

## Literature and Medicine: Contributions to Clinical Practice

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■ Introduced to U.S. medical schools in 1972, the field of literature and medicine contributes methods and texts that help physicians develop skills in the human dimensions of medical practice. Five broad goals are met by including the study of literature in medical education: 1) Literary accounts of illness can teach physicians concrete and powerful lessons about the lives of sick people; 2) great works of fiction about medicine enable physicians to recognize the power and implications of what they do; 3) through the study of narrative, the physician can better understand patients' stories of sickness and his or her own personal stake in medical practice; 4) literary study contributes to physicians' expertise in narrative ethics; and 5) literary theory offers new perspectives on the work and the genres of medicine. Particular texts and methods have been found to be well suited to the fulfillment of each of these goals. Chosen from the traditional literary canon and from among the works of contemporary and culturally diverse writers, novels, short stories, poetry, and drama can convey both the concrete particularity and the metaphorical richness of the predicaments of sick people and the challenges and rewards offered to their physicians. In more than 20 years of teaching literature to medical students and physicians, practitioners of literature and medicine have clarified its conceptual frameworks and have identified the means by which its studies strengthen the human competencies of doctoring, which are a central feature of the art of medicine.

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Sick persons rely on their physicians for skilled diagnosis, effective therapy, and human recognition of their suffering. Although medicine has made dazzling progress in achieving the first two of these goals, its capacity to fulfill the third goal seems to have diminished (1, 2). Medicine has incorporated the knowledge and methods of scientific disciplines such as molecular biology, human genetics, and bioengineering to achieve progress in diagnosis and therapy. Physicians are now beginning to turn to the humanities, to disciplines such as literary studies, to achieve equally essential progress in comprehending their patients' suffering so that they can accompany patients through illnesses with empathy, respect, and effective care (3-5).

Until the initiation of progressive educational reforms in the 1960s, medical schools expected their students to become empathic and attentive clinicians by watching skilled physicians at work. Students were supposed to absorb the human competencies of doctoring—what many call “the art of medicine”—during training (6, 7). But just as physicians can no longer learn the scientific bases of practice in apprenticeship programs, they can no longer learn the human bases of practice without explicit and ongoing training. Such training is not meant to recapture some long-lost proficiency in compassionate doctoring from generations ago but to extend the accomplishments of the past using knowledge that was unavailable to physicians in former times.

Along with other disciplines in the humanities and along with the social and behavioral sciences, literature and literary studies contribute to this educational effort. The relation between literature and science has fueled impassioned debate since the Victorian era. Matthew Arnold defended literature—he called it “criticism of life”—when Thomas Huxley proposed to replace humane letters with natural sciences in general education (8). C.P. Snow's 1959 suggestion that the scientific and the literary cultures were irreparably estranged and that the future belonged to the scientists elicited profound disagreement from scientists and literary scholars alike (9-11). This historical conversation continues today in U.S. medical schools, in many of which, since 1972, literature has joined science in the curriculum. Using literary methods and texts, literary scholars have been teaching medical students and physicians how to listen more fully to patients' narratives of illness and how to better comprehend illness and treatment from patients' points of view (12-14). These skills help physicians to interview patients, to establish therapeutic alliances with patients and their families, to arrive at accurate diagnoses, and to choose and work toward appropriate clinical goals.

The most quickly growing area of the medical human-

clinical implications of the physician's work (44–46). Because the creative writer is often at the forefront of a culture's awareness, literature often heralds the understanding of new crises in medicine such as the acquired immunodeficiency syndrome or the threat of nuclear war (47, 48).

Physician-writers such as Anton Chekhov, William Carlos Williams, Walker Percy, Richard Selzer, and Oliver Sacks write with great insight about medicine. Chekhov's "Ward Number Six" describes the inner conflicts of Dr. Ragin, simultaneously the paralyzed idealist and the nihilistic stoic (49, 50). Williams's short stories about a small-town general practitioner capture the contradictions of the physician's work with scathing accuracy (51). Percy's *The Moviegoer* follows the course of one troubled young man on his way to deciding to become a physician; the story delineates not only the personal conflicts but also the larger cultural issues that are often involved in this choice (52). Oliver Sacks, in *Awakenings*, describes the investment of physician and patient in a "miraculous" cure (53). Physician-writers frame the events and emotions of medicine in ways that lead physician-readers to examine critically their own intimate and complicated relationships with their work and with their patients.

The teaching of such works to physicians and medical students achieves a critical goal in medical education: It allows physicians and students to examine what they do in medicine and what medicine has done to them. During a class on "Ward Number Six," one internist found herself agreeing with Dr. Ragin's cynicism but identifying with his patient's insistence on compassionate care, thereby showing that her own occasional pessimism did not rule out a simultaneous empathy. Reading Ernest Hemingway's "Indian Camp" as a part of medicine attending rounds allowed a medical team of housestaff to come to terms with their cavalier attitude toward a patient in pain, realizing that for them, as for the physician in the story, the patient's screams were unimportant diagnostically but conferred on them the clinical and moral responsibility to control the patient's pain. Literary accounts about medicine, then, contribute a needed ingredient to medical education and training: They give rich and accurate "case histories" of the physician's life that can stimulate important personal introspection about and examination of all that the physician is called on to do.

Narratives written by or about physicians can also teach particular medical lessons. The short stories of Arthur Conan Doyle can help readers examine the humanistic content of ordinary medical encounters as well as the hypothesis-generating and -ratifying processes that constitute diagnostic reasoning (54, 55). Literary representations of particular aspects of the physician's life or of specific medical events can provide a mirror for practitioners who face parallel or analogous issues in their own lives (56–58). Gothic tales or surreal science fiction can help physicians to project their fears into consciousness, thereby allowing them to examine primitive but important terrors and qualms (59). Reading medical narratives, finally, can suggest to physicians and medical students that acts of healing encompass acts of interpretation and contemplation alongside the technical and scientific aspects of medicine (60).

## Narrative Knowledge

When a physician meets a patient in the office or at the bedside, the patient tells a complex and many-staged story. Using words and gestures, the patient recounts the events and sensations of the illness while his or her body "tells"—in physical findings, images, tracings, laboratory measurements, or biopsies—that which the patient may not yet know. If the patient is a hesitant or chaotic narrator, the physician has to be an especially alert listener, leaning forward to grasp the point, to fill in the blanks, to hear the story to the end, so that he or she can then group the data into testable hypotheses. Evaluating patients requires the skills that are exercised by the careful reader: to respect language, to adopt alien points of view, to integrate isolated phenomena (be they physical findings or metaphors) so that they suggest meaning, to organize events into a narrative that leads toward their conclusion, and to understand one story in the context of other stories by the same teller (61–64).

To make sense of clinical information, physicians rely on skills that belong to the narrative sphere of knowledge. Unlike logico-scientific knowledge, narrative knowledge configures singular events befalling human beings or human surrogates into meaningful stories (65). If newspaper stories, myths, folktales, and novels are examples of narratives, then the events of illness are, in a manner of speaking, narratives, as are the written and oral descriptions of these events (66).

The humanities and the social sciences have taken a narrativist turn during the past two decades, during which scholars and practitioners of widely various disciplines (literary criticism, history, sociology, and anthropology) and professions (law, teaching, and psychoanalysis) have found in narrative theory new approaches to understanding their work in a postmodern world (67, 68). Drawing on the work of literary critics, historians, and philosophers, narrative methods focus attention on the storyteller's attempts to find causal or meaningful connections among events, on temporal orderings and reorderings of those events, on the ways in which the teller or author renders the story for the listener or reader, and on the complex cascade of events that unfold as the listener or reader interprets the story (69–71). Although medicine may seem somewhat late in partaking of the explosive interest in narrative thinking, many researchers have long used narrative methods in the study of such medical phenomena as physician-patient interactions and patients' phenomenologic experiences of illness (72, 73). More recently, narrative methods have been adopted in the investigation of such medical issues as risk factors for hip replacement in elderly patients, patients' abilities to make sense of chronic illness, and cross-cultural examinations of the practice of oncology (74–76). From medicine's point of view, narrative study allows the literary critic, the historian, the philosopher, and the anthropologist to work alongside the physician for the good of the patient.

Borrowed from literary studies, such narrative concepts as narratability, temporality, and plot are relevant to much of the physician's research and practice. Generating and conveying medical knowledge are, in part, narrative projects (77). Although considered logico-scientific enterprises, both basic research and clinical research are now

ities, the field of literature and medicine is a recognized subdiscipline of literary studies that has its own scholarly journals, professional societies, graduate school programs, federally funded training programs, and research agendas (15–17). In 1994, approximately one third of U.S. medical schools taught literature to their students, according to our informal surveys of members of the Society for Health and Human Values, and the number is growing quickly. Medical students in the preclinical and clinical years, house officers, and practicing physicians participate in literature courses and writing workshops. Usually co-taught by literary scholars and physicians, such courses can be either required or elective elements of the curriculum. Physicians have joined literary scholars in writing about the connections between literature and medicine and the benefits that literature provides to the physician; this confirms the clinical relevance of such teaching and scholarship (18–20).

The study of literature contributes in several ways to achievement in the human dimensions of medicine: 1) Literary accounts of illness can teach physicians concrete and powerful lessons about the lives of sick people; 2) great works of fiction about medicine enable physicians to recognize the power and the implications of what they do; 3) through narrative knowledge, the physician can better understand patients' stories of sickness, thereby strengthening diagnostic accuracy and therapeutic effectiveness while deepening an understanding of his or her own personal stake in medical practice; 4) literary study contributes to physicians' expertise in narrative ethics and helps physicians to perform longitudinal acts of ethical discernment; and 5) literary theory offers new perspectives on the work and the genres of medicine. Although our discussion of literature's contributions to medicine focuses on works of fiction, genres such as poetry, drama, and film are equally valuable to the physician and the medical educator.

### The Patient's Life

What do sick people worry about? How do they live their lives around their diseases? What sense can they make of the random events of illness? How can their physicians help them to find meaning in their experiences of illness and thereby facilitate participation in treatment or acceptance of the inevitability of death? The asking and answering of such questions should permeate all aspects of diagnosis and treatment, yet medical training does not generally confer on physicians the skills that make this possible. One rich source of knowledge about the human experience of illness is literature. Illuminating patients' experiences in the full, rich, nuanced particularity seldom if ever available elsewhere, literary accounts of illness widen physician-readers' knowledge of the concrete realities of being sick and enable these readers to appreciate their own patients' stories of sickness.

By mobilizing the imagination, literary works engage the reader more fully than do clinical, sociologic, or historical descriptions, even when the same experiences are portrayed (21). Although physicians witness countless actual people wrestling with illness, few can articulate, as could William Shakespeare or John Donne or Henry James, the universal and complex human sequelae of

disease. By reading narratives of illness written by gifted writers, physicians can more precisely fathom the fears and losses of patients with serious illnesses, identifying in fictional characters and then in their own patients the inevitable conflicts and uncertainties that sickness brings.

Narrative accounts of patients' experiences of illness are regularly considered in medical school courses and in professional reflections on the patient–physician relationship, aging, death and dying, disability, and women's health (22–26). Examples of such writings vary in period and in genre. Dante's epic journey in *The Inferno* parallels the journey of illness; Virgil, his guide, stands for the patient's physician (27). Leo Tolstoy's *The Death of Ivan Ilych* brings the reader to the bedside of a middle-aged bureaucrat who is dying of cancer and who articulates, without flinching, the regrets of a selfish life and the fears of a lonely death (28–32). Tillie Olsen's "Tell Me a Riddle" represents the living and dying of Eva—Russian–Jewish immigrant, revolutionary, mother, grandmother, and patient with cancer whose diagnosis is withheld from her—amid the deceptive gambits and the caring acts of her family (29, 30, 33). Henry James's aging protagonist Dencombe in "The Middle Years" reviews his waning life, seeking from his physician the chance for "another go" but receiving instead a deep and healing confirmation of his worth (34, 35). Franz Kafka's Gregor Samsa awakens as an insect in "The Metamorphosis"; this is an allegory of the many-leveled transformations of illness for patients and their families and clinicians (36, 37). In his madness, the protagonist of *King Lear* finds the clarity of vision and value that many dying persons and their families crave (38, 39).

Besides works of fiction and imagination, pathographies—the narratives that patients write about their illnesses—offer "case histories" of illness and treatment from the patients' points of view (2, 40, 41). Both biographical and fictional writings by members of particular cultural or ethnic groups help physicians by situating illness within specific cultural and spiritual understandings of the body (42, 43).

Reading these and other accounts of illness and death deepens the physician-reader's grasp of human need. In a time when physicians and patients are often strangers from different religious traditions and cultural backgrounds, physicians cannot rely on what they know of illness from their personal lives. Literature can supply full-bodied and profound accounts of illness and death in all places and among all peoples. Great works of literature may be unsurpassed in their ability to teach about suffering, death, and the human condition.

### The Physician's Work

Literary representations of the physician's work, written by nonphysicians as well as physicians, clarify the many roles and expectations of medicine and thereby help readers to understand not only the responsibilities of physicians and the position of medicine within a culture but also the social crises to which physicians must respond. Such novels as *Middlemarch* by George Eliot, *The Magic Mountain* by Thomas Mann, and *The Plague* by Albert Camus delve into the personal, professional, and political worlds of physicians and explicitly acknowledge the non-

erary scholars writing in the tradition of ethical criticism examine the moral consequences of serious reading, and their findings speak to the medical ethicist. The relationship between a reader and a book—any book—implicates the reader's values, beliefs, and will. A book—or, in a medical context, a case—draws forth from the reader his or her capacity to be changed by an encounter with the unknown and challenges the reader to measure up to another's mode of comprehending the world (115–117). Medicine and bioethics can benefit directly from literary insights into the confrontations between strangers over questions of goodness, justice, and the right things to do.

Analytic forms cannot contain the ambiguities and subtleties of meaning that arise in the moral life; literature is better able to capture the complex resonance of human choice and human desire (118, 119). The practice of any ethicist includes the tasks of formulating a case and interpreting it, and this requires the exercise of narrative skills and even of literary capacities (120). As clinicians seek sustained and sensible means of arriving at fitting outcomes to the dilemmas of care, literary texts and methods can illuminate the nature of moral reasoning and can serve as valuable guides for individual and collective ethical behavior (121).

### Literary Theory and Medicine

In addition to the contributions of narrative theory and ethical criticism, several schools of literary theory address problems faced by physicians and can help them to understand the texts and work of medicine. Reader-response criticism, deconstructionism, feminist studies, and psychoanalytic literary criticism, among other schools of thought, have shown direct practical and theoretical benefits for the physician.

Reader-response critics examine the acts of reading to understand the complicated and often uneasy "colleague-ship" between a text and its reader. No longer satisfied with the New Critics' assertion that the meaning of a text is a static feature of the words themselves, theorists such as Wolfgang Iser, Jonathan Culler, Norman Holland, and Jane Tompkins examine the role of the reader—his or her associations, memories, character traits, and life experiences—in making the meaning of a text (122–125). As physicians face patients, they, too, respond as would any reader to the complexity of a presentation, filling in gaps in knowledge with highly individual surmises born of their own memories and associations (126, 127). Such findings about physicians' reader-like behaviors can only lead to more accurate receptions of patients' stories by turning physicians' unconscious reflexes into conscious and therefore fully available resources for deeper understanding.

Medicine turns out to be an "interesting case" for the deconstructionist scholar who studies the oral and written transactions of medicine and, by extension, the actual practices that constitute medical care. Using methods introduced by Jacques Derrida and Paul de Man, the deconstructionist looks between the lines of texts, suspicious that any external coherence hides inner chaos (128–131). Sequestered in such ordinary medical texts as the hospital chart or the referral letter can be found evidence of scientific assumptions, class and race biases, power relationships, and unforeseen consequences of medical care.

For example, the clinical case history has recently been the subject of literary examination that calls attention to conflicts between the physician's and the patient's perspectives, the chorus of voices that speak in a hospital chart, the unforeseen limitations imposed by writing in the genre of the medical chart, and the similarities between case presentations and other literary forms, such as ancient bardic performances (132, 133). Rigorous examination of physicians' narrative practices can teach singular lessons about clinical detachment, presumed omniscience, and the performance of diagnostic, prognostic, and therapeutic tasks (134–136).

The feminist methods for understanding the woman writer apply with great force to the narratives of patients, which are often told from a nondominant position (137). Feminist studies offer thoughtful models for examining submerged stories and silences within texts; such examination is the very challenge facing physicians and linguists who study the oral transactions of medicine (138). The application of feminist literary methods to physician-patient interactions grants the investigator proven research methods and a rich tradition of understanding of tales of suffering and celebratory joy (139, 140).

Although seemingly leagues apart, the practices of the psychoanalyst and the physician adopt similar methods and can be examined using similar means. Sigmund Freud's case histories have never been surpassed in their breadth of diagnostic creativity and depth of psychotherapeutic consequences, and the literary study of them has unearthed fundamental features of the sick role and the therapeutic presence (141, 142). The relation of analyst to analysand forms the very center of analytic therapy. Physicians are well served by attending closely to their transference and counter-transference relationships with patients; doing so both increases their therapeutic effectiveness and maintains their own emotional health. Studies in psychoanalytic literary criticism highlight these therapeutic aspects of Freudian, neo-Freudian, and Lacanian theory by reflecting on literary works and clinical cases (143–145). Recent interest in the autobiographical aspects of medical treatment testifies to the applicability of Freud's "talking cure" not only to neurosis and hysteria but to the treatment of somatic illness and ordinary medical disease (2, 41).

### Discussion

How do we know that teaching literature to physicians and medical students works? Outcome studies of literature and medicine courses have examined students' course evaluations, post-course interviews and questionnaires, and faculty members' assessments and have shown that such courses improve students' understanding of patients' experiences, enrich students' capacities for dealing with ethical problems, or deepen students' self-knowledge in clinically relevant ways (22, 83, 88, 111, 146). All of these researchers assume that literary knowledge extends beyond that which can be tested into life-long alterations of the learner's modes of perception and understanding. Individual physicians describe these influences when they attest to the improvements that slowly accrue in their practice over a career of reading, writing, and listening to their patients (29, 84, 86, 147).

recognized to rely in part on narrative ways of knowing: The development and confirmation of scientific hypotheses are guided by plot and intention (78). Much of the physician's day is spent in telling or listening to stories—not only at the bedside but at attending rounds, in grand rounds, in curbside consults, in referral letters. These presentations and re-presentations of cases allow physicians to think through the facts and then to choose, justify, and evaluate clinical actions. Devoted entirely to narrative and medical knowledge, a recent issue of the journal *Literature and Medicine* reports on narrative projects in patient care and teaching that span activities from hospice work to residency training in anesthesia to psychotherapy (79).

Literary activities help physicians to develop and strengthen their narrative skills. Reading fiction or poetry exercises the pattern-finding and meaning-making operations that lead to apt clinical evaluation. Reading puts into play the mental and creative acts of imagination and interpretation, reinforcing subtle competencies of empathy and respect (80–85). Writing in narrative genres about patients exercises the clinical imagination and taps into deep personal sources of knowledge about patients and what ails them (86). Medical students in several schools are asked to adopt their patients' voices when writing the history of present illness as a means to experience, albeit vicariously, that which the patient is going through (87–90). Experienced physicians, even those who are not professional writers, have begun to value their own writings about their practices. Such journals as *Annals of Internal Medicine*, *Journal of the American Medical Association*, *Journal of General Internal Medicine*, and *American Journal of Medicine* and many of the journals of the state medical societies publish physicians' personal reflections about their practices. In all of these ways, physicians and students have discovered that allowing their inner knowledge to achieve the status of language teaches them something of clinical value about their patients or their practices, something that might otherwise be ignored (91–93).

Narrative knowledge offers physicians self-knowledge as well as knowledge of their patients. Many of the current challenges in medicine stem from physicians' inability to live up to their own professional goals and ideals. Disillusioned and exploited, and feeling betrayed by the profession, some physicians advise their children not to become doctors and seek ways of leaving their own practices (94). Increasing self-knowledge through narrative can help these physicians to recapture their own satisfaction with their practices (95). By helping physicians to recognize their own affective selves, reading and writing can reorient physicians toward the generous goals of service and dedication for which they entered the medical profession.

### Narrative Ethics

The recognition of the importance of literature to medicine has contributed a new approach to the practice of ethics (5, 96, 97). Physicians must know the principles of medical ethics; they must also learn to surmise the texture of a patient's life in all its moral complexity. Alone, the analytic approach to ethics reduces human conflicts to rational problems to be solved, but a narrative approach

to ethics presents the individual events of illness, in all their contradictions and meaningfulness, for interpretation and understanding (98–100).

Calling forth the moral as well as the clinical imagination, literature leads physicians to contextualize and particularize ethical issues in health care. The methods that are often called narrative ethics center the examination of ethical dilemmas squarely in the patient's life (101, 102). Narrative ethics offers the kind of knowing that the German neo-Kantians called *Verstehen*—a powerful, concrete, rich sense of the feelings, values, beliefs, and interpretations that make up the actual experience of the sick person (103, 104). Like casuistic and phenomenologic approaches to medical ethics, narrative ethics places moral dilemmas within the framework of a patient's culture and biography, allowing physicians to ask such questions as "In the face of this life, what constitutes a good death?" (105–107).

The practice of narrative ethics aims to prevent the development of ethical quandaries by building into medical care a fully articulated recognition of the moral dimensions of the patient's actual life. Ethical moments occur not only in neonatal intensive care units or in heart-transplant suites but also in the ordinary, everyday events of primary care medical practices (108–110). A hallmark of the practice of narrative ethics is the development of a longitudinal understanding of patients' values and beliefs that relies when necessary on home visits, extensive life histories, and detailed discussions with family members and caregivers. Narrative skills can help the clinician to be sensitive to moral questions as they occur, to integrate questions about values and beliefs into the routines of medical care, and to make contact with the conflicts, tragedy, humor, irony, and ambiguity that contribute to each human life.

Literary studies contribute both texts and methods to the practice of narrative ethics. Teachers of ethics have found literary narratives to be unequalled by other so-called ethics cases in the classroom. For example, texts from classical drama, 19th-century realist fiction, and contemporary short stories have been able to immerse students in the particularity of moral conflict, providing the compelling pull of the storyteller's verisimilitude within a fully rendered universe (111–113). Richard Selzer's short story "Mercy" can stand as an example. In this tale, a physician cares for a terminally ill patient in great pain. The patient wants to die and his family even asks, directly, that he be released from his misery. When a lethal dose of morphine fails to bring about the patient's death, the physician cannot bring himself to do anything further to cause his patient to die. Reading this story brings out the emotional and professional conflicts that beset all who care for dying patients (114). In addition to schooling students and physicians in the legal and professional limits on the termination of treatment, serious reading of such stories augments a comprehension of all that is at stake—intellectual, legal, existential, spiritual—in such situations.

Perhaps more fundamental to ethics than individual literary texts are literature's methods. Where does the moral sense reside if not in the creative faculties? Attunement to the right and the good is attained by imaginatively rendering, for oneself, the situations of others. Lit-

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Nevertheless, longitudinal outcome research is needed. Students and physicians should be followed over prolonged periods of time to document the ways in which enhanced narrative knowledge and skills might alter and improve clinical practice. Such research will inevitably be qualitative rather than quantitative in method, for education in literature does not typically result in universal, replicable changes in behavior at generalizable points in time after an intervention. Not unlike numerous other clinical skills—for example, the abilities to assess quality of life and to express empathy—the effects of teaching literature in medical schools may defy quantitative measurement but may nonetheless be regarded as important contributions to medical effectiveness (148, 149). Because literary methods may help to answer rising demands for improving humanistic behavior in physicians and addressing the personal, cultural, and moral lives of both patients and their physicians, they must be evaluated along with other recent changes in medical training.

### Conclusions

The study of literature accomplishes several goals for medicine and medical education. Reading literary works and writing in narrative genres allow physicians and students to better understand patients' experience and to grow in self-understanding, and literary theory contributes to an ethical, satisfying, and effective practice of medicine. We hope that the introduction of literature and of literary studies to medicine will allow physicians to more accurately render the lives of their patients and to recognize the human dimensions of all of the experiences that occur within their gaze. Together, medicine and literature can modulate the potentially alienating experiences of illness and doctoring into a richer and more mutually fulfilling human encounter that better brings about healing and alleviates suffering.

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