

The background of the cover features a faded, light-colored version of Michelangelo's famous fresco, "The Creation of Adam," showing two hands reaching toward each other. Overlaid on this is a large, semi-transparent caduceus symbol, a staff with two snakes entwined around it and wings at the top, representing medicine. The overall color palette is a mix of warm, aged tones from the fresco and a deep blue gradient at the bottom.

Mohammadreza Hojat

Empathy in Health Professions Education and Patient Care

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*In dedication to those who devote
their professional lives to understanding
human suffering, eliminating pain,
eradicating disease and infirmity,
curing human illnesses, and improving
the physical, mental, and social well-being
of their fellow human beings.*

Foreword to the Original Edition

Empathy for me has always been a feeling “almost magical” in medical practice, one that brings passion with it, more than vaunted equanimity. Empathy is the projection of feelings that turn *I and you* into *I am you*, or at least *I might be you*. Empathy grows with living and experience. More than a neurobiological response, it brings feelings with it. Empathy helps us to know who we are and keeps us physicians from sterile learned responses. Originally, the emotion generated by an image, empathy began as an aesthetic concept, one that should have meaning for medical practices now becoming so visual.

Empathy comes in many different guises. Empathy can be looking out on the world from the same perspective as that of the patient: to understand your patients better, sit down beside them, and look out at the world from their perspective. But empathy can be far more, therapeutic even, when physicians try to help their sick patients.

As a gastroenterologist, I have always been interested in what people feel, more than in what their gut looks like. When the flexible endoscopes began to change our vision in the 1960s, I gave up doing “procedures.” Taking care of patients with dyspepsia or diarrhea up to that time had been a cognitive task: We deduced what might be seen from what our patients told us. Fortunately for our confidence, few instruments tested the truth of what we thought. The endoscopes I disdained proved forerunners of more discerning apparatus that now makes it easy for physicians to “see” an abnormality they can equate with the diagnosis. Gastroenterologists no longer trust what they hear—but only what they can see.

“Imaging,” as X-ray studies have been renamed, has vastly improved medical practice. In the twenty-first century, surgeons are more likely to take out an inflamed appendix than they were in the twentieth century, thanks to the ubiquitous CAT scans that depict the offending organs. Cancer of the pancreas once was allowed to grow unchallenged in the belly when physicians had only a “barium meal” to hint at a malign process, but now they can see it at a much earlier stage. Paradoxically, such prowess makes the patients’ story more important than ever: CAT scans uncover so many harmless anatomical abnormalities that, more than ever, the physician must be sure that what is to be removed from the patient will prove to be the origin of his or her complaints.

“Imaging,” so seductive to the physician, sometimes stands in the way of the empathy that this book is all about. One of my favorite aphorisms, of untraceable provenance, holds that “*The eye is for accuracy, but the ear is for truth.*” It is easy to see a cancer of the pancreas in a CAT scan as you jog by the view box, but it takes far longer to listen to the anguish of the patients at the diagnosis which encapsulates their abdominal pain. And modern physicians have so little time.

Moreover, this enhanced ability to see what is amiss has turned many minor symptoms into diseases, in a frenzy of reification. “Heartburn,” which patients once talked about, has now been renamed “GERD,” gastroesophageal reflux *disease*, which doctors must see to recognize. That once innocuous complaint, which boasted the badge of duty but could be banished by a little baking soda, has become a disease requiring treatment, not just a change of heart or mind. And it has become almost universal, thanks to the media hype magnifying attention to every little qualm of digestion.

The triumphs of medical instrumentation have led some medical students to worry that the physicians they will become may have little to do for patients as the twenty-first century moves on. They point to the “Turing experiment”: Talking to someone behind a curtain, can you detect whether the answers come from a living person or a computer? Sooner or later, they fear, patients will talk to a computer with about as much idea of what or who is responding as Dorothy before the Wizard of Oz. How will tomorrow’s physicians compete with the all-knowing and all-seeing “Doc in the Box!”

I hope they will learn that the sick need the right hand of friendship; for neither robots nor computers can compete with humans when it comes to empathy, sympathy, or even love for those in trouble or despair. Empathy is a crucial component of being truly human and an essential characteristic of the good physician. Yet critics assert that modern physicians lack empathy. If that is true, the selection process may be at fault: Physicians are winnowed by victories, from the competition to get into college and then the struggle to get into medical school. Having clambered up the greasy pole, students may have little feeling left for the defeated, the humble, those who have not made it to the top. Once in medical school, they don white coats—unwisely I think—helping to see themselves separate from their patients and the world. As they learn to be experts fixing what is damaged, they learn the primacy of the eye over the ear.

Sadly, current medical school education squeezes empathy out of the students who learn the body and forget the spirit/mind, while their teachers inculcate more detachment from the “still sad music of humanity.” Later, the experience of post-graduate hospital training quenches the embers of empathy, as they see young lives cut too short by disease and old lives suffering too long. They learn to talk about the case rather than the person, medical writing is objective and impersonal, and imper-turbability becomes their watchword. Medical students, as so many studies have shown repeatedly, lose their empathy as they go through medical school training that “clinical medicine” has been relabeled “cynical medicine.”

That is what this book is intended to counter, just as the program it depicts has changed medical education at Jefferson. In *Empathy in Patient Care*, Dr. Mohammedreza Hojat expands on what we physicians do not see, but can only imagine. **The Jefferson**

Longitudinal Study of Medical Education, which he has headed for so long, provides the bedrock for this volume. He and his colleagues have studied how empathy begins—how medical students develop—and how empathy affects “outcomes”—how patients fare. We humans are social beings who need to live with others and who depend on interpersonal relationships for support. That need for human relationship, Hojat finds essential to the patient–physician dyad, as much as to the work of the ministry. Basing his conclusions on data obtained by the research instruments he has utilized and perfected, Dr. Hojat does not just talk about empathy, he measures it.

A Ph.D. psychologist of estimable attainment, Dr. Hojat has been drawn to viewing empathy as integral to the practice of medicine. The whole aim of this longitudinal study is to select medical students who will be empathic practitioners and to keep them empathic throughout life. “Attainment” and “success” provide the benchmarks of this long-term comprehensive psychosocial study of what makes for successful medical students and turns them into good physicians.

Teachers must find paths to refresh students’ feelings for the human condition early; for that, the humanities loom so important. Beginning in college, premedical students—at least those who are not committed to a career in research—should focus less on the hard sciences and far more on the social sciences and literary fields. Liberal studies should make it easier for them to fold real human emotions into the care they give and—just as important—into their character. The humanities are not forgotten in this book, which recommends more experience with poetry and literature to nurture an empathic attitude in medical students.

It may be easier to recognize the absence of empathy than its presence. Knowing that it had its first openings in the Nazi concentration camp at Theresienstadt (Terezin), I cannot watch the play *Brundibar* without anguish. Its children/actors sing a song of defiance and survival on stage, but they know, Maurice Sendak its illustrator avers, that at its end they will be shipped to Auschwitz, to burn in the ovens of the death camps. Where was the empathy that makes us human in the German guards and officials of that place? In other concentration camps, it is said, prisoners who were musicians were ordered to play chamber music for the guards and officials who, afterwards, would send them off to be gassed. Not much empathy there. Pleasure in music, but no humanity.

Empathy is both rational *and* emotional, for many physicians. Dr. Hojat devotes attention to how much empathy comes from thinking—what the trade calls cognition—and how much from emotion. When we reason, he asks, do we also have emotions appropriate to our thoughts? Surely the answer must depend on what we are thinking about, but here I yield to his appraisal of the data.

Physicians may find his distinction between empathy as a cognitive act and sympathy as an emotional attribute to be more daring, since for us sympathy involves compassion. We physicians, licensed by the state and more knowledgeable than our patients because of experience, try to feel what they experience. Can we feel too much? Get too involved? Can doctors take care of friends? Is it possible for a physician to manage the medical problems of a spouse or children? Are people better off being taken care of by a friend who treats them as patient than by a stranger? Such questions arise from reflecting on his studies.

Dr. Hojat's strong views on human connections are echoed by the phrase "*A friend a day keeps the doctor away!*" Friends, marriage, and all social arrangements help; falling sick, illness, and disease test those relationships. Aging tests them too, especially in the loss of friends, so few left for the funeral. Dr. Hojat attends to some optimistic psychological studies from California claiming that emotional support for women with breast cancer improves their longevity—but, I must caution, most of the time, prognosis depends more on the presence of metastases in lymph nodes than on the circuits of the brain, or even on the spirit.

Hojat finds the roots of empathy nourished by the mother–child relationship, even as he elucidates the nature–nurture conflict. Emotional support in childhood must be enormously fruitful, and the nurturing of infants crucial in establishing a model. Culture must have equal influence, along with the central role of genetic endowment.

Hospital chaplains understand the importance of connections when they talk about "being there" with the patient; no need for talk, just being there, actively present. Dr. Hojat traces the physiological path of that clinical mystery, as he puts it, a gift to the patient. Or is it our duty?

His words on brain imaging bring everything into balance, as up to date as possible. Nevertheless, I wonder whether psychiatry as talk therapy will survive the burgeoning skills of computers. Neurobiology seems to suggest that the mind is like a secretion from the brain, like insulin from the pancreas, that the tide of neurotropic drugs can sweep clean. I prefer to dream that the mind arises from the brain more like smoke from a burning log, to obey quite different physical laws. Just as smoke flies free from its earth-bound roots, so from our protoplasm springs poetry, from the circuits of the brain our hope for a Creator. Yet Leibnitz wisely asked, if we could stroll through a brain as through a room, where would we find charity, love, or ambition? A Creator may have fashioned the channels, but will we ever locate them in that gray matter of the brain? Much depends on culture and environment, as the author so wisely points out.

Empathy is crucial to clinical practice, to treatment especially, though not all physicians agree. Some time ago, an essay "*What is empathy and can it be taught?*" was quickly rejected by a well-known journal of opinion, its editor observing that "Empathy has no place in medical practice." After the essay appeared in a less austere journal, however, many supportive letters and comments encouraged a book on that topic, one that welcomed the return of emotion to medicine.

Hojat sees empathy as largely cognitive, but some will think of empathy as present at birth, innate, waiting to be developed but unlikely to be created by any act of will. That could be too much like play-acting, for if the physician–patient relationship is as central to practice as I believe, there are mystical relationships not yet pictured by our models.

Psychologists will find much of interest in the chapters on techniques and testing. A remarkable collection of abstracts from the Jefferson Longitudinal Study, published in 2005, supports the conclusions in this book. One hundred and fifty-five of those abstracts eventuated in papers published elsewhere provide the outcome data that has changed much at Jefferson. Some, unfamiliar with such studies, will wonder about psychometrics, and how often answers can be "socially desirable," as

Dr. Hojat puts it. They remember that to test how well a subject bears pain in a laboratory setting cannot replicate the state of mind of a patient lying in a bed despairing of unfamiliar abdominal pain and wondering what will happen next. Knowing that an experimenter is causing your pain makes it a lot easier to bear than when you are in the dark. Psychometrics is a complicated science.

The “wounded healer” represents a model. Something good has to be said for the narcissistic satisfaction that comes from patient–physician relationships: working with patients, caring for them, and sharing their emotional life but respecting boundaries. That can be therapeutic for physicians. The physician who has been sick is more likely to be empathic in future practice. Physicians who have had their own troubles have confessed that they have found surcease in talking with patients. Physicians who “burn out” or are bored are often, I imagine, those who regard their tasks as purely medical and technical. Countertransference can play a dynamic therapeutic role for physicians, at times.

The social revolutions of the late twentieth century brought the physician–patient relationship from the distant “professional” ideal of William Osler to one that encourages an intimacy that must vary with cultural norms. Physicians of the twenty-first century in America ask about sexual habits and proclivities, questions which once were taboo. With the fading of parentalism, we are far more frank about the uncertainties of our practices. Prudently, Dr. Hojat has studied the influence of culture and environment, the expectations that mold our behavior. As educators, we might wish to have had empathy poured into our students before they come to medical school, but, as the Jesuits knew, for that we would have to train them from early childhood. The habits and norms of physicians vary with the passage of time; the ideal of what is proper for a physician to do or say also has varied remarkably: Sometimes touching the patient is appropriate and comforting, and sometimes it is misunderstood and inappropriate.

Empathy varies with age and experience. Am I more empathic now than 40 years ago because I have experienced so much more? Does empathy develop? Or does it atrophy or weaken? In recognizing the differences between men and women, Hojat comes down firmly on the side of women as more empathic than men, at least in Western culture. Women are new in medicine, at least in America still finding their way; and the data may change with the “maturation” of their medical practices.

Not all physicians need empathy, for patient–physician encounters comprise many different relationships. Chameleon-like, physicians have to vary with circumstances. Treating a patient with pneumonia is quite different from evaluating someone with abdominal pain of uncertain origin. Their faith in the efficiency of computers has convinced some physicians that empathy is an unnecessary addition to their character. Time is at such a premium; family care doctors complain that they do not get paid for being nice to patients. They have to see more patients ever more briefly just to pay expenses. That must be why fewer graduates are choosing primary care or even internal medicine.

Analysis of videotaped interviews must be a good way to refresh and recover the empathy that students bring to medical school. They can relearn empathy in discussing why patients have asked certain questions, and what answers are most

fitting, and what comfortable phrases may make patients feel better. Rita Charon and others have gotten medical students to write about diseases from their patients' perspective, a very appropriate stimulus to empathy and understanding, the "narrative competence" that Hojat praises.

That also requires the reading of stories and novels, and the discussion of narratives, and it certainly requires more collegiality than trainees tell about in the beginning of the twenty-first century. Empathy can be strengthened through stories. I have no wish to add to what others have written about the medical school curriculum, but I am convinced that rhetoric—the equivalent of persuasion—needs a rebirth in medical practice. We physicians are more than conduits of pills and procedures; we need to build bridges between our medical practice and the world of suffering around us. Conversation is essential, continuing discussions about patient–doctor relationships, about human relationships in general. We can fan the passion of empathy in medicine by both science and poetry, reason and intuition; we can provide more than the robots and computers, for only men and women are capable of empathy.

Team medicine, now looming so large, may supply that remedy through some other member of the group. A nurse or medical student, someone other than a doctor, can readily ask questions and provide the comfort that the physicians on the team do not always find the time to give. Now that hospitalists go from one desperately sick patient to the next, medical practice in the hospital has become too complex for any one person, and the emotional burdens of hospital care cannot be any less trying.

As technology takes over the physicians' task of making diagnoses, empathy will need more attention than equanimity. What physicians can do in the twenty-first century is vastly more effective than before. But physicians no longer find the time to talk to each other, let alone their patients. Conversation helps to develop empathy, empathy overcomes our isolation, and in empathy we rediscover ourselves.

Dr. Hojat wisely provides an agenda for future research ranging from selecting prospective medical students for their empathy to evaluating the neurobiological components of empathy and compassion. He and his coworkers are keen to provide measurements that will predict clinical competence and clinical empathy to help in the selection of medical students. But it may be a long time before the personal qualities of prospective medical students will trump their scientific know-how or their desirably high scores in the MCAT. Gentleness does not loom as captivating as high science grades to most deans of admission. Hojat's utopia wisely provides goals which medical practitioners and teachers can ponder and try to reach for in their daily activities. We are in his debt.

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Foreword to the Expanded Edition

It was in a 1964 decision (*Jacobellis vs. State of Ohio*) in which he was trying to define obscenity, that Supreme Court justice Potter Stewart famously said, “I shall not today attempt further to define the kinds of [obscene] material I understand to be embraced ... *but I know it when I see it.*” Much the same can be said for defining and researching empathy, especially in the context of health professions education and patient care. For example, between *The Oxford English Dictionary* (Compact Edition) and Wikipedia I recently found no fewer than 14 different definitions of empathy some of which conflicted with, and even contradicted, one another.

For a concept with so many different definitions, empathy’s history is surprisingly brief, the word having entered the lexicon in the late nineteenth and early twentieth centuries. This is not to say that caring, concern, and compassion for patients, all mentioned in various definitions of empathy, didn’t exist prior to 1900. On the contrary, one can trace the philosophy and practice of these skills to ancient Greek physicians as Plato showed (Prangle, 1988). Nor does a literal translation of the word, derived from the Ancient Greek (*empathēia*), “physical affection, passion, partiality” which, in turn, derives from (*pathos*) “passion” or “suffering,” help explain why empathy has been the subject of such wide-ranging thought. The answer lies in the fact that the English term “empathy” is actually a translation of the German word, “Einfühlung” (roughly translated as “to feel into”), that first appeared in an 1873 doctoral thesis entitled, *On the Optical Sense of Form: A Contribution to Aesthetics* (Vischer et al., 1994). The thesis focused on the philosophy of idealism and its application to appreciating architectural forms. In its original form, empathy had nothing to do with the connection of human beings to one another and their suffering. The term was translated and reintroduced as “empathy” in 1909 by a British-born psychologist, [Edward B. Titchener](#), who used it in *his* theory of introspection and the problem of intersubjectivity, that is, how it is possible to know others’ minds and experiences (Titchener, 1909). Given its intellectual history, it is not that surprising, even today, that there is so little agreement about what empathy is and the canons of evidence that surround it.

The history of an incomplete translation from one language and discipline to another, plus the current lack of precision in meaning and use, has led to the same

sort of definitional quagmire that faced Justice Stewart half a century ago. Few researchers have attempted, and even fewer have succeeded, in operationalizing empathy in a comprehensive theoretical framework and measuring it in valid and reliable ways. The good news is that this is exactly what Dr. Hojat has done in the expanded and updated edition of *Empathy in Health Professions Education and Patient Care*. Building on his closely reasoned view of empathy and the extant literature in 2007, when the original edition appeared, this expanded edition provides the reader with updates to the field including exciting developments in the neuroscience of empathy, physiological correlates and heritability, psychodynamics, communication, gender, and the relationship of empathy to personal characteristics such as career choice, knowledge acquisition, and clinical competence. Included in the expanded edition are also updated chapters on the development and use of the Jefferson Scale of Empathy (JSE) as well as results from a worldwide network of scholars who have used it in their research. In short, this book is a treasure trove of information and practical wisdom about studying empathy that is unparalleled in depth, breadth, and scholarship.

It was Thomas Kuhn, in his book, *The Structure of Scientific Revolutions* (Kuhn, 1963), who described the evolution of paradigmatic thought in science, thought that normally develops through the accretion of evidence over time and is sometimes disrupted or revolutionized by new ways of thinking. Darwin and Wallace's work on the origin of species through natural selection, Einstein's theory of relativity, and Crick and Watson's discovery of DNA are a few examples of such paradigmatic shifts that have occurred in the modern scientific era. While these paradigm shifts are spectacular and often bring about rapid change, the slow evolution of paradigms in science is more normative. Each paradigm shift brings with it opportunities to add new knowledge as a field matures.

Applying Kuhn's notion of paradigm development in the social and behavioral sciences, Inui and Carter (Inui et al., 1983; Carter et al., 1982) surveyed the field of doctor-patient communication in the early 1980s and concluded that it was slowly evolving from a phase of descriptive work to a more advanced stage in which specific communication behaviors in doctor-patient encounters could be linked to both biomedical and functional outcomes of care. For example, in a series of outcome-based studies, Greenfield, Kaplan, and Ware found that a simple 20-min communication coaching intervention designed to enable patients to ask more questions produced measurably better outcomes in hypertension, diabetes, and ulcer disease (Greenfield et al., 1985). Likewise, in pediatrics, Starfield and her colleagues (1981) showed that patient-practitioner agreement on the nature of a child's problem and the proposed solution had a direct and positive effect on outcomes of care. Given the diversity in scholarship in and around empathy, it has been difficult, until recently, to imagine a similar movement toward outcome-based studies. And yet, if the gold standard of clinical research is the ability to connect specific qualities, characteristics, and behavior outcomes of care, Dr. Hojat's recent research on the role of empathy in diabetes stands out as a telling example of the scientific maturation of research on empathy and the movement from descriptive studies to predictive models (Hojat et al., 2011). The same can be said for his work in medical education and his finding