiences represented in his students' narratives, many of whom were practicing nurses, about their work in the adult and pediatric intensive care units. There they were required to administer treatments to the dying they believed were futile and only prolonged suffering [3]. It was as though the nurses felt powerless in the face of being required as health professionals to, as they saw it, torture patients to death. They could see only three options: do what they were required and suffer moral distress, not do it and leave their job, or do it and repress their moral self and beliefs about their professional commitments.

While first studied in nursing, research on moral distress has been pursued in other fields of health care [4]. Moral distress is now being studied in medical students as well, which is not surprising because of their particular vulnerability given the hierarchical nature of their training [5].

There are three aspects to moral distress: (1) psychological distress, (2) a moral imperative to act, and (3) that one is constrained from acting. According to leaders in the field, moral distress is a unique phenomenon that is distinct from other psychological constructs such as emotional distress, burnout, or post-traumatic stress because of two factors: the perception of a violation of one's own professional integrity and obligations and a concurrent feeling of being powerless to take what one believes is the ethically appropriate action [6]. Common situations provoking moral distress range from direct patient interactions to broader norms and policies governing the practice of health care. Examples of situations provoking moral distress are as follows: conflicts with patients', or patients' families, wishes for treatment; involvement in withholding information from patients; participating in substandard care; hierarchies in healthcare and medical education; and decisions about resources and financial priorities impacting care set by institutions and government [7–9].

Though a distinct concept, moral distress is strongly associated with burnout and is connected to empathy erosion in nurses, medical residents, and fellows [10]. Empathy erosion might be seen as a (poor) strategy for dealing with the moral

distress occasioned by overwork. Empathy toward patients starts to wane as soon as medical students start rotations in the clinic. The issue, according to Danielle Ofri, is not that students have no emotional competency, it is that they are tired, frustrated, and unprepared to deal with the reality of the clinic; there is too much work to be done in too little time [11]. She writes, “It’s no wonder that empathy gets trounced in the actual world of clinical medicine... empathy gets in the way of what doctors need to survive.” The significant decline in empathy during the third year of medical school, as researchers point out, is a terrible irony because the erosion of empathy occurs during a time when the curriculum is shifting toward patient-care activities—that is, when empathy is most essential.

### **17.3 Turning to Non-traditional Partners in Health**

Despite extensive research on moral distress, interventions aimed at addressing the phenomenon are only beginning to be assessed. Among the most promising interventions is the idea of “moral resilience” championed by nurse and ethicist Cynda Hylton Rushton. Moral resilience envisions a range of positive responses and professional growth in the wake of clinicians’ experiences of moral distress [12]. While useful as a strategy to address individual experiences of burnout, empathy erosion, and other negative effects of moral distress, moral resilience may do little to address structural sources of moral distress. Structural strategies proposed by Elizabeth Epstein and Sarah Delgado include involving interdisciplinary partners in solutions, finding root causes, developing policies, and participating in education efforts [6].

In this section, we will introduce the medical–legal partnership model, where lawyers are integrated into healthcare settings and use advocacy that can both serve patients and support health-care providers. Lawyers working in collaboration with health professionals through medical–legal partnerships can be important partners in addressing patients’ social needs, with the knowledge and skills to advocate for specific patients and for policy changes that may alter health systems and practices.

### **17.4 The History of Medical–Legal Partnership**

In what is known as the classic example of a medical–legal partnership, Barry Zuckerman, a pediatrician at Boston Medical Center in Massachusetts, was treating low-income children with chronic, controllable conditions like asthma. Dr. Zuckerman and his colleagues were providing medical treatment to alleviate symptoms, yet frustrated at the ongoing “avoidable hardships” faced by children living in poverty [13]. Dr. Zuckerman and his colleagues, recognizing the potential of a partner

better suited to advocate for patients experiencing illness and injury due to poverty, contacted a local civil legal aid organization, Greater Boston Legal Services. The legal aid lawyers were able to remedy some of the sources of the children's poor health outcomes, for example, unhealthy housing conditions, and Dr. Zuckerman and his team were better able to manage their young patients' chronic conditions. Thus was born the first formal medical–legal partnership, an agreement between a health-care site and a civil legal aid provider to collaborate with the intention of addressing low-income and vulnerable patients' health-related legal needs.

Doctors and lawyers have not always been natural partners. In fact, given the rise of medical malpractice litigation in the nineteenth century, medicine and law have been notably adversarial professions [14]. The professions further fragmented during the twentieth century when medical education, informed by the 1910 Abraham Flexner Report, began emphasizing rigorous scientific training and narrowing in on biological determinants of health [15]. Given these concurrent developments, the incentives that may have encouraged medico-legal collaboration went unrecognized for more than a century, despite both professions' explicit commitments to serving vulnerable and indigent populations. Both medicine and law as professions are given monopolies over their practices, and it is expected members will address problems not just of individual patients and clients but also issues of importance to society and the common good [16].

Conditions favoring collaboration began to crystallize in 1945 with the post-war creation of the United Nations and development of the modern human rights framework which recognized the inherent dignity of all human beings [17]. Then in the 1950s and 1960s, the civil rights movement created ideal conditions for domestic medical–legal collaboration. Although the civil rights movement was led primarily by grassroots communities and faith leaders, health-care professionals too organized themselves to support racial justice [14]. Among them was physician H. Jack Geiger, considered the father of the community health center model and who may also be considered the grandfather of the medical–legal partnership movement.

During the civil rights movement's "Freedom Summer" in 1964, Dr. Geiger and a hundred health-care professionals, including social workers and psychologists, arrived in the Mississippi Delta ready to provide health services to activists. They came to be known as the Medical Committee for Human Rights. During the same year, Dr. Geiger founded the Delta Health Center in Mississippi, one of the first two community health centers funded by the federal Office of Economic Opportunity [14]. In the late 1960s, the health center hired an attorney and social workers to address the social and environmental problems faced by patients.

This early example of medical–legal partnership was driven by health-care professionals' recognition they could support civil and human rights on the frontlines, and by the recognition that to fully support those rights, collaboration with lawyers was necessary [14]. After decades of aligning interests, including the mainstreaming of human and civil rights and the growing understanding of the impact of social determinants of health, 1993 saw the creation of the first modern medical–legal partnership at Boston Medical Center in Massachusetts.

## 17.5 The Modern Medical–Legal Partnership

More than 25 years after the founding of the first formal medical–legal partnership in Boston, hundreds of health-care sites serving low-income and vulnerable patients around the United States have adopted the model. A typical medical–legal partnership will partner a health-care site (usually a hospital or health center) with a legal aid agency staffed by attorneys and paralegals, or a law school clinic where law students provide legal services under the supervision of licensed clinical faculty.

Though once considered an innovation in health-care delivery, medical–legal partnership is becoming a common feature of health-care settings like Veterans hospitals, children’s hospitals, and health centers [18]. In 2018, at least 333 health-care sites in the United States had partnered with a civil legal aid provider for a medical–legal partnership [18]. In many settings, medical–legal partnership formally embeds civil legal aid services (as opposed to criminal law, for which public defenders and state attorneys provide services) into health-care delivery. Legal professionals and students become part of the healthcare team, using advocacy to address social determinants of health, with the intention of improving patient and population health outcomes. Studies supporting medical–legal partnership have demonstrated improvement in patients’ mental health and compliance with treatment plans, reduced health system costs, and improved provider satisfaction [19–21].

Medical–legal partnerships will vary in their level of integration, and a highly integrated medical–legal partnership will collaboratively engage in the following key activities: (1) interprofessional education; (2) health partner screening for social determinants of health and health-related social needs; (3) referrals to the legal partner; (4) direct legal services for individual patient-clients, provided by the legal partner with collaboration from health partners, where appropriate; and (5) joint medical–legal systemic advocacy targeting institutional, local, state, or federal policies that impact health [22, 23]. These key activities are interdependent and inform one another, although factors like funding, capacity, and partner priorities will impact whether and how effectively the medical–legal activities will be fulfilled.

Recall that some of the potential systemic strategies suggested by Epstein and Delgado for addressing moral distress include working on interdisciplinary teams, participating in education efforts, finding root causes, and developing policies. The discussion below will highlight how these strategies can be easily integrated into the key activities of a medical–legal partnership [6].

### 17.5.1 *Interprofessional Education*

Interprofessional education is defined as “occur[ing] when two or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes” [24, 25]. Traditional interprofessional education envisions professions like medicine, nursing, therapists, pharmacists, and other disciplines found

interacting in most hospitals and clinics, but the growing recognition of the importance of social determinants of health underscores the need to include non-traditional health partners like lawyers. Medical–legal partnership provides the ideal vehicle for this type of non-traditional interprofessional education, where health care and legal partners establish a symbiotic exchange of knowledge and skills.

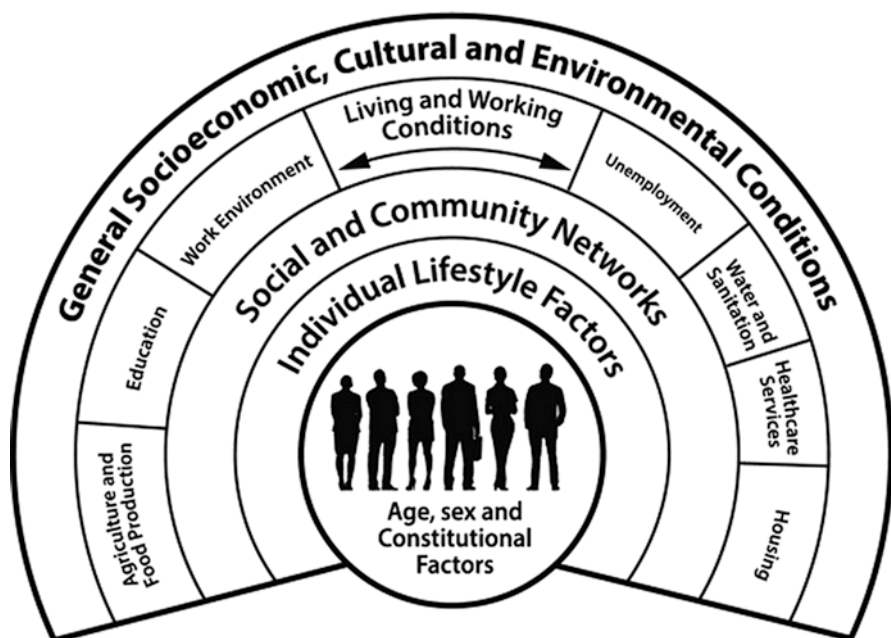
In medical–legal interprofessional education, legal partners educate health-care providers about substantive legal topics relevant to local health-care practice and broader policy issues. For example, legal partners can train providers about how to screen for health-related social and legal needs. Legal partners can also provide instruction about substantive legal issues like identifying special education issues in children attending public school, barriers to healthcare access, tenants’ rights, overviews of immigration law, and many other law and policy issues impacting low-income or vulnerable patients. Legal providers may also teach health partners about specific advocacy skills, like legislative or media advocacy.

Simultaneously, health-care providers educate legal partners about how to be more empathetic, holistic advocates. For example, behavioral health providers may train lawyers working with domestic violence survivors about trauma-informed care. Family physicians may teach lawyers how to read a medical record. Bioethicists may lead sessions about medical–legal ethics. Moral distress could certainly be included as a topic for medical–legal training, where health and legal providers can jointly learn about the topic, and brainstorm specific ways their partnership could confront and address health providers’ common sources of moral distress.

Although the primary purpose of interprofessional education and training is the exchange knowledge and skills, the incidental effect of regularly interacting in a low-stress setting like a boardroom or classroom is equally as important because it builds familiarity, trust, and a sense of shared mission for the legal and health-care providers. These qualities are crucial for effective collaborative practice, and essential for overcoming any residue of antagonism that may persist, given historical tension between legal and medical professions.

### ***17.5.2 Screening for Social Determinants of Health***

The perspective gained through interprofessional medical–legal education supports clinicians’ screening for social determinants of health impacting patients. Health-care providers can easily integrate social needs screening questions into their patient’s social histories. Although no validated tool for screening social determinants of health has been created (yet), most electronic health records have the ability to integrate specific social needs screening questions related to housing, income, or any health-related legal issues that may be common in a community or population [26]. Figure 17.1 depicts the “main determinants of health,” with biological determinants and individual behaviors represented at the center, and the wide array of social determinants impacting health extending beyond [27].



**Fig. 17.1** The main determinants of health. Dahlgren G, Whitehead M. Policies and strategies to promote social equity in health. Stockholm, Sweden: Institute for Futures Studies; 1991

A 2018 report published by The Physicians Foundation found that 88% of a sample of 8000 physicians practicing in the United States “indicate that some, many or all of their patients have a social situation (poverty, unemployment, etc.) that poses a serious impediment to their health” [28]. Additionally, providers have indicated their reluctance to screen for social determinants of health absent the ability to provide a service or assistance to their patients [26]. This reticence is understandable given limited time and the demands of documentation, electronic records, and billing, which already greatly limit the capacity of health-care professionals.

Medical–legal partnership offers a solution to providers who have limited capacity to address social needs, but whose patients are nonetheless adversely affected by them. Health-care professionals may no longer feel frustrated in the face of patients’ health-related social needs because they know there are members of the interprofessional team equipped to address those needs. Rather than ignore the need, or acknowledge it but not be able to offer a service—both situations which may generate moral distress—clinicians in medical–legal partnerships have the opportunity to take an actionable step to support their patient, by referring them to the legal partner.

### ***17.5.3 Referring Health-Related Legal Needs to the Lawyer***

The hallmark of a mature medical–legal partnership is a referral mechanism that facilitates the ethically compliant exchange of patient–client information between health providers who identify health-related social needs, and legal aid providers who might be able to address those needs through legal education and advocacy. Many electronic health records have features that enable both screening for social determinants and referrals to legal aid partners in a medical–legal partnership. Similarly, many legal aid providers have online case management systems with electronic referral portals where health providers can refer a patient for legal services. For some partnerships, a paper law referral form is used. In many hospitals and health centers, the lawyer is located on-site for part of the week, usually in a private office space, and providers can walk or send patients for an immediate legal consultation.

Although outside the scope of this chapter, it is important to note that medical–legal partnerships are developed with specific agreements around information-sharing between legal and health partners, to comply with patient privacy laws, client confidentiality, and other applicable legal and ethical requirements. Regardless of the mechanism facilitating law referrals, medical–legal referral processes are important for tracking individual patient needs, and for collecting data and assessing systemic trends related to social determinants of health impacting the population served by the medical–legal partnership.

### ***17.5.4 Legal Advocacy***

Interprofessional education, screening for social needs and determinants of health, and sending law referrals provide the foundation for the most impactful activity of a medical–legal partnership: legal advocacy. Legal advocacy that addresses social determinants of health can be either direct legal services, which focus on the interests of individual patients or clients, or systemic advocacy, which emphasizes law and policy change or promotion that impacts population health [23].

**Direct Legal Services** Once a patient–client is referred to the law partner, they will go through a legal intake process, similar to the concept of triage, where legal needs are identified and assessed for urgency. Common health-related legal needs can be categorized by social determinant of health, for example, evictions and foreclosure connect to housing stability; Social Security disability benefits connect to health-care access and income; immigration status can connect to employment, income, health-care access, and more. The legal partners can provide direct legal services to address these, and other, civil legal issues impacting a patient’s health.

Typically, a lawyer providing a direct legal service will address the issue using one or more of the following techniques: client education, counseling, legal research and drafting, negotiation, or litigation. Legal partners may often request



the collaboration of healthcare providers to assist with certain cases. For example, a treating provider may be able to draft letters of support for their patients' Social Security disability claims, or might be able to provide medical or mental health records to support certain immigration cases.

In ordinary practice, physicians are commonly asked to support patients' social and legal needs by completing paperwork and furnishing records, which can be burdensome, especially for smaller practices and resource-limited clinics. In a medical–legal partnership, the lawyer joins the team and can provide support navigating bureaucracy and substantive guidance for providers as they respond to patients' requests for assistance with social needs. Lawyers can also verify, through their own thorough intake process and access to records, the authenticity of patients' social needs. For example, a behavioral health patient may express to his psychiatrist paranoia around visiting public locations for fear of being arrested. With a referral to the medical–legal partnership, the lawyer could easily access court records to verify whether criminal charges were in fact pending, and, if confirmed, would be able to navigate the patient to a community legal resource to potentially assist. If not confirmed, the psychiatrist would be able to treat the patient accordingly. Importantly, in the absence of a legal partner, the psychiatrist would be limited in their ability to fully respond to the patient's needs.

Patients receiving law services through medical–legal partnership benefit from the collaboration of an entire team of professionals. The successful resolution of a legal case supported by an interprofessional team may result in significant direct financial benefits to patients through securing owed benefits like Social Security disability or negotiating debt. For example, one medical–legal partnership secured more than \$520,000 in financial benefits for patients served in a 6-year period [29]. Health-care institutions too have demonstrated the benefit of medical–legal partnership by calculating return on investment. In one study, a rural hospital demonstrated a 319% return on investment by securing insurance funding for previously unreimbursed clinical services, and an urban medical–legal partnership concluded legal services may reduce unnecessary emergency department visits for children with asthma [30, 31].

Returning to the case of Isabel from the chapter introduction and imagining an alternative scenario where the health center included a medical–legal partnership. Upon hearing Isabel's reports of housing and income instability, the therapist, who would have been trained in medical–legal topics, would have recognized the potential for legal intervention, and generated a referral to the medical–legal partnership. After the intake interview—or “legal triage”—the legal partner may have determined that, in fact, Isabel did meet criteria for Social Security disability, and through advocacy with support from the health-care team, was able to demonstrate to the Social Security Administration that Isabel was eligible for the benefits dating back to the prior year. Social Security disability can be a long process—taking up to 3 years or more to reach a final decision—but with the assistance of an interprofessional health-care team including a lawyer, Isabel's likelihood of success improves. And with a successful disability claim, Isabel would gain a more stable monthly source of income and health insurance, through Medicaid or Medicare. Depending

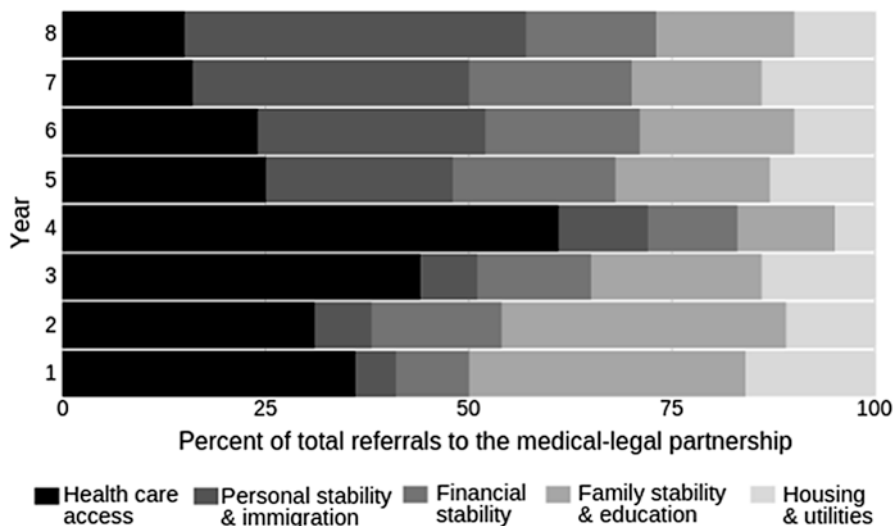
on the disability application timeline, she might also receive a retroactive payment of up to tens of thousands of dollars. The health center too would benefit from Isabel's positive legal resolution—Isabel was previously uninsured, but with insurance, they would be able to receive reimbursement for services, rather than provide uncompensated care. And, importantly, Isabel's therapist and psychiatrist would be able to return to focusing on treating her medical conditions within their scope of practice.

Direct legal services are an important feature of a medical–legal partnership, resulting in both positive patient impact and potentially lowering health system costs, but individualized advocacy may not address the root causes of inequity and frequent sources of providers' moral distress, which is why systemic advocacy should be included as part of the medical–legal partnership's overall strategy.

**Addressing Systemic Barriers to Health** Systemic advocacy is an upstream approach to addressing root causes of health inequities. For example, a medical–legal partnership might receive more than a dozen referrals in a year for medical debt from a nonprofit hospital, where indigent patient-clients should have been notified of their eligibility for charity care but were not. In addition to opening individual direct legal service cases to negotiate the more than 12 individual cases of medical debt, the medical–legal partnership attorney may opt to also schedule a meeting with hospital administrators to review the charity care policy and advocate the adoption of changes to practices around patient notification of their eligibility for charity care, thereby preventing future problems for similarly situated patients. In this example, the attorney uses the medical–legal partnership referrals to inform a systemic advocacy strategy targeting an institutional policy.

Figure 17.2 shows an example of year-by-year legal referral data tracked by a medical–legal partnership. Issues referred to the medical–legal partnership were categorized according to the following corresponding social determinants of health: health-care access (e.g., Medicaid eligibility and coverage, disability applications, and appeals), personal stability, and immigration (e.g., assistance obtaining immigration status through naturalization or family-based petitions), financial stability (e.g., assistance with debt reduction and identity theft), family stability and education (e.g., domestic violence injunctions and divorce), and housing and utilities (e.g., defending against illegal evictions and housing livability issues). Around years 3 and 4, there is a significant increase in law referrals for health-care access issues, which corresponded with the implementation of the Patient Protection and Affordable Care Act, while years 7 and 8 show an increase in the personal stability and immigration needs, which corresponded with a time of increased federal immigration enforcement [32, 33].

Systemic advocacy can focus on preserving or promoting specific institutional, local, state, or federal policies, or may take other forms aimed at public education or supporting community power. Other forms of systemic advocacy are community organizing, media advocacy, community education, or impact litigation [23]. A notable feature of systemic advocacy is that most forms of systemic advocacy do not require the license of a lawyer. In this context, health-care providers are ideal



**Fig. 17.2** Using year-by-year medical–legal partnership referral data to identify systemic trends. Data from Florida International University Herbert Wertheim College of Medicine Green Family Foundation Neighborhood Health Education Learning Program, 2010–2018

partners to participate in health-related systemic advocacy, given their status as trusted service providers with expertise and firsthand knowledge of health and the healthcare system. Health-care providers who participate in systemic advocacy like testifying at public hearings, speaking at press conferences, and having opinion-editorials published in local newspapers make important contributions to advocacy efforts, and in the process may gain a sense of empowerment that alleviates their own experiences of moral distress.

For both legal and health-care providers serving low-income and vulnerable populations, engaging in systemic advocacy can be an important preventive tactic that addresses the root cause of some persistent health inequities, while also impacting providers’ own experiences of moral distress.

## 17.6 The Lawyer by Your Side: Assessing the Evidence

A developing body of research has assessed the impact of medical–legal partnership, finding that medical–legal partnerships not only have the potential to benefit patients and health-care institutions but also have a positive impact on health-care professionals and medical students.

One study led by pediatrician Robert Pettignano assessed the impact of medical–legal collaboration on health-care providers at a children’s hospital located in Atlanta, Georgia. They found 70% of providers who made referrals to the

medical–legal partnership “reported that they believed the services provided by [the medical-legal partnership] allowed them to reallocate time to other cases” [19]. Providers in this study also reported the perception that medical–legal partnership services helped reduce emergency department visits, decrease hospital readmissions, and decrease inpatient length of stay. These findings were in addition to reporting over \$640,000 in Medicaid services payments to the hospital for 62 children in a four-year period that would have otherwise been unreimbursed.

A follow-up study was conducted by Dr. Pettignano and his team in Atlanta, this time evaluating the impact of medical–legal partnership on undergraduate medical students, finding that students exposed to medical–legal didactic sessions were more likely to self-report that they would both screen for social determinants of health in their patients and send legal referrals for issues identified [34]. Research in progress at the authors’ home institution in Florida has yielded similar preliminary findings that exposure to one medical–legal didactic session can impact undergraduate medical students’ knowledge of legal resources and perception of collaborating with lawyers to address patients’ social determinants of health.

Although the limited research and case studies documenting the benefits of health professionals collaborating with lawyers in medical–legal partnerships are thus far promising, more research should be undertaken to develop an understanding of how medical–legal partnerships impact health-care providers’ experiences of moral distress.

## 17.7 Conclusion

Through medical–legal partnerships health-care professionals gain allies in confronting some of the most frustrating aspects of modern health-care practice, including negative impacts of social determinants on patient health, bureaucracy, and barriers to care created by managed care and insurance. The evidence shows lawyers can be partners in health, supporting clinicians by going upstream to address root causes of health inequities and sources of moral distress, which are related to empathy erosion.

Developing awareness of the effects of social determinants of health and in turn developing relationships with other professionals that help clinicians effectively address those determinants may further clinicians’ ability to meet their own professional goals. Indeed, clinicians cannot take care of everything in the system, but there are other professionals with whom they can collaborate, who have the expertise to help.

Social determinants of health, systemic inequities, and facilitating the social contract of the healing professions call for non-traditional interprofessional partners with the expertise to deal with policies having a direct impact on patients and clinicians. This, in turn, empowers health professionals to meet challenges to their professional autonomy and integrity including the ethical foundations of their practices,

namely acting in the patient's interest first and respecting the dignity and autonomy of their patients.

In medical–legal partnerships, health-care professionals gain important allies who are trained to address the non-medical influences impacting patient health, which are frequently connected to, or the direct cause of, their experiences of moral distress and empathy erosion.

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# Chapter 18

## Academic Health Centers as Healthy Learning Environments: “Form Follows Function” in Promoting Empathic Care



Christopher M. Woleben and Peter F. Buckley

### 18.1 Introduction

In recent years, medical education has undergone dramatic curricular reform. It is transitioning from a hierarchical, teacher-centered model to one that is more competency-based and patient-focused, placing emphasis on inter-professional collaboration rather than individual mastery of skills. Theoretically, such curriculum change is intended to train physicians who can provide safer, evidence-based medical care with improved patient outcomes. Often steeped in tradition, academic medical centers are being forced to adjust to this changing educational landscape. However, not uncommonly this adjustment results in provider burnout and dissatisfaction in their work environment. Competing interests for time combined with inadequate leadership skills and knowledge of adult education learning theory make it hard for medical educators to successfully navigate this educational milieu. Such difficulty places the entire academic medical system at risk of failing not only trainees and employees but also the patients it is designed to serve [1]. As this book covers the topic of empathy from multiple key vantage points, this chapter seeks to add the perspective of the broader institutional and structural contexts that might enhance or detract from the ability to instill empathy in our learners.

Training physicians to become empathetic care providers to diverse patient populations is becoming increasingly complex and challenging. Table 18.1 summarizes some of the essential elements of the learning environment necessary to achieve this goal. Long gone are the days of medical students and residents wearing “trailing

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**Table 18.1** Contextual issues in student empathy: “Form Follows Function”

Healthy environment	Financially stable health system that is able (and willing) to support student training
	Optimum campus plan and buildings that enable the learning environment
	Use of simulation centers and/or virtual reality to promote inter-professional education (for example, multi-disciplinary code simulations)
	Dedicated educational spaces within the health system’s inpatient and outpatient facilities
	Medical student access and accommodation in the use of electronic medical records
	Academic practice compensation plan that enables teaching
Healthy mentors	Access to sufficient faculty with dedicated teaching time and commitments
	Faculty trained to be experts in teaching and mentorship
	Diverse, engaged faculty
	Medical education as a core value and expectation
	Teachers who emphasize good “bedside manner” in addition to use of technology for patient examinations
Healthy learners	Recruitment of applicants who demonstrate the ability to develop empathic relationships through volunteer and community service or through personal work/family obligations
	Ensuring resources are available to assure academic success and promote wellness as learners develop their professional identity in medicine

white coats,” pockets overflowing with clinical guideline manuals and patient lists scribbled with checkboxes to complete daily tasks assigned by the attending physician in charge. Teaching rounds now less frequently occur in the team room, and are often held at the bedside using patient-centered, shared decision-making and interdisciplinary feedback to determine treatment plans.

Mutual understanding and recognition of relationships with others is core to the principle of empathy. Therefore, utilizing this transition to patient-focused care, perhaps we can go “back to basics” when teaching trainees to provide empathetic care. Such a transition begins with selecting appropriate candidates to enter the learning environment. Medical schools and residency programs are beginning to incorporate behavior-based interview questions or interactive role-playing scenarios in the interview process to assess the capabilities of prospective students to form empathic relationships with members of diverse communities [2, 3].

Ohio State University College of Medicine established best practices for medical school admissions committees to achieve a diverse student body through implementing several key steps. Admissions deans aligned the committee’s charge with institutional mission/vision statements, clearly articulating the value of diversity in the clinical learning environment. Recruitment of new admissions committee members included reaching out to women, minorities, and younger faculty members who are more likely to value diversity in the selection process. Committee members adapted a holistic approach to application review as endorsed by the American Association of Medical Colleges (AAMC), and all committee members received additional training on implicit bias. To further minimize potential bias in the selec-



tion process, interviewers were blinded to the academic metrics of applicants, photos of applicants were not shown at selection committee meetings, and admission committee members used an audience response system to confidentially record their votes. From 2009 to 2016 when these steps were implemented in their admissions process, the number of female students entering medical school increased by almost 20% while the number of students under-represented in medicine increased by 50% [4]. Similar programmatic changes can be implemented at other medical schools to reflect the core values of diversity unique to each institution.

Similarly, to help improve successful recruitment of medical students matching into Emergency Medicine residency programs, the Association of American Medical Colleges (AAMC) is currently piloting a standardized video interview as part of the application process. The standardized video interview assesses the student’s ability to respond to a number of hypothetical scenarios assessing their ability to meet the Accreditation Council for Graduate Medical Education (ACGME) core competencies for Interpersonal/Communication Skills and Professionalism. While currently still in the pilot phase, this is a promising tool to provide additional information to applicant profiles, so program directors can make better-informed decisions about who to invite for interviews using a holistic approach [5]. Diverse learners augmented with excellent interpersonal communication skills and awareness of the importance of professionalism in the learning environment can serve as the culture change required to ensure empathy thrives in academic medical centers.

## 18.2 Academic Health-Care Organizational Structures

Academic medical centers are complex entities that consist of inpatient and outpatient clinical care facilities in partnership with a university-based medical school that often provides oversight to both undergraduate (medical student) and graduate (resident) medical education programs. Practice plans are developed to delineate the responsibilities of each entity to ensure the missions of clinical practice, scholarship, teaching, and administration work seamlessly together. In developing these practice plans, concerns about funding typically drive decisions regarding the scope and balance of work performed by physicians. The demand to meet these rigorous expectations often leads to physician fatigue, burnout, and dissatisfaction with work–life balance—see Table 18.2.

Having appropriate senior leadership in place to ensure the academic mission is met while preserving empathy as a core value is crucial to the success of academic medical centers. Having the right Dean in place sets the tone for how the academic medical center will function. Successful deans will be able to balance recruitment, retention, mentorship, and leadership development taking into consideration the cultural landscape of the academic medical center. Essential to their success is effective communication with other members of senior leadership, making sure key stakeholders bring diverse sets of talents to the table [6]. Recruitment of senior leadership in academic medicine is becoming challenging as the market for highly

**Table 18.2** Institutional barriers to developing empathy among learners in academic medical centers

Mal-aligned student–faculty ratio	Too many learners in the environment dilutes learning experience; lack of sufficient supervision to assure learners meet educational goals
Multiple clinical teaching venues	Difficult to assure consistent educational experiences in the clinical setting
Hostile work environment	Mistreatment of learners by faculty and staff; additionally, responding to frustrated patient and visitors diminishes job satisfaction for faculty, staff, and learners
Faculty and staff burnout	Stressors created by the health system lead to depersonalization, diminished state of achievement, and emotional exhaustion
Institutional instability	Poor financial performance, high turnover
Problems with health care and/or educational accreditation	Compliance with stringent accreditation processes, many of which are designed to assure patient safety, can strain health systems

trained individuals to serve in such roles is competitive. Best practices to ensure recruitment goals are met include creating search committees that are small and hence efficient, ones that contain carry-over representatives to provide consistency between searches, and an associate-level dean to oversee all senior leadership recruitment for the health system. Furthermore, continuous improvement in the leadership search process can include benchmarking and evaluation to determine institutional best practices in future searches [7].

Due to federal health reform with an increased emphasis on managed care payment, mergers of teaching hospitals affiliated with academic medical centers have become increasingly common over the past 25 years. In order to sustain funding for the academic mission, decisions were made to increase clinical productivity by consolidating and diversifying health systems to provide care for patients from diverse socio-economic backgrounds with an increased focus on a more privately insured patient population. The concept of a county teaching hospital sustained by state and federal support designed to serve primarily indigent populations is becoming an afterthought in this current environment. More recently, mergers between health systems have allowed academic medical centers to pool expertise of providers, enhancing market share in the communities they serve while managing costs and accountability. However, such mergers often lead to a downsize in the number of clinical and ancillary staff, further stressing employees already stretched to their limits prior to the merger. While these mergers are designed to help smaller health systems survive, many physicians feel they lose autonomy in their ability to practice medicine, as they must follow regulations enforced by the parent corporation. In order to assure a successful merger, effective leadership needs to create trust among employees, ensuring stability when bringing the different work cultures together under one entity [8]. Smitherman et al. have even suggested expanding the three core missions of an academic health-care system (education, research, and clinical care) to include a fourth dimension, social accountability: assuring that the needs of the community being served are core to the mission of the organization [9].

### 18.3 Academic Health-Care Finances and Organizational Performance

Financing academic health-care organizations is a complex task that requires expertise from a variety of institutional leaders as well as knowledge of current reimbursement regulations that drive profit from clinical care. Further, US health-care expenditures are already the highest among all developed nations as costs for doctor visits, procedures, and medications are established by profit-driven insurance and pharmaceutical companies who attempt to maintain their profit base by continually increasing prices for consumers. Thus, funding the academic mission becomes particularly challenging as often these centers are designed to care for patients who cannot afford insurance to cover their health-care costs resulting in narrow profit margins or worse yet, losses. According to the Center for Medicare and Medicaid Services (CMS) 2017 annual report, US health care spending when inflation-adjusted per capita increased almost 4% to reach \$3.5 trillion, or \$10,739 per person in 2017 accounting for 17.9% of the gross domestic product when compared to the prior year. Inpatient hospitalizations account for nearly one-third of US health-care costs with physician/clinical services and retail prescription drug accounting for another third. Private health insurance, despite recent Affordable Care Act legislation, only accounts for 34% of funding sources. An additional 10% comes from out-of-pocket payment by patients that too often places a major strain on them [10].

In addition to the limited income generated by patient care, academic health system administrators need to appreciate multiple factors required to complete the educational mission of academic medical centers. Dedicated time and space for clinical and bench research, teaching medical students and residents, as well as protected time for scholarship and administrative duties all weigh in the balance. Understanding the culture of the faculty facilitates effective implementation of budget plans, especially in times of rapid transformation to keep up with the market. Successful academic medicine business plans acknowledge that “shared governance, academic freedom, extensive consultation, and widespread agreement before action—with [little] tolerance for risk and mistakes” are tenets that can help health system administrators gain trust and support of faculty [11, p. 109].

As budget cuts are becoming more frequent, many academic medical centers are relying less on state-funded university support to drive the academic mission and more on funding from patient care revenue and student tuition. However, raising income from tuition must be balanced with the rising concern for medical student indebtedness. Although the percentage of medical students receiving financial aid decreased slightly in 2017 to 78%, the median medical student debt among US medical school graduates jumped to just over \$192,000 [12]. While increasing class size may bring in more funding to support the academic mission, doing so may dilute the pool of accepted applicants. Thus, more students may be at risk for failing to complete their medical education, which in turn, increases the financial risk for students. Medical schools are therefore turning to alternative sources of income to help preserve the academic mission; they are engaging both alumni and thankful patients to support scholarships for students, infrastructure, and research efforts.

While alternative methods are successfully being used to help fund academic medical centers, faculty who teach students in a clinical setting are feeling pressure to fulfill the expanding duties expected of them. To properly supervise a medical student or resident, clinicians must often decrease their clinical load, directly impacting the clinical revenue they generate for their department. Without direct support from the medical school or their clinical department for protected teaching time, trainees are at risk for not being sufficiently supervised to ensure they are gaining the competencies expected for successful progression to increased levels of independent practice. In response, a paradigm shift for clinical practice has emerged. Increasingly, treatment algorithms and care sets are used to ensure consistency of care between providers at all levels of training. Furthermore, many academic medical centers are now creating senior leadership positions, such as Chief Safety Officer, to monitor, evaluate, and improve treatment algorithms and other processes designed to preserve patient safety. Creation of such leadership roles in academic medical centers emphasizes the importance of a safe learning environment, necessary to train empathic health-care providers.

The role of an interdisciplinary approach to patient care is becoming more common in medical education curricula. Most curricula now introduce teamwork as early as orientation for newly matriculated students. For example, at our home institution, we have partnered with a local team-building organization, Challenge Discovery, to design a daylong educational experience where new students are introduced to basic teamwork concepts and language utilized by the World Health Organization. During this interactive experience, completing tasks sometimes 30 feet off the ground, students are not only able to meet their fellow classmates but also gain teamwork skills that will be built upon and reinforced at various intervals in the curriculum. Much of the preclinical curriculum is spent working through clinical cases in small groups, requiring attentive listening skills and closed-loop communication to ensure members of the team are mastering the material covered. Even more importantly, the concept of inter-professional teamwork is essential to success in the clinical curriculum, where medical students work collaboratively with resident and attending physicians, nurses, pharmacists, social workers, chaplains, and other ancillary staff members to provide care for patients. Although attending physicians tend to serve as leaders of these teams, rather than being the sole contributors to treatment plans, now they are better trained to recognize and more fully utilize talents of all members of the health-care team to provide the best patient outcomes.

## **18.4 Professionalism in Academic Medicine**

It has been well documented that physicians facing state medical boards for professional misconduct had higher rates of unprofessional behavior during their time in medical school when compared to their peers [13]. While medical schools are beginning to better document and develop remediation plans for medical students

who act unprofessionally, sadly the learning environment often propagates poor behavior among learners by not identifying and removing from the environment faculty members who mistreat learners. According to the 2018 AAMC Graduation Questionnaire, approximately 42% of graduates from US medical schools reported being mistreated at some point during their medical education experience. This means over 4 in 10 medical students experience some form of mistreatment ranging from public humiliation and physical harm to being the subject of racist/sexist discrimination in determination of grades and other opportunities for advancement [14]. Why is a medical education system designed to train motivated, compassionate individuals who wish to make an impact on the health of others so broken when it comes to taking care of its very own students?

Medical school faculty often are not well equipped to properly identify and remediate students who experience lapses in professional behaviors. Although the majority of schools have specific policies and processes in place to identify unprofessional behavior, often faculty and student peers are reluctant to report professionalism concerns. This may be due to lack of faculty training, uncertainty of the impact the report will make on the professional trajectory of the student in concern, and ineffective strategies to remediate and monitor unprofessional behavior over time [15]. When combined with competing demands for clinical performance, including direct patient care and completion of electronic medical records, many clinicians in academic medical centers feel that reporting is burdensome and ineffective. Therefore, medical schools occasionally graduate medical students who transition to residency and beyond with professionalism concerns resulting in poor patient outcomes and satisfaction.

Providing clinicians working in academic medical centers with resources to attend to professionalism concerns is one component of reducing mistreatment and nurturing the health of academic medical centers. Medical educators in Amsterdam recently published a model for managing lapses in professionalism that clearly defines three phases of intervention and remediation. In the first phase, faculty serves in the role of *concerned teacher*, exploring the lapse from the student’s perspective while helping the student explore and understand the impact of the unprofessional behavior. In the second stage, faculty serves as a *supportive coach* by providing the affected student with strategies to incorporate professional values in their daily routine, creating a safe space for reflection and offering support when needed. In the final stage, faculty serves as the *gatekeeper of the profession*, responsible for disciplinary action or dismissal if the student does not demonstrate significant improvement in their professional obligations, especially if patient care may be compromised [16].

Regardless of how we identify and remediate professionalism concerns, medical school policies and procedures must be clearly communicated to faculty and students, so they are aware of the requirement to report lapses in professionalism on the Medical Student Performance Evaluation. At our home institution, we developed a professionalism reporting and tracking mechanism that is widely available to faculty, staff, and students to report professionalism concerns. Student affairs deans investigate each report received, involve appropriate members of the course or

clerkship where the incident occurred, and determine an individualized remediation plan that is monitored through completion. The process was designed to be transparent to the student involved, so they are aware of the impact on their progression in the academic program. Likewise, we created multiple mechanisms for students to report mistreatment by utilizing university resources both within and outside of the school of medicine, providing students with options to be protected from potential retaliation and transparency as to the results of the investigation when possible. According to the AAMC Graduation Questionnaire data for our school, students report that they are more satisfied with the options provided to report mistreatment and appreciate the closed-loop communication that demonstrates action is being taken to improve the learning environment when compared to prior years data.

## **18.5 Promoting Wellness Among Today's Teachers**

As clinicians working in academic medical centers feel more pressure to meet clinical and non-clinical obligations, the concept of academic time management has taken on new meaning. Senior medical students place increasing emphasis on work–life balance when determining specialty choice, seeking out role models in both academic and community settings to better gauge what their eventual practice will resemble when done with residency training. Specialties such as Emergency Medicine and Anesthesiology have become increasingly popular, and hence more competitive, due to the flexibility available in the scope of practice for those specialties. In an attempt to improve patient safety and quality of life for residents, the ACGME instituted work duty limits during residency training to ensure residents are able to get adequate rest. As a result, much of the workload in residency training is transitioning to shift work to ensure that residents do not violate duty hour regulations. Unintended consequences include less continuity of care for patients, the development of effective methods of patient handoff at shift change to ensure safe transition of care, and increased use of simulation for residents to obtain necessary exposure to procedures they may not encounter as frequently during the course of their training. Faculty supervising residents often feel they take on more direct patient care responsibilities, further adding to their already intense workload, resulting in fatigue, frustration, and eventually the development of burnout.

Burnout is a generalized term to describe a self-reported job-related syndrome with multiple manifestations including emotional exhaustion, depersonalization, and low sense of personal accomplishment. Physicians who report higher levels of burnout are more likely to make errors in patient care, demonstrate unprofessional behavior, experience symptoms of depression and anxiety, and have higher rates of suicide when compared to the general population. In a 2018 meta-analysis published in *JAMA*, the true prevalence of burnout among physicians was difficult to determine as most studies examining this epidemic use a variety of assessment methods and definitions for burnout. Overall burnout prevalence has been reported in the literature to be as low as 0% and as high as 80.5%. Clearly, some consistent

definition of burnout as well as a standardized approach to interpreting data from validated burnout measurement tools such as the Maslach Burnout Inventory need to be developed to better assess the true scope of the issue across institutions [17]. Academic medical centers should perform regular climate surveys to determine factors leading to burnout such as time-consuming electronic medical record systems that may be preventing physicians from working to the best of their abilities. For a detailed discussion of burnout and its relation to empathy, see Chap. 15.

Having effective leadership in place that values physician well-being is crucial to the long-term viability of academic medical centers. To address wellness in physicians at the national level, the National Academy of Medicine in 2017 launched the Action Collaborative on Clinician Well-Being and Resilience with the goal of raising awareness of stressors clinicians face in the work environment, improving knowledge of factors that affect clinician well-being, and developing solutions to help clinicians take better care of themselves, so they in turn can provide better care to their patients [18]. Providing clinicians with opportunities to learn and practice self-care techniques such as mindfulness, stress management, and reflective practice has all shown reduction in physician burnout rates over time. Encouraging physicians to contribute to health system change by involving them in design and implementation of not only the health systems in which they work but also wellness-focused initiatives within these academic medical centers provides them with a sense of control and pride in their work environment. As a result, healthy, empathetic academic physicians will train empathetic learners. Not only will the physicians be more engaged with their work, but trainees will receive more quality educational opportunities, and patients will receive higher quality medical care.

## **18.6 Contemporary Environmental Changes That Optimize the Training of Empathy in Clinical Practice**

With all of the challenges faculty face working in academic medical centers, ensuring trainees receive optimal training of empathy in clinical practice has required new approaches to address barriers to its successful implementation. Since most physicians never receive formal training in adult education, many universities affiliated with academic medical centers are now offering formal masters or certificate programs in medical education. Likewise, graduate medical education programs are offering “residents as educators” curricula to ensure interns and residents know how to properly teach and evaluate medical students, as residents are often the ones who provide the most direct supervision of medical students on their clinical rotations. The Gold Humanism Honor Society even promotes excellence in resident teaching by offering the Humanism and Excellence in Teaching Awards designed to recognize residents who are exemplary models of teaching and providing humanistic patient care as selected by medical students at their institution.

The learning environment for preclinical medical students is also rapidly evolving to adjust to more frequent small group activities facilitated by faculty, such as team-based learning, that often center on students working through clinical cases. Although this approach is more labor intensive for faculty due to the number of teachers needed to successfully deliver such a curriculum, students are able to think more like clinicians earlier in medical training. This makes the transition to clinical rotations easier. By introducing cases that focus on patients from various cultural and socio-economic backgrounds, the use of simulation and standardized patients provides students with the opportunity to utilize language and skills designed to provide culturally competent and empathic care under direct observation. The real-time feedback students receive in this setting provides students with opportunities to improve and refine their communication skills before placement in higher-stakes environments with real patients. For example, Foster et al. demonstrated an effective use of virtual patients and videotaped interviews to help second-year medical students better assess suicide risk [19]. Other medical schools such as Vanderbilt are including weeklong courses on the foundations of the profession of medicine prior to delving into typical basic science coursework; student feedback indicates that such programs help them become better rooted in their learning and professional development [20].

There are challenges to providing and receiving feedback. Many faculties are not comfortable providing constructive feedback, and learners often do not know how or when to ask for it. Ramani et al. investigated resident and faculty perceptions of feedback at Brigham and Women's Hospital. They found that the culture of feedback was impaired by the need to normalize constructive feedback to promote a culture of growth, lack of comfort in asking for feedback, and a hierarchical culture that prevented bidirectional feedback. This hospital's focus on a culture of institutional excellence and politeness led faculty members to avoid providing constructive feedback to students for fear of adversely affecting their self-esteem. Understanding the culture of feedback at one's institution opens the door to creating more effective ways to seek and deliver feedback and perhaps change the culture over time [21].

To facilitate more timely feedback, many medical schools have designed online/mobile applications allowing clinical faculty to provide immediate formative feedback for specific competencies medical students should achieve prior to graduation. The AAMC has undertaken a pilot program evaluating the core Entrustable Professional Activities (EPAs) that all medical students should achieve by the time they graduate. Currently, residency program directors report a wide variation in clinical skills among residents coming from different medical schools. The goal of the EPA initiative is for clinical competence to be viewed on a continuum along which medical students develop skills they should be trusted to complete independently by the start of their internship. Interestingly, empathic care is not among the 13 core EPAs being evaluated by the ten medical schools participating in the pilot study. Instead, empathy and the provision of humanistic care are interwoven throughout many of the core competencies students are expected to achieve [22].

Many academic medical centers are focusing on providing improved customer service to optimize patient experiences. The utility of patient satisfaction scores to



drive decisions to improve health-care delivery is controversial for numerous reasons. For example, patients may be dissatisfied when physicians actually practice evidence-based medicine, perhaps becoming frustrated when physicians do not order a test a patient feels they may need or prescribe antibiotics for a viral upper respiratory infection. While the physician is practicing sound medicine, patients perceive the decisions to be mal-aligned with their preferences. However, the benefit of patient satisfaction scores centers on the feedback provided about the general patient care environment. In 2008, the University of Utah Health Care system underwent an attempt to change the culture by delivering a consistently exceptional patient experience. In studying reasons why their health system was not achieving their goals, they found several factors that affected their ability to deliver exceptional care: “lack of good decision-making processes; lack of accountability; the wrong attitude; a lack of patient focus; and mission conflict.” [23, p. 338] From the top down, senior leadership of the school and individual departments aligned health system goals, emphasizing patient satisfaction and engagement. The health system began to use values-based recruitment interviews for new hires into the health system with questions focused on compassion, collaboration, innovation, accountability, diversity, integrity, quality, and trust. These same qualities were incorporated into annual performance/promotion reviews for all existing personnel. Medical students and residents were engaged to incorporate system-wide practice changes into their daily routines. Staffing models were improved to assure work load was manageable at all levels from housekeeping to clinical department managers. The results? Improved patient satisfaction scores were noted, with parallel improvements in quality, risk management, and employee satisfaction. Unanticipated benefits included more patients posting reviews of their experiences on the health system website, generating more web traffic and search engine optimization resulting in increased patient volume and revenue [23].

Shah et al. discuss the concept of faculty vitality as important in combating burn-out. Institutional, individual, and leadership factors all contribute to how faculty perceive their well-being in academic medical centers. Table 18.3 summarizes some of the contextual factors that influence faculty vitality in academic medical centers. Essentially, when faculty perceive they are working in an environment that is aligned with their personal goals and values, the vitality of the faculty improves to the point where their productivity and ability to convey empathy in their training of learners improve [24].

## 18.7 Conclusion

Training physicians who can provide competent yet empathic patient care only becomes more crucial as academic medical centers face unprecedented challenges in meeting the needs of the patients and communities they serve while maintaining financial solvency. Increasing the diversity among trainees in academic medical centers must be a focus of admissions and residency selection committees as having a diverse workforce helps assure culturally competent medical care is provided to a

**Table 18.3** Contextual factors influencing faculty vitality in academic medicine

Individual	Motivation, self-efficacy, self-esteem, and self-management
	Lifelong learning goals, personal goals, priorities, and values
	Expectations, work habits, work experiences, and collegiality
Leadership	Vision, values, goals, and priorities
	Diversity, alignment, expectations
	Mindfulness
	Transparent communication, mentoring and coaching, sponsoring
Institutional	Mission, culture, values
	Work environment, collegiality, resources
	Faculty development/engagement values
	Promotion criteria, personnel policy, tenure/award/merit/productivity criteria

variety of patient populations. Learners must be trained in academic medical centers that emphasize healthy learning environments by providing faculty with sufficient resources to balance their multiple roles including clinical, teaching, and scholarship. Mistreatment of learners in the environment must be identified and eliminated, and an inter-professional approach to patient care should be core to the clinical mission. Health-care administrators should regularly survey faculty and learners to better understand frustrations and inefficiencies existing in the clinical learning environment, engaging these same audiences with opportunities to make effective changes when necessary. Novel methods of training medical students and residents must continue to consider one fundamental principle: *patients are at the center of all we do in academic medicine*. Including formal training in making connections with people from all backgrounds should be core to educational innovation as academic medical centers transform so that empathy is preserved as a core value.

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