Mohammadreza Hojat

Empathy in Health Professions Education and Patient Care

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"Empathy in Health Professions Education and Patient Care" is an expanded and updated version of Empathy in Patient Care: Antecedents, Development, Measurement, and Outcomes published by Springer in 2007.

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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 imperturbability 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 (*empatheia*), "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 disciple 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

that there is a decided decrease in empathy in the third year of medical school (Hojat et al., 2009), a finding that is both significant and actionable. In addition to these studies, the reader will find in the expanded edition of *Empathy in Health Professions Education and Patient Care* chapters on the evidence supporting empathy training in health professions education, its effect(s) on patient outcomes, and a road map for future research in the field.

I grew up professionally as a health services researcher and educator in an academic division of general internal medicine where we trained primary care physicians to diagnose and treat 80 % of office-based patient problems and to know when to refer the rest. To succeed in this environment one must be flexible, adaptable, and like solving lots of different kinds of problems. I recall attending a grand rounds presented by a well-known basic scientist who was working at the time on the human genome project. In introducing him it was noted that he had spent the majority of his career working on sequencing the DNA of a single insect, the common fruit fly (*Drosophila melanogaster*)! I was blown away by the investment of time and energy this researcher had put into a single problem, which might or might not produce meaningful results, and might ultimately fail. As it turned out, the investment was worth it and the combined efforts of many basic scientists paid off when the human genome was successfully sequenced in 2013. The point is that single mindedness, persistence, and focus in scientific research, while risky, often lead to significant advances in the field.

The expanded edition of *Empathy in Health Professions Education and Patient Care* is the latest installment in one researcher's lifelong commitment and focus to defining, measuring, and disseminating research on the role of empathy in medical education and practice. It is learned, lucid, and accessible to those who have a passing interest in this area as well as established researchers and medical educators tasked with training future physicians and other health care professionals who hope to realize the promise of medicine to heal as well as cure. It was Sir Isaac Newton, in a letter to a rival, who wrote, "What Descartes did was a good step. You have added much in several ways [but] … *If I have seen further it is by standing on the shoulders of Giants*" (Turnbull, 1959). Indeed, with the publication of this expanded edition of *Empathy in Health Professions Education and Patient Care*, we can see more clearly what lies just over the horizon for research, education, and practice on the role of empathy in health professions education and patient care. As a communication researcher, educator, and sometimes patient, I am especially grateful to Dr. Hojat for his long-standing interest and focus on this topic and for the path he has blazed in bringing clarity and precision to the science and practice of empathy.

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Preface to the Original Edition

All human beings are in truth akin,
all in creation share one origin.
When fate allots a member pangs and pain,
no ease for other members then remains.
If, unperturbed, another's grief canst scan,
thou are not worthy of the name of human.

—Saadi (classic Persian poet, 1210–1290 AD)

Although the primary intention of this book is to describe the antecedents, development, measurement, and consequences of empathy in the context of health professions education and patient care, some of the material presented goes beyond that purpose. For the sake of a more comprehensive analysis, one cannot isolate such a complex and dynamic entity as empathy in health professions education and patient care from a string of determining factors (e.g., its evolutionary, genetic, developmental, and psychodynamic aspects) and multiple consequences (e.g., physical, mental, and social well-being). Thus, to achieve a broader understanding of empathy in health professions education and patient care, I discuss the issue in the wider context of a dynamic system, the function of which rests on the following six premises:

- Human beings are social creatures.
- The human need for affiliation and social support has survival value.
- Interpersonal relationships can fulfill the human need for affiliation and social support.
- The interpersonal relationship between clinician and patient is a special case of a "mini" social support system that can fulfill the need for affiliation and support.
- Empathy in patient care contributes to the fulfillment of the need for affiliation and support.
- An empathic clinician–patient relationship can improve the physical, mental, and social well-being of the patient as well as the clinician.

Human beings are designed by evolution to form meaningful interpersonal relationships through verbal and nonverbal communication. Human beings possess a system of needs for social affiliation—for bonding and attachment, forming a social network, feeling felt, for understanding and being understood. The grand principle is the same whether the individual is an infant, a child, an adolescent, or an adult, or

whether the individual is male or female, healthy or ill: *Being connected is beneficial to the human's physical, mental, and social well-being; it has survival value*.

The aforementioned principle is indeed the theme underlying all chapters of this book. In some chapters, it may seem that I take my eyes off the intended target of health professions education and patient care, but I always return to the underlying theme to link the discussion to the clinician–patient relationship. When appropriate, I frequently use the terms "clinician" and "client," rather than "doctor," "physician," or "patient," to make the discussion more general and thus applicable to all health care disciplines and professions, not to medicine and physicians alone.

Empathy is viewed in this book from a multidisciplinary perspective that includes evolution; neurology; clinical, social, developmental, and educational psychology; sociology; medicine; and other health professions. Some theoretical aspects of antecedents, development, and outcomes of empathy are discussed, and relevant experimental studies and empirical findings are presented in support of the theoretical discussion. The book is based on my years of experiences in medical education research, and in particular on our research in empathy in physicians-in-training and in-practice at Jefferson (currently Sidney Kimmel) Medical College at Thomas Jefferson University. This research resulted in the development and validation of the Jefferson Scale of Empathy, a psychometrically sound instrument that has been used by many researchers in the USA and in other countries.

The book is written for a broad audience that includes physicians, residents, medical students, and students and practitioners of all other health professions including the disciplines of nursing, dentistry, pharmacy, psychology, and clinical social work, and other health professions students and practitioners who are involved in patient care. In particular, faculty involved in the education and training of health professionals can use the book as a reference in their courses in the art (and science) of patient care.

Because the book is intended to serve as a reference source on the topic of empathy in patient care, on many occasions I have cited multiple references for critical issues for those who need to further review the issues in more detail beyond what I have presented in this book. Although a critical review of the literature was not among the intended purposes of the book, occasionally when appropriate I reported additional information such as measuring instruments used, and described the sample used in the cited research to help readers judge the merit of the findings.

It is my hope that this book can help to improve our understanding of empathy in the context of health professions education and patient care. A problem that is well understood is a problem that is half solved. The more that health professions teachers and practitioners understand the importance of empathy in patient care, the better the public is served.

Mohammadreza Hojat, Ph.D.
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September, 2006

Preface to the Expanded Edition

The original edition of this book, "*Empathy in Patient Care: Antecedents, Development, Measurement, and Outcomes*," was published in 2007. The book contributed to a surge of interest in empathy research in medical and other health profession disciplines, based on the feedback from national and international readers, researchers, and scholars. In addition to the attention to the book by educators and practitioners in the health professions disciplines, the following three factors prompted me to embark on this journey to expand and update the original edition of my book. First and foremost, empathy as an important element of professionalism in health care, and as a pillar of the art of patient care, has received increased attention in recent years by leaders, administrators, and educators in academic health centers, by practitioners of patient care, by students and researchers in health professions education, and by the public media. This shift of attention has contributed to a new wave of research on empathy in the context of health professions education and patient care that needed to be included in the expanded edition of the book.

Second, another major advancement in empathy research has been the increasing volume of published research in health profession students and practitioners in the USA and abroad in which the *Jefferson Scale of Empathy* has been used. Indeed, this wave of national and international research imparts great pleasure to me and my research team to witness the impact of our work in the advancement of empirical research on empathy in health professions education and patient care. I have included findings of some of this accumulating volume of national and international research in the annotated bibliography in this expanded edition of the book (see Appendix A).

Third, since the publication of the original edition, a major development ensued in empathy research. An increasing number of studies in the emerging field of social cognitive neuroscience have been published in which brain imaging techniques have been used to explore neurological activities involved in empathy. These advances are important to be reported in an independent chapter which is included to this expanded edition of the book (Chap. 13).

The book is divided into two parts. The first part consists of Chaps. 1 through 5, in which empathy is discussed from a broader perspective in the general context of

human relationships. This part lays the foundation for the second one, without which the discussion of empathy in the second part would look like a structure without supporting pillars.

In the second part, consisting of Chaps. 6 through 14, the focus shifts more specifically to empathy in the context of health professions education and patient care. The two parts are closely interrelated, evident by frequently referring readers to different chapters in the book to avoid redundancies. Each chapter begins with a preamble (an Abstract) presenting the major highlights of the text and ends with a recapitulatory paragraph that provides a brief global view of the chapter.

Chapter 1 presents a historical background about the concept of empathy and discusses the ambiguity associated with the definitions and conceptualization of empathy. The long-standing confusion between empathy and sympathy is discussed and specific features of each construct are listed to distinguish the two. In addition, distinctions are made between cognition and emotion and between understanding and feeling, as specific features of empathy and sympathy, respectively. Finally, the implications of such distinctions are outlined to clarify their different consequences in the context of patient care.

Chapter 2 is based on the assumption that human beings are evolved to connect together for survival. Thus, the importance of making and breaking human connections in health and illness is emphasized. The beneficial effects of a social support system on health and the detrimental effects of isolation, loneliness, and disconnection are presented to underscore the nature, mechanisms, and consequences of interpersonal relationships. The chapter concludes with a notion that the positive relationship between clinician and patient is formed by the drive for human connectedness and serves as a special kind of social support system with all its beneficial healing power.

In Chapter 3, empathy is viewed from an evolutionary perspective, and the psychosocio-physiological function of empathic engagement is described. In addition, the chapter discusses the genetic studies of empathy. The chapter ends with the notion that the foundation of the capacity for empathy developed during the evolution of the human species; thus, empathy is likely to be a hard-wired human attribute.

Chapter 4 discusses the psychodynamics of empathy by emphasizing the importance of prenatal, perinatal, and postnatal factors in the development of prosocial and altruistic behaviors. In particular, the effects of the early rearing environment, especially the mother's availability and loving responsiveness, in the development of internal working models that provide a framework for later interpersonal relationships are described. Experimental studies are presented to show that early relationships with a primary caregiver influence the regulation of emotions that becomes an important factor in interpersonal relationships in general, and in empathic engagements in particular.

Chapter 5 briefly describes several instruments that researchers have used most often to measure empathy in children and adults. The contents of the items in these instruments indicate that these instruments are useful for measuring empathy in the general population; thus their content relevance (or face and content validities) in the context of health professions education and patient care is limited. The chapter

concludes with the notion that a psychometrically sound instrument, developed specifically to measure empathy in the context of health professions education and patient care, was required to satisfy an urgent need to measure empathy among students and practitioners of the health care professions.

In Chapter 6, empathy in patient care is discussed in relation to the World Health Organization's definition of health and the triangular bio-psycho-social paradigm of illness. In that context, empathy in patient care is defined, and four key features in the definition are emphasized: cognition, understanding, communication, and intention to help. The chapter concludes with the point that the patient's recognition of the clinician's empathy through verbal and nonverbal communication plays an important role in the outcome of empathic engagement.

Chapter 7 describes in detail the developmental phases and psychometric properties of the Jefferson Scale of Empathy (JSE), which was developed specifically to measure empathy among students and practitioners in the medical and other health professions. A large volume of empirical evidence is presented from our research team and from other national and international researchers in support of the validity and reliability of the three versions of the JSE. The chapter ends with the thought that the accumulating research evidence from the USA and abroad in support of the JSE's validity and reliability should instill confidence in those who are searching for a psychometrically sound instrument that can be used in empirical research on empathy among health professions students and practitioners.

Chapter 8 discusses the interpersonal dynamics involved in an empathic relationship between clinician and patient, and proposes that both can benefit from empathic engagement. The chapter presents several experimental studies that describe how role expectations, the tendency to bind with others for survival, uncritical acceptance of and compliance with authority figures, the effects of the clinical environment, and bystanders' empathy can influence clinicians' and patients' behavior in clinical encounters. In addition, the chapter argues that such psychological mechanisms as identification, transference, and countertransference, plus placebo effects, and cultural factors, personal space, and boundaries make clinician–patient encounters unique. The chapter ends with a notion that for achieving a better empathic engagement, the clinician should learn to listen with the "third ear" and to see with the "mind's eye."

Chapter 9 describes the link between empathy, psychological, and social variables, clinical performance, career interest, and choice of specialty. The chapter reports a number of desirable personality attributes, conducive to relationship building, that are positively correlated with empathy, and a number of undesirable personal qualities, detrimental to positive interpersonal relationships, that are negatively correlated with it. Data reported in this chapter suggest that high empathy scores are associated with greater clinical competence, and more interest in people-oriented specialties as opposed to technology- or procedure-oriented specialties.

In Chapter 10, gender differences in favor of women observed in a large number of studies of students and practitioners in the health professions are discussed. While the contribution of social learning in gender differences cannot be ignored, I propose that other factors can provide plausible explanations for gender differences

in social skills and capacity for empathy. The ancestral history in mate selection, parental investment, division of labor, and hormonal and physiological factors has endowed women with a greater propensity for social skills and empathic engagement. It is argued that women may be endowed at an early age with a greater sensitivity to social stimuli and a better understanding of emotional signals that can result in a greater capacity for empathic engagement. This argument is reflected in studies reporting gender differences in the practice styles of male and female health professionals.

Chapter 11 reports the theoretical link between empathy and positive patient outcomes and provides evidence concerning the quality of clinician–patient relationships that can lead to more trusting relationships between clinician and patient, which in turn could lead to more accurate diagnoses, and to patients' greater satisfaction with their health care providers, better compliance with clinicians' advice, firmer commitment to treatment plans, and a reduced tendency to file malpractice litigations. Based on the reported empirical studies, and particularly recent findings that showed significant associations between physician's level of empathy and tangible clinical outcomes in diabetic patients, it is concluded that empathy should be considered as an important component of the overall clinicians' competence.

Chapter 12 describes obstacles to the enhancement of empathy in health professions education and practice—the cynicism that students develop during their professional education, the changes evolving in the health care system, and the current overreliance on biotechnology. The chapter also presents some empirical evidence suggesting that empathy is amenable to change by targeted educational programs and describes a variety of approaches used in psychological and health education research to enhance empathy. In particular, ten approaches used for enhancing empathy in the context of patient care were described including interpersonal skill training, perspective taking, role playing, exposure to role models, imagining, exposure of students to activities resembling patients' experiences while hospitalized or during encounters with health care providers, the study of literature and the arts, development of narrative skills and reflective writing, and the Balint approach to training physicians. The chapter presents an overall view that empathy can be taught through targeted educational programs, but the challenge is to retain the improvement.

Chapter 13 describes a new wave of research in social cognitive neuroscience, in exploring the neurological underpinnings of empathy. Recent findings from neuroimaging studies and a new line of research on the mirror neuron system hold promise of helping to understand the neurological underpinnings of empathy. Relying on the conceptualization of empathy (Chaps. 1 and 6), and findings from neuroimaging research and neurological impairment linked to deficiencies in empathy, it can be assumed that particular cortical regions of the brain may be implicated in empathic responses. The importance of making a clear distinction between empathy (predominantly a cognitive attribute) and sympathy (predominantly an affective reaction) in exploring the neurological underpinnings of empathy is discussed. However, challenges exist in developing a research paradigm to evoke empathic responses in one occasion and sympathetic reactions in another to examine similarities and differences in brain activities in the two situations. It is argued that exploring neuro-

logical underpinnings of empathy as opposed to sympathy is important for finding ways to maximize empathy and regulate sympathy in patient care.

In Chapter 14, the final chapter, empathy in the context of health professions education and patient care is viewed from the broad perspective of the systems theory. I suggested that a systemic paradigm of empathy in patient care includes the following subsets that interactively operate in the system: the clinician related, non-clinician related, social learning, and educational subsets. The elements within each subset and the interactions of the elements within and between subsets during clinical encounters that lead to functional (positive) or dysfunctional (negative) patient outcomes are discussed. Finally, an outline of an agenda for future research on several topics involving empathy in patient care is presented. The chapter concludes that the implementation of remedies for enhancement of empathy is a mandate that must be acted upon and that any attempt to enhance empathic understanding among people is a step toward building a better civilization.

It is my hope that the instruments we developed—Jefferson Scale of Empathy—and our research in empathy in health professions education and in patient care can continue to generate greater motivation and inspire researchers to undertake more inquest on the topic, and hopefully help to improve our understanding of the concerns, pain, and suffering of our fellow human beings in general, and to enhance health professionals' empathic engagement in patient care, in particular. As indicated in the entire text of this book, empathic understanding can not only enhance the quality of patient-clinician relationships and improve outcomes of patient care, but also serve as a binding means for achieving global peace and harmony in all humans, everywhere, regardless of any so-called divisive factors.

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August, 2015

A Personal Odyssey

Life is full of surprises!

—(A popular cliché)

A mother and her young daughter sat in the examination room, waiting for the doctor to show up. They looked anxiously at the closed door, expecting a stranger in a white coat to open it at any moment. Time seems to stand still when a patient is waiting for a doctor to come. It is interesting that patients always view a doctor as the most trusted of all strangers unless an adverse event occurs, usually during the first encounter.

At the recommendation of the pediatrician, the mother brought her teenaged daughter to this pediatric cardiologist to be examined for heart palpitations. The pediatrician had indicated that, at that age, occasional palpitations were not necessarily a serious cause for concern: They could be a result of too much caffeine for a coffee-lover like that young girl, a sign of test-taking anxiety at school, or a sign of a transitory emotional state. However, to eliminate the possibility of a serious heart condition, the pediatrician referred the girl to an expert in cardiology.

Here they were waiting for the expert to deliver the final verdict—either a clean bill of health or a long-term treatment that eventually could involve surgical procedures. The fear of the unknown that always haunts human beings was escalating with the passage of time. Finally, the doctor entered the room shadowed by a young woman also wearing a white coat. He pointed to her and said, "This is my resident." No greetings were exchanged, and the doctor seemed indifferent and in a rush. The encounter was cold. Without looking at the mother or the girl, he opened the medical chart the pediatrician had sent him and announced that additional tests were needed. The test he suggested was a heart monitor the girl would wear 24 hours a day, seven days a week, for at least a month. After each abnormal heartbeat, the device would transmit the recorded signals to a monitoring center via a telephone line connected to the monitor.

When the anxious mother asked the doctor how her daughter could be hooked up to a heart monitor for a month without missing her classes, the cardiologist said the monitor was light and could be attached to a belt around her waist and connected to a watch-like device on her wrist. The only additional information he offered was that the monitor could be rented for a month and that the expense might not be covered by insurance. He seemed to be more concerned about how the monitor would be paid for than about the mother's and daughter's need for comforting comments.

The doctor informed the mother that the next appointment would be in a month or so, after the heart monitor test was completed. The anxious mother expected, to no avail, more information about her young daughter's condition, some sign from the doctor that would make her daughter, who was looking hopelessly into the doctor's emotionless eyes, feel a little hopeful at least. As the doctor and his resident were leaving the examination room (where no examination had been performed), the mother, with a despairing look, asked the doctor: "Is my daughter's

> heart condition really serious enough to need constant monitoring for a month? Couldn't her condition be transitory?" The doctor looked at his resident and mumbled, "We've got another doctor in here," and the two left the room, leaving mother and daughter feeling desperate and confused. The mother did not trust the expert, never rented the monitor, and the heart palpitation stopped abruptly when the daughter stopped drinking coffee. However, memories of cold encounters can last forever.

It is interesting that an adverse event occurring when a person is in a heightened state of emotional arousal tends to leave a deeper scar in the sufferer's mind than it would otherwise. Or it may be that a lack of empathic understanding has a more lasting effect than the presence of expressing concerns. It is true that negative experiences have a more lasting trace than positive ones. Is it any wonder that many patients hate to go to a doctor's office? (By the way, that mother happened to be my wife and the young patient was my daughter.)

It is interesting to note the gift of presence of a lovingly responsive and empathic human being can become a panacea to other's pain and suffering. Here is a personal observation:

> The baby startled first at the touch of the immunization needle in her tiny thigh, then came bursts of cries. The mother anxiously rushed to her baby's side, held her tight in her arms, gently put the baby on her chest, while patting her back started to talk in a calm motherly voice: "Oh my little girl … don't cry baby, it's over …" The little girl gazed at her mother's eyes, stopped crying, cuddling in the security of her mother's arms as if her pain had gone away to the sky …

I accompanied my wife and my daughter that day to the pediatrician's office, observed this event, and wondered: What is in the mother's tender loving care that soothes her baby's pain? Could it be a miraculous outcome of an empathic understanding?

The aforementioned events, plus my long-standing curiosity about and fascination with the two opposing poles of human connectedness versus lack of connectedness—namely interpersonal relationship versus loneliness—compelled me to embark on a journey that would lead to a better understanding of why empathy is so important in patient care.

Since my college years, I have been curious about why people behave as they do in making or breaking human connections. What are the foundations on which human beings build, or fail to build, the capacity to form meaningful interpersonal relationships? Has human evolution included development of the ability to form interpersonal connections? What roles do genetic predisposition, rearing environment, personal qualities, educational experiences, and social learning play in achieving personal and professional success, in clinician–patient encounters, or in student–teacher relationships, or even in achieving likeability or attaining the qualities of professional, educational, or political leadership?

While earning my master's degree at the University of Tehran, I attempted to satisfy my curiosity about the personal attributes leading to popularity and success by examining the qualities of popular students using a sociometric methodology. I found that the human attribute of likeability, or popularity, was rooted in the early rearing environment and was also linked to positive personality traits, such as sociability and self-esteem. Furthermore, academic and professional success is the

end result of these social skills. This research culminated in my master's thesis, *An Empirical Study of Popularity*.

While earning my doctoral degree at the University of Pennsylvania several years later, I continued to pursue my research interests, which eventually resulted in my doctoral dissertation, *Loneliness as a Function of Selected Personality, Psychosocial and Demographic Variables*. During this period, I studied factors contributing to loneliness, an indication of an inability to form meaningful interpersonal relationships. The findings showed that a set of personality factors, early experiences in the family environment, perceptions of the early relationship with a primary caregiver, early relationships with peers, and later living environment could predict experiences of loneliness in adulthood.

From the results of both studies, I learned that a common set of psychosocial attributes can contribute to the development of a capacity (or incapacity) to make (or break) human connections. These psychosocial attributes that are conducive to making human connections are similar to the elements of "emotional intelligence," such as social competency and the ability to understand the views, feelings, and emotions of others: that is, the capacity for empathic understanding.

As a psychologist by academic training, I entered a new territory of medical education research more than three decades ago. At the beginning, I was not sure whether my interests, knowledge, skills, and academic background in psychology could serve the purpose of medical education research. However, I soon discovered that the field of medical education research was a rich and challenging territory at the crossroad of several disciplines, including psychology, education, and sociology as well as medicine. As a result of learning more about the field, I became convinced that both the art of medicine and the alleviation of human suffering would flourish by incorporating ideas from the behavioral and social sciences into the education of physicians.

I started my career in medical education research at a great academic medical center, Jefferson (currently Sidney Kimmel) Medical College of Thomas Jefferson University, where I was charged with administrative and research responsibilities for the Jefferson Longitudinal Study of Medical Education. This now well-known longitudinal study retrieves data about Jefferson's medical students and graduates from the most comprehensive, extensive, and uninterrupted longitudinal database of medical education maintained in a single medical school. The Jefferson Longitudinal Study was initiated under the supervision of Joseph S. Gonnella, M.D., a decade before I joined the faculty. Joe was then the Director of the Office of Medical Education. Joe initiated the study because he had a vision concerning the need to empirically assess the outcomes of medical education at a time when most medical faculty and leaders in academia did not believe in the value of such an extensive (and expensive) study and thus were unwilling to devote resources to it.

My involvement with the Jefferson Longitudinal Study not only opened up a new window of opportunity for me but also proved to be an extremely interesting beginning to my professional life. I enjoyed the freedom bestowed on me to add new dimensions (e.g., personality and psychosocial measures) to the longitudinal database to address psychosocial aspects of academic success in medical school. Given my academic background in psychology, to me, that green light which

allowed me to include personality and psychosocial measures in the longitudinal study was analogous to offering a cool glass of water to a thirsty man in the heat of a desert! The job provided me with a golden opportunity to incorporate my ideas about psychosocial attributes into research on the contribution of those attributes to the academic attainment and professional development of medical students, to the professional success of physicians, and to clinical outcome which is the ultimate goal of health professions education. So far, this highly productive research enterprise has resulted in more than 200 publications in peer-reviewed journals.

Meanwhile, my long-term interest in why people behave as they do in making or breaking human connections shifted to a more specific interest in empathy in health professions education and patient care. Then the question became the following: Why are some health professionals more capable than others of forming empathic relationships with their patients? More important, how can empathy be conceptualized and quantified in the context of health professions education and patient care? How does the capacity for empathy develop? How can it be measured? And what are the antecedents and consequences of empathy in the context of patient care?

Approximately 15 years ago, in pursuit of answers to these questions, we began to develop an instrument for physicians to measure empathy in patient care (see Chap. 7). During that time, I was fortunate to benefit from the intellectual input and instrumental support of a group of medical education scholars and practicing physicians making up the team of physician empathy project at the Jefferson (currently Sidney Kimmel) Medical College (see "Acknowledgments").

All the elements in this interrelated chain of events brought me to the uncharted terrain of empathy in health professions education and patient care. Interestingly, empathy has proved to be an extremely rich area of research requiring a multidisciplinary approach that links views, concepts, theories, and data from diverse disciplines, such as evolutionary psychiatry; ethology; developmental, clinical, and social psychology; psychoanalysis; sociology; neuroscience; philosophy; art; and literature. What prompted me to embark on a search for the answers to my questions about how empathy develops and what its antecedents and outcomes are in the health professions was fascination with the richness of this uncharted territory, in combination with my long-time interest in the mysteries of interpersonal relationships, my academic background in the behavioral and social sciences, and my professional experience in medical education research.

If a fortune-teller had told me at the beginning of my college years that I would end up with a career as a researcher in medical education, I would have laughed uproariously in disbelief! And that wise fortune-teller probably would have responded by saying, "Well, young man! Life is full of surprises." It is indeed!

Mohammadreza Hojat, Ph.D.

Acknowledgments

I am indebted to many for their influence on my thoughts, for inspiring me to pursue this line of research, and for their encouraging and supporting my research ideas and activities. Because of space constraints, I cannot name them all.

There is a popular saying in the Persian language: "Forever remain my masters those from whom I have learned." Following this piece of advice, I must begin with my mother—that angel from whom I heard before taking my first breath, who taught me to say my first word, who is engraved vividly in my mind as the foremost symbol of love, care, and empathic understanding.

Then there are others: among them, those who are the most valuable of all human resources, the teachers. There are many of them, but I would like to mention two of my undergraduate psychology teachers, Professor Reza Shapurian, Ph.D. (who joined the eternity after publication of the original edition of this book), and Professor Amir Hooshang Mehryar, Ph.D.; both of them not only opened up a window for me to the study of human behavior but also instilled self-confidence in me by asking me, when I was a novice undergraduate student, to write a critical review of their book for publication.

There are others who trained me on the job and encouraged me in my professional development, particularly in medical education research. Among them are Joseph S. Gonnella, M.D., and Carter Zeleznik, Ph.D. Joe Gonnella is one of the best and brightest role models of an exemplary clinician-academician, teacher, leader, scholar, and researcher in medical education, whom I consider my mentor in medical education research. His great advice to me that "perfectionism is an obstacle to progress" has made my research career productive. Carter Zeleznik often said, humorously I hope, that his worst mistake was to hire me at Jefferson! His ideas, kind heart, and sense of humor made medical education research fun for me. (Carter joined the eternity after publication of the original edition of this book.) Joe has continued to be a source of inspiration to me, and unceasingly providing me with his intellectual input and instrumental support to pursue my research on empathy in medical education and patient care. I must confess that it was indeed his idea to empirically study patient outcomes of physician empathy (and to use diabetes as the disease of choice, since it has well-defined criteria for patient improvement) that led to the publication

of our two key studies on linking physician empathy to clinical outcomes, which enjoyed broad media coverage (these studies are cited in Chap. 11).

Enormous appreciation is due to colleagues at Sidney Kimmel Medical College who contributed to the inception and development of the Jefferson physician empathy project. This book is an offshoot of that project. Those colleagues are (in alphabetical order) Clara A. Callahan, M.D., the Lillian H. Brent Dean of Students and Admissions, and Director of the Center for Research in Medical Education and Health Care, Sidney Kimmel Medical College; James B. Erdmann, Ph.D., Emeritus Dean of Jefferson College of Health Professions; Joseph S. Gonnella, M.D., Emeritus Dean of then Jefferson Medical College, Distinguished Professor of Medicine, and Founder and Emerirus Director of the Center for Research in Medical Education and Health, Sidney Kimmel Medical College at Thomas Jefferson University; Daniel Z. Louis, M.S., Research Associate Professor of Family and Community Medicine, Managing Director, Center for Research in Medical Education and Health Care; Thomas J. Nasca, M.D., former Anthony and Gertrude DePalma Dean of then Jefferson Medical College, and current President and Chief Executive Officer of the Accreditation Council for Graduate Medical Education (ACGME) and ACGME International; Salvatore Mangione, M.D., Associate Professor of Medicine, Course Director for Physical Diagnosis, Sidney Kimmel Medical College; and Jon Veloski, M.S., Director of the Medical Education Research Division, Center for Research in Medical Education and Health Care, Sidney Kimmel Medical College. Throughout the book, I have frequently used the plural pronoun "we," rather than the singular "I." Such phrases as "our research findings," rather than "my research findings," reflect my acknowledgment of the contributions of these colleagues.

There are others whom I would like to thank; among them are Mark Tykocinski, M.D., Provost and Executive Vice President for Academic Affairs, Thomas Jefferson University, and Anthony F. and Gertrude M. De Palma Dean and Professor of Pathology, Sidney Kimmel Medical College at Thomas Jefferson University; Michael Vergare, M.D., Chair, Department of Psychiatry and Human Behavior; and of course Joe Gonnella for encouraging me to pursue the idea of expanding and updating my book. All of them provided me with the opportunity to do so by graciously approving my sabbatical leave.

The Jefferson physician empathy project was supported in part for a few years at its inception by a grant from the Pfizer Medical Humanities Initiative, Pfizer Inc., New York. Mike Magee, M.D., who at that time was Director of the Pfizer Medical Humanities Initiative and a member of the Jefferson physician empathy project, provided me with continued support, and encouragement in my pursuit of this line of research. At the beginning, I could not imagine that a modest financial support could lead to such an important project. Also, I would like to acknowledge funding provided by Dr. Yoshihisa Asano, founder and chairman emetirus of Noguchi Medical Research Institute in Japan to partially support our continuous research on empathy in health professions education and patient care.

Several colleagues reviewed different chapters of this book and made valuable suggestions for improvement. Joe Gonnella was kind enough to review all the chapters and his valuable feedback has been incorporated in the text. Herbert Adler, M.D., Ph.D., Clinical Professor of Psychiatry and Human Behavior, Sidney Kimmel Medical College, reviewed Chaps. 8 and 13; Marianna LaNoue, Ph.D., Assistant Professor of Family and Community Medicine, and Director of the Greenfield Research Center, Sidney Kimmel Medical College, and Jon Veloski, M.S., Director of Medical Education Research, Center for Research in Medical Education and Health Care, Sidney Kimmel Medical College, reviewed Chap. 7. Alice Eagly, Ph.D., Distinguished Professor of Psychology, Northwestern University, and Judith A. Hall, Ph.D., University Distinguished Professor, Northeastern University, reviewed Chap. 10; and Nuno Sousa, M.D., Ph.D. Professor of Neuroscience at University of Minho, Portugal, reviewed Chap. 13. All of these colleagues made valuable comments to improve the chapters they reviewed, but I take full responsibility for any possible shortcomings in the text.

Kaye Maxwell has played a major role in the development of computerized testing services and compiling the User's Guide for the Jefferson Scale of Empathy (see Chap. 7), and preparing computerized reports for the scale. I am also grateful to Dorissa Bolinski for her valuable help in editorial polishing of the text. Shira Carroll helped me in proofreading, checking for consistencies in citations in the text and reference list and for stylistic corrections to conform with the APA publication guidelines.

I chose Springer Science + Business Media over other book publishers, not only because of its reputation as a publisher of scholarly books, but also because of the professional manner in which Janice Stern, the acquisitions editor, responded to my original book proposal. I was pleased and impressed by her initial and encouraging feedback—she would seek an expert to endorse the value of the book, rather than offering the standard response that the book's merit must first be judged by the publisher's reviewers. She also encouraged me to pursue the idea of expanding and updating the text for this new edition of the book. Scholarly publishers would do well with more editors like she—those who empathically understand the strong bond that exists between authors and their intellectual property.

My children, Arian, Anahita, and Roxana, filled me with additional joy and energy by repeatedly asking "Dad! How is your book going?" when I was writing the original and this edition of the book. They are my inspiring source of joy and energy. A recent addition to my family, my first grandchild, Alexander Bijan, who has become a new joyful energizing attraction, is a reminder of the notion that in a broader context, we all somehow contribute to the eternity of the garden of life by our surviving DNA, or by leaving traces of our thoughts, intellectual products, or creations. Last, but certainly not the least, I would like to thank my charming wife, Mimi, who provided me with all I needed to work in an atmosphere full of peace and love at home during my sabbaticals to write the original as well as this edition of the book.

Contents

Part I
Empathy in Human Relationships

Chapter 1
Descriptions and Conceptualization

To be one in heart is enchanting,
more than to be one in tongue.

—Rumi (Persian mystical poet and philosopher, 1207–1273 AD)

Abstract

- Empathy, a translation of the German word *Einfühlung*, has been described as an elusive and slippery concept with a long history marked by ambiguity and controversy.
- There has been an ongoing debate about the construct of empathy, described sometimes as a cognitive attribute featuring understanding of experiences of others (cognitive empathy); at other times, as an emotional state of the mind featuring sharing of feelings (emotional empathy); and at still other times as a concept involving both cognition and emotion.
- Distinctions are made in this chapter between cognition and emotion and also between their corresponding underlying mechanisms of understanding and feeling.
- The unsettled issue of the differences between empathy and sympathy in the context of patient care is addressed by viewing empathy in patient care as a predominantly cognitive attribute featuring understanding of others' concerns (cognitive empathy, or clinical empathy) that has a positive and linear relationship with patient outcomes and by viewing sympathy (synonymous to emotional empathy) as a primarily emotional concept featured by sharing emotions and feelings that has a curvilinear relationship (an inverted U shape) with patient outcomes.
- Distinctions between cognition and emotion, understanding and feeling, and empathy and sympathy are utterly important because of their implications not only for relevant conceptualization and valid measurement of empathy in patient care but for their different consequences in patient outcomes as well.

M. Hojat, *Empathy in Health Professions Education and Patient Care*,
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Introduction

The concept of empathy has received a lot of attention in the past few decades in public media, academia, national and international politics, arts, ethics, health professions education and patient care (Coplan, 2014). Despite the popularity of the concept, there is no consensus on the definition of empathy among researchers (Matravers, 2014). The notion of "empathy" has a long history marked by ambiguity, discrepancy, disputation, and controversy among philosophers and behavioral, social, and medical scholars (Aring, 1958; Basch, 1983; Preston & deWaal, 2002; Wispe, 1978, 1986). Because of conceptual ambiguity, empathy has been described as an "elusive" concept (Basch, 1983)—one that is difficult to define and hard to measure (Kestenbaum, Farber, & Sroufe, 1989). Eisenberg and Strayer (1987a, p. 3) described empathy as a "slippery concept … that has provoked considerable speculation, excitement, and confusion." Also, because of the ambiguity associated with the concept of empathy, Pigman (1995) suggested that empathy has come to mean so much that it means nothing! More than half a century ago, Theodore Reik (1948, p. 357), the prominent psychoanalyst, made a similar comment: "The word empathy sometimes means one thing, sometimes another, until now it does not mean anything at all."

Because of the conceptual ambiguity, Wispe (1986) suggested that the outcomes of empathy research might not be valid because empathy means different things to different investigators, who may believe they are studying the same thing but actually are referring to different things! As a result, Lane (1986) suggested that empathy might not even exist in reality after all. Later, Levy (1997) proposed that the term should be eliminated and replaced by a less ambiguous one.

Despite the conceptual ambiguity, it is interesting to note that empathy is among the most frequently mentioned humanistic dimensions of patient care (Linn, DiMatteo, Cope, & Robbins, 1987). Many successful clinicians know intuitively what empathy is without being able to define it. In that respect, empathy may be analogous to love, which many of us have experienced without being able to define it! Thus, while we all have a positive image of the concept of empathy and a preconceived idea about its positive outcomes in interpersonal relationships in general and in patient care in particular, we wonder how to define it operationally. Needless to say, no concept can be subject to scientific scrutiny without an operational definition.

The Origin and History of the Term *Empathy*

The concept of empathy (not the English term) was first discussed in 1873 by Robert Vischer, a German art historian and philosopher who used the word *Einfühlung* to address an observer's feelings elicited by works of art (Hunsdahl, 1967; Jackson, 1992). According to Pigman (1995), the word was used to describe the projection of human feelings onto the natural world and inanimate objects.

However, the German term was originally used not to describe an interpersonal attribute but to portray the individual's feelings when appreciating a work of art, specifically when those feelings blurred the distinction between the observer's self and the art object (Wispe, 1986).

In 1897, the German psychologist-philosopher Theodore Lipps brought the word *Einfühlung* from aesthetics to psychology. In describing personal experiences associated with the concept of *Einfühlung*, Lipps indicated that "when I observe a circus performer on a hanging wire, I feel I am inside him" (cited in Carr, Iacoboni, Dubeau, Mazziotta, & Lenzi, 2003, p. 5502). In 1903, Wilhelm Wundt, the father of experimental psychology, who established the first laboratory of experimental psychology in 1879 at the University of Leipzig in Germany, used *Einfühlung* for the first time in the context of human relationships (Hunsdahl, 1967). In 1905, Sigmund Freud (1960) used *Einfühlung* to describe the psychodynamics of putting oneself in another person's position (Pigman, 1995).

The English term "empathy" is a neologism coined by psychologist Edward Bradner Titchener (1909) as an English equivalent or the translation of the meaning of *Einfühlung*. The term empathy derives from the Greek word *empatheia*, which means appreciation of another person's feelings (Astin, 1967; Wispe, 1986). Although Titchener (1915) used the term empathy to convey "understanding" of other human beings, Southard (1918) was the first to describe the significance of empathy in the relationship between a clinician and a patient for facilitating diagnostic outcomes. Thereafter, American social and behavioral scientists have often used the concept of empathy in relation to the psychotherapeutic or counseling relationship and in the discussion of prosocial behavior and altruism (Batson & Coke, 1981; Carkhuff, 1969; Davis, 1994; Eisenberg & Strayer, 1987b; Feshbach, 1989; Feudtner, Christakis, & Christakis, 1994; Hoffman, 1981; Ickes, 1997; Stotland, Mathews, Sherman, Hansson, & Richardson, 1978). Empathy also has been discussed frequently in the psychoanalytic literature (Jackson, 1992) and in social psychology, counseling, and clinical psychiatry and psychology (Berger, 1987; Davis, 1994; Eisenberg & Strayer, 1987b; Ickes, 1997).

Definitions, Descriptions, and Features

A review of the literature indicates that more disagreement than agreement exists among researchers about the definition of empathy. Presenting a long list of definitions and descriptions of empathy would take us far beyond the intended scope of the book and space constraints do not allow such an extensive review. I have deliberately chosen a few definitions and descriptions that seem to be most relevant to health professions education and can also provide a framework for the conceptualization and definition of empathy in the context of patient care that will be presented in Chap. 6.

Carl Rogers (1959, p. 210), the founder of client-centered therapy, suggested the following often-cited definition of empathy as an ability "to perceive the internal frame of reference of another with accuracy *as if* one were the other person but

without ever losing the "as if" condition" (emphasis added). In addition, Rogers (1975) described the experience of empathy as entering into the private perceptual world of another person and becoming thoroughly at home in it. Similarly, in one of the first psychoanalytic studies of empathy, Theodore Schroeder (1925, p. 159) suggested that "empathic insight implies seeing *as if* from within the person who is being observed" (emphasis added).

George Herbert Mead (1934, p. 27) suggested the following definition of empathy more than eight decades ago: "The capacity to take the role of another person and adopt alternative perspectives." More than half a century ago, Charles Aring (1958) described empathy as the *act* or *capacity* of appreciating another person's feelings *without* joining those feelings. Robert Hogan (1969, p. 308) defined empathy as "the intellectual or imaginative apprehension of another's condition or state of mind *without* actually experiencing that person's feelings" (emphasis added). Clark (1980, p. 187) defined empathy as "the unique capacity of the human being to feel the experience, needs, aspirations, frustrations, sorrows, joys, anxieties, hurt, or hunger of others *as if* they were his or her own" (emphasis added). These definitions by Hogan and Clark are in line with Rogers's (1959) "as if" condition in describing empathy and with Aring's (1958) "without joining" feature of empathy described earlier. I will assert later in this chapter that the "as if" condition is a key feature that distinguishes empathy from sympathy.

Wispe (1986, p. 318) described empathy as "the attempt by one self-aware self to comprehend nonjudgmentally the positive and negative experiences of another self." Baron-Cohen and Wheelwright (2004) described empathy as the "glue" of the social world that draws people to help one another and stops them from hurting others. Levasseur and Vance (1993, p. 83) described empathy as follows: "Empathy is not a psychological or emotional experience, nor a psychic leap into the mind of another person, but an openness to, and respect for, the personhood of another." Similarly, Shamasundar (1999) described empathy as related to open-mindedness and tolerance for ambiguity and complexity.

Mead (1934) described empathy as an element of social intelligence. This description resembles the notion of emotional intelligence introduced originally by Salovey and Mayer (1990) and later by Goleman (1995) who proposed that empathy, as an ability to recognize emotions in others, is one domain of emotional intelligence. The proposition that empathy has a significant overlap with measures of emotional intelligence and social skills has been supported (Schutte et al., 2001).

Greif and Hogan (1973) described empathic development as a parallel function of moral maturity. Schafer (1959, p. 343) defined empathy as "the inner experience of sharing and comprehending the momentary psychological state of another person." Stefano Bolognini (1997, p. 279) described empathy as "a state of complementary conscious-preconscious contact based on separateness and sharing." William Ickes (1997, p. 183) defined empathy as "a state of our mind upon which we reflect." Bellet and Maloney (1991, p. 183) defined empathy as "the capacity to understand what the other person is experiencing from within the other person's frame of reference, i.e., the capacity to place oneself in another's shoes." Hamilton (1984, p. 217) defined empathy as a "vehicle for understanding one another in a meaningful way."

Levasseur and Vance (1993, p. 82) described empathy as "a mode of caring," adding that "Empathy is not for those who are flourishing or happy. … Empathy is for those who need help or are suffering or struggling in some way." Similarly, Shamasundar (1999) suggested that the intensity of empathic resonance is deeper for negative states, such as sadness, anger, and hostility. These descriptions portray the importance of empathy in situations where others are suffering or are sad. Thus, the importance of empathic relationships in patient encounters is apparent.

Recently, empathy has been described as the neural matching mechanism constituted of a mirror neuron system in the brain that enables us to place ourselves in the "mental shoes" of others (Gallese, 2001, 2003). Briefly, mirror neurons are brain cells (not visual cells) that are activated when we observe another person who is performing a goal-directed action as if we are performing that act (Carr et al., 2003; Gallese, 2001; Iacoboni et al., 1999). Brain imaging studies have shown that watching on a television screen a needle prick a specific hand muscle influences the same hand muscle in the observer (Singer & Frith, 2005). These new studies suggest the possibility that, in the future, empathy may be defined in neurological terms and be measured by physiological indicators (see Chap. 13 for a more detailed discussion).

Empathy Viewed from the Cognitive and Emotional Perspectives

In general, empathy has been described as a cognitive or an emotional (or affective) attribute or a combination of both. Cognition requires mental activities involved in acquiring and processing information for better understanding, and emotion is sharing of the affect manifested in subjectively experienced feelings (Colman, 2001). Two types of empathy, cognitive empathy and emotional empathy, fit these descriptions of cognition and emotions, respectively. I believe that emotional empathy is conceptually synonymous to sympathy and vicarious empathy, which will be addressed later.

Cognitive Perspective

Rosalind Dymond (1949) viewed empathy as a cognitive ability to assume the role of another person. Heins Kohut (1971, p. 300) described empathy as "a mode of *cognition* that is specifically attuned to the perception of a complex psychological configuration" (emphasis added). Basch (1983) also described empathy as a complex cognitive process involving cognitive functions, such as judgment and reality testing. MacKay, Hughes, and Carver (1990, p. 155) described empathy as "the ability to understand someone's situation without making it one's own."

Cognitive activities, such as perspective taking and role taking, are among the features some authors have presented in their definition of empathy. For example, Dymond (1949, p. 127) defined empathy as "the imaginative transposing of oneself into the thinking, feeling, and acting of another, and so structuring the world as he does." Blackman, Smith, Brokman, and Stern (1958) defined empathy as an ability to step into another person's shoes and to step back as easily into one's own shoes again when needed. Similarly, Decety and Jackson (2004) described empathy as subjective experience of similarity between feelings experienced by self and others without losing sight of whose feelings belong to whom. Those who advocate the cognitive view of empathy, place more emphasis on understanding and social insight than on emotional involvement (Rogers, 1975).

Emotional Perspective

Some authors have defined empathy as an emotional response by generating identical feelings and sharing emotions between people. For example, Batson and Coke (1981, p. 169) defined empathy as "an emotional response elicited by and congruent with the perceived welfare of someone else." Rushton (1981, p. 260) defined empathy as "experiencing the emotional state of another." Eisenberg (1989) described it as "an emotional response that stems from the apprehension of another's emotional state or condition and is congruent with the other's emotional state or condition" (p. 108). Halpern (2001, p. xv) described empathy as "a form of emotional reasoning with risks of error that such reasoning involves." Katz (1963, p. 26) defined it as "the inner experience of feeling oneself to be similar to, or nearly identical with the other person." Kalisch (1973, p. 1548) defined it as "the ability to enter into the life of another person, to accurately perceive his current feelings and their meaning"; and Hoffman (1981, p. 41) defined it as "a vicarious affective response to someone else's situation rather than one's own." However, Underwood and Moore (1982) suggested that an emotional perspective is not a sufficient condition to define empathy. I will describe later that emotional empathy is analogous to sympathy.

A number of researchers, however, believe that empathy involves both cognition and emotion (Baron-Cohen & Wheelwright, 2004; Davis, 1994). For example, Bennett (2001, p. 7) defined empathy as "a mode of relating in which one person comes to know the mental content of another, both *affectively* and *cognitively*, at a particular moment in time and as a product of the relationship that exists between them." Mark Davis (1994) believes that cognitive and affective facets of empathy interact in his organizational model of empathy. He defined empathy as "a set of constructs having to do with the responses of one individual to the experiences of another. These constructs specifically include the process taking place within the observer and the affective and non-affective outcomes which results from those processes" (Davis, 1994, p. 12). Hodges and Wegner (1997, p. 313) suggested that "empathy can have either an emotional component … or a cognitive component, or both."