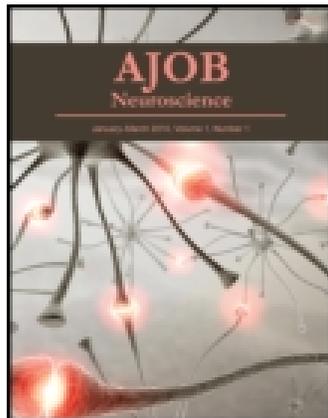


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### The Impact of Clinical Empathy on Patients and Clinicians: Understanding Empathy's Side Effects

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# The Impact of Clinical Empathy on Patients and Clinicians: Understanding Empathy's Side Effects

Helen Riess, Harvard Medical School

The benefits of clinical empathy in medical practice abound. They include improved patient satisfaction and adherence to treatment recommendations, more accurate diagnoses, reduced distress (Neumann et al. 2011), improved health outcomes (Kelley et al. 2014), and fewer medical errors and malpractice claims (Hickson et al. 2002). A new article by Jackson, Eugène, and Tremblay (2015) suggests that in the quest to enhance empathy in patient-clinician dyads, the welfare of both must be taken into consideration.

The well-being of today's primary care physicians is in peril. While some studies have shown that clinician empathy positively impacts clinician well-being, meaningful work, sense of coherence, and job satisfaction (Halpern 2001; Krasner et al. 2009; Warmington 2012; Tei et al. 2015), other research shows a decline in empathy during training and beyond (Bellini and Shea 2005; Hojat et al. 2009; Decety, Yang, and Cheng 2010). This emotional distress may arrive as a result of a clinician's heightened state of perception and high exposure to pain, especially if a clinician is experiencing decreased self-regulation and perspective-taking, adverse work conditions, and insufficient work-life balance. If empathy is so helpful to patients, does it necessarily come at an emotional cost to providers who begin their careers with humanism and altruism?

## UNDERSTANDING CLINICAL EMPATHY AND "EMOTIONAL LABOR"

In the medical profession, empathy has been conceptualized as a communication competency between clinician and patient, in which the practitioner uses various perceptive routes leading to expressions of concern and compassion. These include perceiving sensory/affective cues to identify and transiently experience the subject's emotional state (Hirsch 2007) and using cognitive abilities such as perspective taking to understand the patient's experience (Singer and Lamm 2009). These may lead to a potential mutual understanding and helping behaviors from clinicians, or diverging responses leading to clinicians' personal distress and distancing behaviors. These responses have important implications for patients and clinicians alike.

Empathy involves a continuum that begins with cognitive and affective appraisals of others' pain and emotions, a temporary mapping on the observer's brain (in the areas of the anterior insula, anterior cingulate cortex [ACC], primary and secondary somatosensory cortices, the temporo-parietal junction and septal area) that then leads to a response from the provider. To understand empathy in clinicians, it is important to understand which components are being assessed. Empathic capacity is comprised of perceptive components, processing components, and responsive components. Perceptive components can be influenced by the clinician's individual disposition and trait sensitivity to others, and also by the environment. The ability to employ cognitive empathy and perspective taking modulates the empathic response toward either empathic concern and compassion, or emotional distress.

Environmental factors also contribute to emotional overload that lead to emotional distress rather than empathic concern. Empathy has been described as "emotional labor" (Larson and Yao 2005), and all labor requires energy, resources, and conducive environments to optimize results. Emotional distress may result from emotional exhaustion due to workloads where patients are seen every 10 minutes, the responsibility for too many sick and dying patients, documentation requirements that could be shifted to support staff, and no time for self-care. These enormous stresses on health care providers contribute to physical and emotional exhaustion, substance abuse, insomnia, marital discord, job attrition (Gleichgerricht and Decety 2013), and suicide. Compared to the general population, male and female physicians are 48% and 130%, respectively, more likely to suffer from depression leading to suicide (Schernhammer 2005).

Increased pressures and lack of workplace support are spurring physicians to flee the profession. Research from the Physician Worklife Study showed that adverse work conditions contributed to high levels of stress, burnout, intentions to leave practices, and perceptions of suboptimal patient care (Pathman et al. 2002). A recent Healthy Workplace Study (HWS) demonstrates that organizations may be able to improve retention, burnout, and dissatisfaction by addressing communication and workflow, and by initiating quality improvements targeting clinicians' concerns (Linzer et al. 2015).

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## EMPATHY TRAINING

A new focus on providing health care providers with supports to maintain optimal empathic perception and responses is critically needed, and can be accomplished by providing communications skills training and by improving work–life conditions (Linzer et al. 2015). Targeted training in empathy can lead to improved clinician empathy by both enhancing perception through self- and other-awareness, and optimizing empathic responses through self-regulation and perspective taking, which lead to empathic accuracy and improved patient satisfaction. Reconnecting with patients meaningfully can improve job satisfaction and decrease clinician burnout, providing a positive feedback loop, especially if supported by humane work conditions. As Jackson and colleagues (2015) suggest, there is resounding agreement that patients' awareness of some of the challenges clinicians face could also foster mutual empathy, which would enhance the relationship bilaterally. Empathy training that focuses on honing both the perceptive and responsive components of empathy has been shown to improve the experience of both patients and providers of health care by enhancing empathic concern and compassion (Riess et al. 2012). A randomized controlled trial of empathy training focused on improving perception of patient and clinician emotions and enhanced perspective taking was shown to significantly improve the experience of both patients and providers. Trained physicians reported significant improvement in both the perceptive and responsive domains of empathy, which was confirmed by significant improvement in patient satisfaction scores. Trained physicians reported (1) improved interpretation of patient non-verbal cues (91%); (2) greater awareness of and ability to manage their own physiological reactions (96%); and (3) greater awareness and management of their emotional reactions to patients (91%). Physicians were also trained in mindfulness breathing practices that enhanced self-regulation.

A confusing and divisive dichotomy is emerging in the social neuroscience literature whereby empathy training and compassion training are being artificially contrasted—“empathy training” has been described as leading to distress and negative affects in nonclinical research subjects, whereas “compassion training” in research subjects is reported to augment self reports of positive affects in subjects (Klimecki et al. 2013). In one study, the “empathy training” condition was specifically designed to train subjects in emotional resonance by depicting human suffering and measuring brain regions associated with pain. This resulted in increased negative affect and brain activations in anterior insula and anterior midcingulate cortex—regions previously implicated with empathy for pain. The training was designed to focus on sensory/affective resonance, which is only one dimension of empathy, which can lead to emotional distress, without the benefits of full empathy training that includes training in cognitive empathy, perspective taking, self-regulation, and breathing

exercises to promote mindfulness practices and empathic responses. The “compassion training” condition used a mindfulness intervention that was reported to increase activations in non-overlapping brain network spanning ventral striatum, pregenual ACC, and medial orbitofrontal cortex. This research is a valuable contribution as it identifies mindfulness interventions as a strategy to overcome emotional distress and to strengthen resilience (Klimecki et al. 2013). These strategies have also been embedded in evidence-based empathy trainings and should not be described strictly as “compassion training” interventions. Increased compassion has been shown to be a significant effect of empathy training as assessed by patients in clinical settings (Riess et al. 2012).

Confusing the definitions of empathy and compassion is a disservice to the medical field and provides evidence that a common nomenclature that spans social neuroscience and clinical practice is needed. Also, as Jackson and colleagues point out, extrapolating from experimental conditions in the laboratory to more ecologically valid conditions in clinical settings must be done with caution. Studies have shown that clinical empathy training improves the experience for both patients and providers in rigorous trials. Medical practitioners who read neuroscience studies of empathy training producing distress may question the benefits without knowing that some authors refer to empathy training solely as training in emotional resonance in neuroscience laboratories that may lead to personal distress. As we have seen, personal distress is but one of many responses to perceiving the distress of others. The positive responses include empathic concern and compassion. It does not serve clinicians well to confuse terms that are poorly defined. A recent report by Singer and Klimecki (2014) has clarified that empathy can lead either to positive outcomes including prosocial motivation, other-centered emotions, compassion, and wellness, or to emotional distress (self-related emotions, negative affect, social withdrawal, and burnout.)

Increased support of clinicians' well-being is vitally needed to enable them to provide empathic care, which is strongly tied to patient satisfaction, health outcomes, and physician well-being. Neuroscience studies are needed to identify the role of workplace factors in empathy decline. Physicians are finding current medical environments a poor fit for careers they were once passionate about, and interventions that improve communication, workflow solutions, and group supports that address clinician concerns are all needed. Providing “resilience rounds” for providers could enable them to be more empathic when making patient rounds in hospitals. Health care institutions are ethically obligated to provide work environments and trainings that balance the health of both patients and providers. By supporting all components leading to empathic and compassionate care, medical professionals will become more aligned with the values and joy that drew them to health care professions in the first place.

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# Neuroscience and Psychoanalysis: Toward an Empathic Theory of Mind

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This issue of *AJOB Neuroscience* deals with the psychological constructs that psychoanalysts have become ever more concerned with: empathy, social relatedness, and need for psychological connection, among others. And the

discoveries of the anatomy, physiology, and functions of discrete areas of the brain are quite consistent with and confirmatory of much psychoanalytic clinical data and some of its theoretical hypotheses. There are some new

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