

The Role of Empathy and Compassion in Diagnosis

By Susan Carr
Newsletter Editor

Although empathy and compassion are central to topics of current interest, including burnout, patient satisfaction, and medical and nursing education, the terms are often loosely defined, and research about their role in medicine has been scarce.¹ That is beginning to change. There are recently published studies,¹⁻⁴ and healthcare organizations such as the Stanford School of Medicine and the Massachusetts General Hospital have established departments and training programs dedicated to improving interpersonal skills related to compassion and empathy (see p3 for more information). Some of this work looks beyond the benefits of improved relationships to explore the complex effects emotions can have on diagnosis and treatment.

Defining Empathy and Compassion

The first step for researchers and others interested in this topic is to define the terms empathy and compassion, which are often used interchangeably in casual conversation.

The first step for researchers and others interested in this topic is to define the terms empathy and compassion, which are often used interchangeably in casual conversation.

Tony Fernando, MD, psychiatrist and sleep specialist at Auckland University in New Zealand, offers training in compassion and mindfulness for physicians and medical students.⁵ Fernando describes empathy as a precursor to compassion.⁶ Empathy is how one individual connects with others, recognizing and understanding their experiences. Compassion is the next step, in which empathy leads to a desire to help—often but not necessarily leading to action. To provide an example, Fernando describes approaching a disruptive patient. Though the patient is clearly suffering, the clinician’s initial reaction may be wary and defensive. Fernando role plays, saying, “Then I [the physician] notice my judgment and shift into empathy. ‘I can understand your suffering.’ Then I shift into compassion: ‘I want to help; How may I be of benefit?’”⁶

In a review of healthcare literature focused on compassion, Sinclair et al. note the challenge many researchers face in “distinguishing between the construct of compassion and variants of sympathy and empathy.”^{1(e2)} They describe empathy as the ability to understand and acknowledge the feelings of others. Sympathy is an emotional reaction to suffering; compassion involves taking action: “[Compassion] requires emotion and action . . . , finds its basis in love, vulnerability, and reciprocity, and is actualized in the disadvantaging of oneself for the benefit of another.”^{1(e2)}

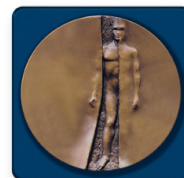
Compassion Fatigue and Occupational Stress

It is widely assumed that compassion—the desire to help others—is what drives most clinicians to choose their profession. It has also been noted that the process of medical education and the demands of practice and caregiving take a toll on the capacity of medical students and clinicians to feel empathic and to act with compassion toward patients.^{4,7}

This erosion of empathy and compassion,

Also in This Issue ...

Diagnostic Error in Medicine Europe.....	4
AHRQ Research Summit on Improving Diagnosis	4
Leapfrog Group Survey	4



SOCIETY to
IMPROVE
DIAGNOSIS in
MEDICINE

With thanks for their assistance with this article:

Jeannine Cyr Gluck, MLS

Mark L. Graber, MD

Michael Grossman, MD

Lorri Zipperer, MA

often referred to as “compassion fatigue,” is related to burnout. All of these are considered to be forms of occupational stress.² Signs and symptoms associated with these conditions include anger, fatigue, detachment, addiction, disrupted sleep, and troubled relationships. These conditions may contribute to poor performance and diagnostic error, among other safety problems.^{8,9}

Compassion and empathy are elements of a larger context—the emotional environment within which patients and clinicians relate around medical care. The intensity of that environment contributes to occupational stress.² Patients expect physicians and other caregivers to treat them with empathy, sympathy, and compassion. Meanwhile, physicians navigate their own emotions as they work with patients who may be distrustful, scared, frustrated, or have other more serious psychological issues in addition to serious medical conditions.⁶

For physicians and nurses, this environment requires a high level of “emotional intelligence,” a term popularized in 1995 by Daniel Goleman, PhD,¹⁰ that encompasses the ability to know, manage, and marshal one’s own emotions while recognizing and working with the emotions of others. Even professionals with highly advanced medical or nursing knowledge and technical skills may struggle to perform optimally when facing adversarial patients and chaotic practice situations. Those circumstances require everyone to muster emotional intelligence. The demands placed on clinicians for improved efficiency, electronic documentation, quality reporting, etc., also make the practice environment more stressful.

Emotions and Diagnostic Error

Researchers in The Netherlands found a direct correlation between working with patients whose behavior was identified as “disruptive” and the accuracy of physicians’ diagnoses.^{11,12} Physicians committed more diagnostic errors when working with disruptive—versus neutral—patients; with more clinically complex cases, the effect was stronger. To control the variables, the study was performed with written vignettes. Two versions of each case were identical except for the description of the patient; physicians (family practice residents) saw only the neutral or disruptive version of each case. The authors point out that the study’s design may understate the effect: “The potential negative effect of difficult behaviours displayed by real patients is likely to be stronger than what can emerge from a few sentences about the patient’s behavior in a written case.”^{11(p4)}

Commenting on the study, editorialists state the obvious: “Real people have real emotions

that motivate their thinking.”¹³—a thought that is taken for granted in some spheres, but not in medicine. It is less obvious why the disruptive behavior led to the errors. Contrary to what was expected, physicians in the study spent roughly the same amount of time on all the cases. The errors were not caused by the physicians rushing through cases in order to spend less time (even if just on paper) with disruptive patients. In a separate but related study, researchers postulate that the physicians spent extra mental energy dealing with disruptive behavior and, therefore, had less to spend on the diagnosis, to the detriment of their performance.¹²

In “Emotional Influences in Patient Safety,” Croskerry, Abbass, and Wu find correlations between but little awareness of or research about the connections between emotions and diagnostic error.⁸ They observe that among different kinds of errors, “emotional errors” are most analogous to cognitive errors:

The properties of emotional error make it especially difficult to deal with. As with cognitive error, it is mostly covert, often not witnessed, and almost never recorded.... emotional influences remain a blind spot both in studies of clinical decision making and within the general context of patient safety.^{8(p200)}

They use examples of diagnostic error to illustrate how emotions can undermine good decision-making. In *countertransference*, something about the patient reminds the physician of someone else—perhaps an emotionally needy relative—or a class of patients, evoking a “predictable and often biased response.”⁸ *Attribution* also involves a bias; in this case, assumptions (often negative) that are triggered by something about the patient’s presentation or history. For example, a physician attributes a patient’s symptoms to his or her known history of drug abuse and misses the actual, unrelated medical problem. These errors are possible with any patient and may be more likely to occur with those who are disruptive or disturbed.⁸

Croskerry, Abbass, and Wu also connect burnout to the emotional context of medical practice and recommend that clinicians monitor and regulate their emotions—ie, employ good emotional intelligence. They further propose that physicians and nurses (as well as teachers, whose work is also intensely involved with people) who lack that intelligence have to work harder to block or defend against their own emotional reactions and are therefore more prone to occupational stress. They are also more likely to make errors, having been distracted and depleted by the challenge of

ImproveDx is a bimonthly publication of the not-for-profit Society to Improve Diagnosis in Medicine. The opinions expressed in this publication are not necessarily those of the Society to Improve Diagnosis in Medicine or its Board of Directors.

Editorial Board

Mark L. Graber, MD

Michael Grossman, MD

Jeannine Cyr Gluck, MLS

Managing Editor

Lorri Zipperer

Zipperer Project

Management

Albuquerque, NM

Editor

Susan Carr

Concord, MA

© 2016 Society to Improve Diagnosis in Medicine

Permission to reprint portions of this publication for educational and not-for-profit purposes is granted subject to accompaniment by appropriate credit to SIDM and *ImproveDX*. Commercial reproduction requires preapproval. Some fees may apply.

Training to Improve Empathy and Compassion

Recognition of the need for emotional intelligence in healthcare has led to the development of training and education programs.

- The **Emory-Tibet Partnership** (ETP) was formed in 1998 with the blessing of the Dalai Lama to “bring together the best of Western and Eastern intellectual traditions” to address global problems. ETP offers sessions of cognitively-based compassion training designed specifically for faculty, staff members, and students at the Emory School of Medicine.
- Massachusetts General Hospital (MGH) established the **Empathy and Relational Science Program** to focus on the neurobiology and physiology of human interaction and to offer evidence-based education and training to improve empathy in healthcare. Helen Riess, MD, is director of the MGH program and Empathetics™, a program that also offers training in empathy and interpersonal skills.
- The **Schwartz Center for Compassionate Healthcare** was founded by Ken Schwartz shortly before he died from lung cancer in 1995. Schwartz established the center to promote relationships that “provide hope to the patient, support to caregivers, and sustenance to the healing process.” The Schwartz Center offers grants, programs, and awards designed to help strengthen clinician-patient relationships.
- The Stanford School of Medicine in California established the **Center for Compassion and Altruism Research and Education** (CCARE) in 2008, following a visit from the Dalai Lama to Stanford University in 2005. In addition to research, CCARE offers conferences and training programs designed for a broad audience, including but not exclusive to patients, caregivers, and healthcare professionals.

managing their own emotions. This observation mirrors the finding that physicians who expended extra energy working with disruptive patients were more likely to make diagnostic errors.^{11,12}

In a review of *How Doctors Think*,¹⁴ Richard Horton, MD, editor of *The Lancet*, synthesizes the observations of experts in patient safety and diagnostic error in a message that rings true for most human endeavors, not just medicine:

Physicians can guard against these traps by heightening their sense of self-awareness and becoming conscious of their own feelings and emotions, responses, and choices. All too few doctors have this skill today. Indeed, a doctor's training can instill utterly contrary traits—confidence and certainty, in particular, which might close off an awareness of one's usually unconscious weaknesses.¹⁵

Further research will help deepen understanding of the role of emotions in medicine. Meanwhile, self-awareness combined with common sense and compassion offers a path to improvement. Patient safety requires acceptance of human error as a universal experience; it's possible to mitigate harm caused by errors, but not to eliminate the

errors themselves. Similarly, emotions cannot be denied. They will always have the potential to contribute to biases in clinical reasoning and diagnosis. To deny the role of emotions or to attempt to control them too strenuously—versus recognizing and working with them—will serve only to increase stress and harm.

References

- 1 Sinclair S, Norris JM, McConnell SJ, et al. Compassion: a scoping review of the healthcare literature. *BMC Palliat Care*. 2016;15(6). doi:10.1186/s12904-016-0080-0.
- 2 Sabo B. Reflecting on the concept of compassion fatigue. *Online J Issues Nurs*. 2011;16(1). doi:10.3912/OJIN.Vol16No01Man01.
- 3 Lombardo B, Eyre C. Compassion fatigue: a nurse's primer. *Online J Issues Nurs*. 2011;16(1). doi:10.3912/OJIN.Vol16No01Man03.
- 4 Neumann M, Edelhäuser F, Tauschel D, et al. Empathy decline and its reasons: a systematic review of studies with medical students and residents. *Acad Med*. 2011;86(8):996–1009.
- 5 Stephenson K. Tony Fernando wins top NZMA award for mindfulness medical education. www.nzDoctor.co.nz. Published December 2, 2015. Accessed July 10, 2016.
- 6 Szecket N, Nahill A. Episode 12: compassion. IMReasoning [Podcast]. <http://imreasoning.com/episode-12-compassion/>. Published January 6, 2016. Accessed 7/10/16.
- 7 Newton BW, Barber L, Clardy J, Cleveland E, O'Sullivan P. Is there hardening of the heart during medical school? *Acad Med*. 2008;83(3):244–249.
- 8 Croskerry P, Abbass A, Wu AW. Emotional influences in patient safety. *J Patient Saf*. 2010;6(4):199–205.
- 9 Fahrenkopf AM, Sectish TC, Barger LK, et al. Rates of medication errors among depressed and burnt out residents: prospective cohort study. *BMJ*. 2008;336(7642):488–491.
- 10 Goleman D. *Emotional Intelligence: Why It Can Matter More Than IQ*. New York, NY: Bantam Books; 1995.
- 11 Schmidt HG, van Gog T, Schuit SCE, et al. Do patients' disruptive behaviours influence the accuracy of a doctor's diagnosis? A randomised experiment [Published online ahead of print March 7, 2016]. *BMJ Qual Saf*. doi:10.1136/bmjqs-2015-004109.
- 12 Mamede S, van Gog T, Schuit SCE, et al. Why patients' disruptive behaviours impair diagnostic reasoning: a randomised experiment [Published online ahead of print March 7, 2016]. *BMJ Qual Saf*. doi:10.1136/bmjqs-2015-005065.
- 13 Redelmeier DA, Etchells EE. Unwanted patients and unwanted diagnostic errors. [Published online ahead of print March 7, 2016]. *BMJ Qual Saf*. doi:10.1136/bmjqs-2015-005150.
- 14 Groopman J. *How Doctors Think*. Boston, MA: Houghton Mifflin; 2007.
- 15 Horton R. What's wrong with doctors. [Book review]. *New York Review of Books*. <http://www.nybooks.com/articles/2007/05/31/whats-wrong-with-doctors/>. Published May 31, 2007. Accessed July 25, 2016.

Diagnostic Error in Medicine Meets in Europe for First Time

By Laura Zwaan, PhD
Chair, DEM Europe
Chair, SIDM Research
Committee

On June 30 and July 1 of this year, the Society to Improve Diagnosis in Medicine (SIDM) went to Europe to hold its first conference outside the United States. Held at the Erasmus Medical Center in Rotterdam, The Netherlands, the conference exceeded expectations, attracting 127 attendees from 17 countries. The conference had European style and content, and both days offered attendees a two-hour track of concurrent presentations in the afternoon. In addition to excellent plenary speakers, the meeting featured elements that have become Diagnostic Error in Medicine (DEM) traditions, including a clinical case presentation and “meet-the faculty” dinners held at local restaurants.

To begin the conference, SIDM President Mark L. Graber, MD, gave a presentation about the Institute of Medicine’s 2015 report, *Improving Diagnosis in Health Care*. Next, Cordula Wagner, PhD, offered a European perspective on diagnostic error by reporting the results of a safety program established in the Netherlands. The discussion that followed set the stage for the rest of the conference. The atmosphere was inspiring, and the audience was involved and interactive. Henk Schmidt, PhD, provided insight into the

way contextual factors, such as patient behavior, can influence diagnostic performance.

“Poster pitches” were a new feature introduced at DEM Europe. Poster presenters were invited to entice visitors to view their poster by giving a one-minute pitch to the audience. The concept was well received and made the poster session even more valuable. Fifty-five abstracts had been submitted for presentation at DEM. The highest ranking among those accepted were presented orally and included exciting innovations to reduce diagnostic errors.

The topics addressed during the second day of the conference demonstrated the speakers’ diverse backgrounds, beginning with presentations from the medical testing and laboratory viewpoint by professors Patrick Bossuyt, PhD, and Michael Laposata, MD, PhD. Next, Sara Hiom presented valuable lessons from the Cancer Research United Kingdom program. The conference ended with two high quality presentations. Charles Vincent offered valuable new perspectives from a systems and human-factors approach, and Hardeep Singh, MD, provided the attendees with insights about the risks and challenges posed by electronic health records.

AHRQ Research Summit on Improving Diagnosis in Health Care

September 28, 2016

8:30am – 5:00pm

Agency for Healthcare Research and Quality
Rockville, Maryland

The research summit is available as a live event and webcast. To register and view the agenda, visit <http://www.ahrq.gov/news/events/ahrq-research-summit-diagnostic-safety.html>.

Is Your Organization Part of the Leapfrog Group?

The Leapfrog Group is working with SIDM to raise awareness about diagnostic safety in ambulatory care. In July, SIDM board members David Newman-Toker and Mark L. Graber gave a presentation, “Diagnostic Error: The New Frontier for Patient Safety,” during a Town Hall Call hosted by Leapfrog. A recording of the call and slides from the presentation are available at <http://www.leapfroggroup.org/survey-materials/town-hall-calls>.

At the same address online, there is a link to a survey for Leapfrog members about diagnostic error. If your organization is part of the Leapfrog Group, please also encourage your colleagues to participate in the survey.

