

Balancing Head, Heart, And Hand In The Physician's Education: A Special Task For Family Practice

Edmund D. Pellegrino, M.D.

In every branch of medicine, the physician must, to some degree at least, combine scientific knowledge with technical skill and apply both with sensitivity and respect for the sick person. In the best physicians, those cognitive, competent, and compassionate components are carefully balanced to serve the best interests of the patient.

In no field of medicine is the balance more crucial than in family practice. Here, the physician openly offers himself as healer not of a part of the patient, but of the patient, himself, and his family. No other specialty claims so broad a span of responsibility, nor, on that account, does any other specialty incur as wide a range of moral responsibilities. While it is not defensible for the narrower specialties to ignore compassion, they can often achieve their ends by knowledge and competence alone. But the very claim of family medicine to uniqueness rests on its claim to balance head, heart, and hand. Without that balance, family medicine becomes a deception and a danger to those it purports to serve.

It is for these reasons that, in the first issue of a new journal devoted to family practice, I have chosen to emphasize the education of the physician in the three dimensions of head, heart, and hand. The time seems propitious for another attempt to reorder medical education along more "humanistic" lines. The recent GPEP report,¹ while it contains nothing new for the "medical education watchers," nonetheless calls again for such a reordering. The parallel recognition by the American Board of Internal Medicine of a need for educating residents in "humanism"—however loosely the Board has defined it—is further evidence of an awakened consciousness to some of the deficiencies of graduate education.² Similar

commitments by other specialty groups are sure to follow. Perhaps more powerful than recognition by the profession is the progressively wider appreciation of the general public of the need for some significant reform of medical behavior.

In any case, whether recognized officially by professional bodies or not, compassionate competence is grounded in the very nature of medical practice. It transcends, therefore, educational faddishness and opportunism and confronts every generation of physicians as a moral obligation that cannot be ignored. For this reason, it has recurred, and will recur as long as medicine itself persists.

The inspiration for my triadic metaphor comes from an essay by Farrington on Greek medicine.³ I have added "heart" to this diad of "hand" and "head" because this is where so many perceive today's deficiency to be. It is the dimension as difficult to teach and measure as it is indispensable to being truly a physician.

The Historical Background

Medicine has always occupied a peculiar place among the learned disciplines. It is, in one sense, an art; in another sense, a science; and, in yet another, one of the humanities. In addition, however it is classified, its content and method, its knowledge and skills are always directed to a humane and humanistic purpose—healing and helping. It is, therefore, at its core also a moral enterprise. For these reasons, the physician must be educated in head, heart, and hand, i.e., cognitively, compassionately, and practically.

In Hellenistic Greece, medicine was classified primarily as a *tekne* (in Latin, *ars*)—a knowledge of doing something well. Plato and Aristotle used it as an example of practical knowledge and reason. A little later, Varro (116-27 B.C.), the Roman encyclopedist, saw it as one of the *artes liberales*—the arts that make men free. It was not dropped from that status until the fifth century A.D. Since

From the Kennedy Institute of Ethics, Georgetown University. Address reprint requests to Edmund D. Pellegrino, M.D., Kennedy Institute of Ethics, Georgetown University, Washington, D.C. 20057.

the Renaissance, medicine has increasingly been placed among the sciences. In our day, it has also become a technology—an art infused by science.

Throughout these taxonomic metamorphoses, medicine has also experienced conflicting appeals to make the head, the hand, or the heart the dominant influence in this education and practice. Depending upon its relative strength, its utility, or the zealotry of its advocates, head, hand, or heart has each been exalted—often to the detriment of medicine's progress and the patient's welfare. A few examples will suffice.

In its beginnings, the head was dominant. Medicine, philosophy, and religion were intermingled. Medicine suffered from an excess of speculation. The Hippocratic author of the treatise, *On Ancient Medicine*,⁴ had to rescue medicine by asserting the importance of observation and hands-on ministrations. The same tendency to subvert practice to theory recurred in the Hellenistic period when the conceptual remnants of the major philosophical systems of Greece strongly shaped theories of medicine. Likewise, in the Middle Ages, both philosophy and theology overshadowed the more mundane demands of medical praxis. In the nineteenth century, the speculative excesses of the German idealists spawned some very strange medical theories. The present-day dominance of reductionistic biology is a repetition of the elevation of head over hand and heart—only this time in place of philosophical speculation, it is scientific method that is exalted.

In similar fashion, throughout history, the hand has been exalted over head and heart. Empiricists have always abounded, innocent of theory or spurning it as irrelevant. Much of archaic and pre-Hippocratic medicine is of this kind, perceptively invoking magical or religious powers, but basing actual practices in sometimes remarkably accurate observation—particularly with respect to trauma. Primitive, Egyptian, and monastic practitioners often gained in effectiveness by being less rather than more educated. This might be said also of the barber surgeons.

With the advent of scientific medicine, scientific theory could less defensively be spurned. The practitioners of colonial America and the nineteenth century had to learn from the university-educated physicians of Europe. But the practicality of American medicine, its emphasis on problem solving, and technical know-how gave the hand new prominence even as science was exalting the head. Some of today's practitioners,

fearing the domination of scientific-technical medicine, still place their faith in "art"—by which they mean not the total rejection of scientific advance, but some combination of practical skills, intuitive diagnosis, and skills in dealing with people.

The heart has not wanted for its advocates. The Greek physicians spoke of *philanthropia*—not precisely love of mankind as we understand it today, but nonetheless an acknowledgment of the need for empathy. Roman Stoic physicians more specifically spoke of *humanitas*, *clementia*, and *miseri-cordia*—terms roughly equivalent to compassion.⁵ Early Christian physicians used such terms as *agape* or *caritas*—the love of Christian charity. Sometimes the advocates of the heart repudiated the head over even the hand. The most recent examples are the romantic activists of the late sixties who attacked technology, specialization, and basic research in favor of "humanistic" medicine. Some called for the resuscitation of archaic, folk, and ethomedicine; others for "wholistic" medicine or humanistic psychology. Often enough, their intent was to prevent the eclipse of the heart by the head and the hand, but the imbalance that could result was detrimental to both competence and compassion.

To avoid these recurrent tendencies or imbalances in the education of the physician requires an ordering principle in the way education affects the end of medicine—the healing relationship between the physician and his patient. That is the reality test any education reform must meet. I will therefore examine the tasks peculiar to medicine as a human activity and then how one dimension of the triad—education of the heart—can be effected. I shall not comment on education of head or hand, not because these are beyond criticism, but they are, by and large, better provided for than the humanistic education of the physician.

The Peculiar Task of Medicine

The task of medicine, to which education must be fitted, is a peculiar mixture of technique, science, and liberal arts. Let me illustrate this by anatomizing the clinical encounter—the transaction between one who is ill and one who professes to heal.⁶ Whatever may happen, in science, technology, politics, or economics, the essential nature of this encounter will not change. This is not to say that external forces will not influence that encounter. But its essential features will not change. One person ill—anxious, in pain, vulnerable, ex-

posed, dependent, and exploitable—will still seek help from another who professes the knowledge and skill needed to help the sick person become whole again. In the face of that special state we call illness, the physician makes a promise to help, that is, to make his skill and knowledge available, and to do so for the good of the patient. This is his act of “profession.”

On the way to helping the patient, the physician attempts to answer three fundamental questions—What is wrong? What can be done to right it? And, of the things that can be done, what ought to be done in the best interests of this particular patient? These questions are all directed to decisions and actions that will, to the extent possible, restore health or wholeness lost in the state of illness or, if this is impossible, contain disease or ameliorate its pain and disability.

At every stage in making these decisions, and in carrying them out, the physician’s head, hand, and heart must interact synergistically. In diagnosing, prognosticating, or selecting a treatment modality, the physician requires a knowledge of scientific and technical medicine. He must be able to reason logically—probabilistically as well as dialectically. He must be skillful in physical diagnosis, which requires the use of his hands, which is crucial if he carries out any manipulation on the body of the patient. Further, whatever is decided or done must meet the test of morality; that is, it must be for the good of the patient. A morally valid clinical decision must be technically correct and also good for *this* patient, i.e., in keeping with his values and beliefs about the purpose and meaning of his life and the kind of life he wants to live.

The inextricable intermingling of the functions of intellect, psychomotor skill, moral judgment, and feeling is best epitomized in the words of Temkin as “compassionate objectivity.”⁷ The physician cannot meet the peculiar needs of the one who is ill without the capacity to objectivize—to observe, feel, weigh, smell, and measure. In this, he must temporarily bracket his own and his patient’s feelings. But, having determined what is objectively the clinical state of affairs and what possible actions that state dictates, the physician must put those actions back into the life situation, beliefs, plans, aspirations, and values of this patient. What emerges in medical objectivity must also be congruent with this patient’s estimate of his own best interests and sensitive to his personal experience of illness, i.e., it must be compassionate.

To comprehend the patient’s assessment of his own best interests requires some capacity to enter into his unique experience of illness, to feel something of his predicament, and to modulate each decision and action in the light of that experience. Some identification with the patient, seeing one’s self in similar need, is required if the physician is to respect fully the patient’s rights, claims, and demands. This, in short, is what compassion means. Compassion is the “heart” of medicine. It softens, modulates, shapes, and negotiates what head and hand must do; it places the necessary scientific objectivity in the service of a humane purpose.

This is particularly the case in family practice where the technical dimensions are less conspicuous or even less pertinent than they are in the narrower specialties. The family doctor is the manager of the circumstance of illness, the one who directs, explains, and focuses what technical medicine has to offer. He places this in a personal and family context that is unique to each person and that must not only be understood but felt by those who try to help. This is particularly the case when the patient’s illness is beyond the help of medical science, when care becomes paramount, and the resources of the physician as a human being are most urgently in demand.

The anatomy of medical action, therefore, necessitates a dynamic and balanced relationship between head (science and the liberal arts), hand (practice), and heart (human feeling). Any disproportion in which one usurps or dominates the clinical encounter endangers the patient. The physician cannot heal if he violates the humanity of his patient. The patient cannot be fully healed unless he entrusts his welfare to his doctor.

Medical Humanism and the Tasks of Medicine

There are many pedagogical problems in teaching science, technical knowledge, and skill to future physicians. However, they are not our concern in this essay. Moreover, in comparison with the skills required to educate for technical competence, there is little agreement on how to educate for the compassionate use of these skills.

It is the perceived lack of education for compassion that generates the current pleas by the public, many professionals, and educators for teaching medical humanism. The term has become a rallying cry for reforms of all kinds. Any definition of

the precise contribution the liberal arts or humanities might make in the education of doctors and other health professionals must first distinguish between the two elements that make up the concept of medical humanism—the cognitive and the affective-behavioral.

The cognitive component is an educational and literary ideal based in the classical conception of the liberal arts. It has its roots in the classical languages, particularly Latin; a familiarity with the history, texts, attitudes, and values of classical antiquity; and the Judeo-Christian tradition. In medicine this ideal is best presented by such physicians as Thomas Linacre, Thomas Browne, John Caius, Thomas Percival, and William Osler to name a few. These were men possessed of powers of diction and the capacity to reason clearly and to write and speak eloquently. They were scholars and bibliophiles and representative of what a “learned” profession should be.

The second sense of medical humanism is the one most people mean when they speak today of medical humanism or humanizing medical education. This is an affective and behavioral ideal more or less equivalent to humanitarianism. It manifests itself in sensitivity to the needs of others and by empathy, receptivity, and openness to the human, personal, and social dimensions of the patient and his illness. It is expressed in such formulae as treating the patient as a person, caring for the whole person, and the bio-psycho-social model of the physician-patient relationship. This form of medical humanism includes concern for the person of the student and for his emotional health during the process of medical school and residency training. It aims to assist the student in becoming an emotionally adjusted and caring human being or, at least, to avoid the dehumanization perceived to characterize the present structures of medical education.

The affective-behavioral components of medical humanism ultimately reduce to compassion towards patients, students, other health professionals and colleagues, and one’s self. It is generally assumed that the cognitive dimensions of medical humanism can be taught and that the relevant disciplines are the liberal arts and the humanities. In contrast, there is little agreement on the possibility of teaching compassion and much dispute about the disciplines relevant to its teaching.

How can each of these components be taught? What can the liberal arts and the humanities real-

istically contribute? How can head, heart, and hand be cultivated to a right relationship with each other? How much of what is being so widely recommended in the premedical, medical, and continuing education of physicians is achievable?

Medical Humanism: Some Pedagogical Aims

Is it realistic to think of making medicine a “learned” profession in the classical literary sense? Historically, this was never the case. Most physicians were not educated to the degree of an Osler or a Cushing. Nor is such an aim necessary to the competent compassion that the tasks of medicine require. Certainly the Oslerian ideal should not be abandoned, but it will remain always limited to the few fortunate enough to imbibe a classical liberal education. Those who have, and are also competent, are a grace to the profession. But it is not realistic to suppose that competent, compassionate care is impossible without a genuine liberal education. In our attempts to foster liberal education among physicians, we must avoid promising too much.

This does not mean that the liberal arts should be abandoned and that a wholly technical education will suffice. Some facility in the attitudes of mind imparted by the liberal arts is mandatory since they are essential to any study that goes beyond empiricism and technicism. They are also essential to the competent performance of the tasks of medicine.

The liberal arts are those intellectual skills and attitudes of mind that set our minds free, those that enable us to think clearly, to read, write, speak, make moral judgments, and to judge what is true, good, and beautiful. The liberal arts are essential to any educated person, but particularly to physicians who must modulate technique with moral judgment. Making a differential diagnosis is, for example, an exercise in dialectical reasoning. Taking a history is the compilation of a historical record, critically validating and weighing its chronological events. Writing and transmitting that history are exercises in narration, biography, and drama. Making a decision that is good for a particular patient is a task of moral judgment and applied ethics.

Clearly the liberal arts are intrinsic to the proper functioning of the physician as a physician. This is what justifies emphasis on their teaching in premedical education and their reinforcement in medical schools. No one has more precisely

authenticated the connections between the liberal arts than Buchanan, a philosopher who spent a year on the wards of Johns Hopkins Hospital discerning those connections. His *Doctrine of Signatures* is still the clearest statement of why the liberal arts are linked to the tasks of clinical medicine.⁸

The humanities and the liberal arts are not synonymous. The liberal arts are those generic skills needed for any human study including the study of humanities. The liberal arts existed before the humanities were recognized as such. The humanities—philosophy, literature, language, and history—are disciplines, areas of content and method. They are the preferred vehicles through which the liberal arts can be taught. But the humanities can also be taught illiberally and, thus, frustrate proper instruction in the liberal arts.

The liberal arts are essential to the cognitive capabilities—to the “head”—of the competent physician. Without them, hand or heart, as important as they are, can distort the healing relationship with the patient. That does not mean, however, that every physician can, or should, be a humanist in the classical sense or that every medical student should major in the humanities. The best thing medical schools can do to liberalize premedical education is to encourage students to major in whatever fields genuinely interest them. The tasks of medicine are broad enough to accommodate any authentic interest the student may manifest. To force uninterested or unsusceptible college students to major in the humanities will be as little productive as the insistence on science has been in making them scientists. In any case, medical students are notoriously adept at hurdling any, and every, academic obstacle we place before them. We must be careful, therefore, not to foster illusions that exposure to the liberal arts will assure contagion.

Within this caveat, medical schools should encourage the liberal arts in premedical education. Most of all, they must be as acceptable for medical school admission as the sciences. The liberal arts can be reinforced later in medical school for those who studied them seriously in college. For those who did not, perhaps a new interest can be stimulated if they can be helped to see their relevance for medicine. This is the modest but hopeful aim of many of the courses in philosophy, literature, and history now being offered in many American medical schools.⁹

Besides their utility for the tasks of medicine, the liberal arts have intrinsic merits, which more

than amply justify their serious study throughout life. Humanistic study opens up avenues of satisfaction and personal growth and provides sources of pleasure, relaxation, and stimulation that enrich our lives. For the physician, they offer refuge and refreshment in those moments when even the most enthusiastic clinician may feel overwhelmed by the enormity of his task, the ubiquity of human suffering, or the rigorous demands of the conscientious practice of medicine.

For some, the restoration and recharging of emotional batteries will come from fishing; for others, from travel; and for still others, from painting, writing, or reading. But even the most dedicated physicians need moments of delectation. Hamilton put it very well, “In our endless discussion of our education, so little stress is ever laid on the pleasure of becoming an educated person and the enormous interest it adds to life.”¹⁰ Pursued for their own merits, the liberal arts can make the physician a better person; imposed as requirements, they will be ineffectual and even damaging to human attitudes.

The liberal arts and humanities cannot guarantee that those who study them will be humane, sensitive, or responsive to other people’s needs. To expect to make students compassionate by exposure to the humanities is to ignore simple historical fact that some of history’s most eminent humanists were execrable people. The humanities obviously can educate the head and hand and fail to touch the heart. How then is the heart to be educated?

On this point, there is little agreement, considerable skepticism, and outright cynicism. The skeptics despair of teaching compassion. They hold that it is a matter of character, family, church, and social influences and that it is too late to redeem a faulty character in medical school. The cynics suggest that the whole notion of compassion is a fuzzy romantic ideal and to pursue such an ideal is a waste of time. Others are confident that if we were able to change the structures of medical education drastically enough, we could eliminate the major cause of physician inhumanity or insensitivity.

Between the extremes of overexpectation and negativism, there is a growing conviction that some modest goals are, indeed, attainable. Those who subscribe to this moderate position generally offer five ways to produce more compassionate physicians—each of which requires some critical assessment.

Teaching Compassion

The five methods generally advanced for teaching compassion are these: selecting students with humanistic qualities; teaching the behavioral and social sciences; teaching human values, humanities, and ethics in medical schools; modifying faculty behavior to provide models of compassionate clinical care; and integrating universities and medical schools more closely. Before examining each method, it is important to dispel some myths that have grown up around the subject of teaching compassion.

Some Myths to be Dispelled

First is the myth that there is some single cause or remedy, like too much science, not enough humanities or social sciences, not enough religious training, or too much materialism in today's society. Nothing so complex as the way a physician responds to the special demands of a life in medicine can be capsulized in such simplistic formulae. No doubt these factors have some role in the education of some physicians, but not in all.

A second myth is that there existed a past era when medical students were better persons and when they were better educated—at least in the liberal arts. Even the most cursory review of history reveals the insufficiency of evidence for such a contention. Physicians have always reflected the full range of nobility and depravity of which humans are capable. The students of today are not more, or less, altruistic than those of yesterday; today's physicians are not more, or less, educated men and women. If anything they are, on the whole, better educated than their forebears.

A third myth is the supposed inherent antagonism between scientific and technical studies and compassion. There is no evidence for such a contention. The number of creditable scientists with interests in the arts and the humanities and with compassionate concern for their fellows is impressive. If the amount of science is to be reduced in premedical education, it must be for sound pedagogical reasons—not for some unsubstantiated antagonism to humanism.

Another myth is that the dehumanization of medicine is, itself, a myth, that it is all a question of poor public relationships and poor "positioning." All we need, some would contend, is a better public relations and advertising campaign and more sophisticated media messages. The public will see through this transparent cover for self-

interest. Even if they did not, this is precisely the kind of professional hucksterism least suitable to a profession already suffering a serious loss of moral integrity.

Finally, there is the cyclical illusion of the perfect curriculum—one that will guarantee that the crass or indifferent student is fashioned into a loving, lovable, and caring physician. That is a fault in many of the numerous reports of committees, commissions, and conferences dedicated to correcting the faults of the doctor's education. This is to presume too much from medical education and too little from the student. Whatever is done, we must avoid the Panglossian temptation that only raises expectations that cannot be fulfilled and thus confirm the worst doubts of the skeptics.

Expectations in teaching compassion, like other curricular manipulations, should be modest and aimed at incremental, not global, changes. At the very best, we can expect to move some students and be rejected by others. In some, the seed may grow as the student matures in medicine. The same can be said of any other subject taught in medical school from anatomy and biochemistry to surgery and medicine.

These myths and illusions aside, let us look at the five specific ways under consideration today for "humanizing" the education of physicians.

Selecting Humanistic Students

The most frequent suggestion I hear is that we must select more humanistic medical students. If we start with more of the "right" people, it is argued, we ought to produce better doctors. The logic is correct, but the presumption on which it is based is not. There is no valid or verifiable way to select those who will become humane practitioners. Such things as interest in people rather than things, evidences of public spiritedness, the good opinions of one's teachers, and the like, may or may not predict compassionate behavior in medical practice. In addition, such evaluations offer too many opportunities for interviewer bias and, thus, for injustice in the interview or the committee discussions.

The same may be said of psychological tests. Their reliability, accuracy, and predictability are questionable. Moreover, medical students are perceptive and highly intelligent. Their capabilities for sensing the expected answers are considerable, and there is an extensive communication network among premedical students, alerting them to the

desirable answers. Without accusing applicants of cynicism or deception, the possibilities for misleading or circumventing any system of selection based on intangibles like "humanism" are difficult to withstand even for the morally upright applicant.

In many years of admissions committee work, I have become convinced that I cannot evaluate "humanism," even though I have for many years had a serious interest in doing so. The only thing I can ascertain with any degree of certitude—excepting possibly gross psychosis—is intellectual integrity. By questioning applicants to the point where they will admit that they "do not know," I can test whether they know the limits of their knowledge. That is not an inconsequential virtue in a clinician.

If the selection of humanistic students is so complex, what about preference towards those who have majored in the humanities in college? Here, again, the presuppositions will not stand up to scrutiny. For one thing, courses in the humanities do not make one humane. Humanitarianism and compassion are different from humanism as an educational ideal, which is the aim of liberal arts courses. Also, students may have chosen to major in the humanities less out of love for humanistic study than dislike for, or inadequacy in, the sciences, particularly quantitative studies.

Some urge the preferential admission of certain students presumed to be more "humanistic" by virtue of belonging to certain groups—women, minorities, or those with more "average" academic records, more rounded college careers, or who intend to enter family or rural practice. None of these presumptions has been adequately tested. Women and minority students should be given preference out of retributive justice, not because we expect them to be more humanistic or compassionate. Even the differences in ethical sensitivities pointed out by Gilligan must be re-evaluated when past unequal sociocultural role differentiations imposed on men and women are eliminated.¹¹

When all is said and done, it remains perilous to try to forecast who, in his twenties, will be a compassionate physician in his or her forties and fifties. Too many things happen emotionally, physically, and intellectually in the interval to make such predictions very accurate. It seems more realistic, and more just, to try to teach compassion to those who are admitted than to exclude those we deem noncompassionate on the scanty evidence now available.

The Behavioral and Social Sciences

The second method of humanizing medical education became popular in the sixties, namely, teaching the behavioral and social sciences. Today, they are usually taught in courses that focus on interviewing and communication skills, patterns of response to illness, and the sociocultural determinants of illness and healing. More recently, the social and behavioral sciences have moved closer to clinical medicine, especially in family medicine, pediatrics, and psychiatry. In the form of "behavioral medicine"—using the psychophysiological phenomena of biofeedback in therapeutics—they are of special interest to family physicians and general internists.

The social and behavioral sciences can sensitize students to those elements of compassionate behavior important to understanding and treating illnesses and to assisting with the psychological, personal, and family crises illness can produce. They also provide a cognitive basis for compassionate behavior. As with the humanities, we cannot expect to make students humane simply by exposure to the skills and knowledge of anthropology, clinical or social psychology, or sociology. Like the humanities, these subjects are justifiably a part of the medical curriculum. But there is now enough experience with them to counsel against inflated expectations.

Teaching the Humanities and Liberal Arts

I have outlined the way the humanities and liberal arts contribute to the cognitive skills essential to all serious intellectual work and specifically to the arts of the clinician. The way they influence the affective components of medical humanism is far less certain.

Manifestly, it is impossible completely to separate the cognitive and affective dimensions of human activity. The head and heart are not impermeable to each other's influence. As rational beings, what we believe to be true and reasonable cannot help but influence our behavior. The humanities and liberal arts, therefore, cannot fail to influence the behavioral and affective components of medical humanism as well as the cognitive.

The connections, however, are indirect and not easily demonstrable. They vary with each humanistic discipline. Philosophy, at one extreme, is more a cognitive and abstractly intellectual discipline than literature, at the other. Literature can, for example, evoke empathy, sympathy, and com-

passion through the artful use of words. The world's literature abounds in descriptions of the experiences of illness, plagues, and lives of doctors, etc. Through the skillful reading of literary works under the guidance of a teacher of literature, medical students can vicariously experience compassion and understanding in ways no medical lecture on these subjects could match. Reading selected literary passages feelingly may be the most effective way for a young person who has yet to experience illness to develop some compassion for the plight of the sick, the elderly, the dejected, and the rejected.

Philosophy and, to a lesser extent, history are more cognitive in orientation than literature. Philosophy, nonetheless, has strong effects on behavior. A deeper appreciation of one's own ways of thinking, prelogical presumptions, and intellectual history should make us more understanding of others. Philosophy should make students more self-critical, particularly with regard to moral behavior, their own, their profession's, and society's. Philosophy formalizes the internal dialogue between head and heart requisite to the balance between them and to the equanimity of judgment characteristic of the wise clinician.

History alerts the student to the continuity of human experience in time. It can teach humility by reminding the young that the world did not begin on the date of their own birth. Despite the current disrepute of the "great man" school of history, the value of models of the good physicians should not be undervalued. Biography is certainly not the whole of medical history, but neither is it insignificant. Careful study of the lives of exceptional physicians can move many to emulation or to sympathy for the vicissitudes of a medical life. The young will have heroes one way or another. Lest they all be athletes, rock musicians, or celebrities, we ought to offer some alternative drawn from medicine's rich past.

Ethics, a branch of philosophy, has some special merits in linking cognitive and affective/behavioral dimensions of medical humanism. It deals with the right and the good and what ought to be done. Ethics, therefore, bears directly on behavior. Ethics is, in many ways, a bridge between scientific knowledge on the one hand and the purposes to which we put that knowledge on the other. It links scientific with humane values and provides the critical surveillance necessary to optimize the good and to avoid the evil possibilities of our unprecedented medical prowess.

The moment of clinical truth—that moment when we decide *for* and *with* a patient what *ought* be done—is the heart of medicine as medicine. That is the moment when the humanities and the sciences fuse. Ethics judges the moral quality of the fusion. I think it is the realization of this fact that accounts for the increasing popularity of teaching medical ethics in medical schools today.

Philosophy, largely through ethics; literature, largely through seminal texts relevant to medicine; and history, largely through social and biographical study, can impart both the cognitive skills and the affective/behavioral learning essential to medical humanism.

One thing that is clear with the limited experience we now have is that there is no one branch of the humanities that will capture all medical students. Nor is it essential that all students be exposed to history, philosophy, and literature. Ethics, because of its ubiquity in all medical decisions, is the exception. But, saving this, the aim in medical school should be to offer an opportunity for courses or seminars in any of the humanistic studies a student may choose. Different personalities are attracted to different disciplines. What is hoped is that each medical student will find an affinity with one of the humanities. Each student should be free to choose the cognitive discipline that opens the door of compassion for him.

Such a selective approach should answer the criticisms of those who fear there is no time in the curriculum for the social sciences and humanities as well as scientific medicine. That is true, of course. But exposure to ethics for all, combined with a selection from one of either the social sciences or the humanities, should suffice to foster some increment in compassion in each student.

Faculty Models and Integrating Universities and Medical Schools

While teaching the behavioral sciences and the humanities can contribute to the teaching of compassion, the single most effective means is still the compassionate behavior of a respected clinician, exhibited in the care of his own patients and his relationships with students and colleagues. Through example, the compassionate clinician teaches that competent, scientific medicine is not incompatible with compassion; that, indeed, medicine without compassion is incompetent in its own way. The compassionate clinician also teaches those nuances of personal concern and

care, those sensitivities to the predicament of the sick person, and those capacities to fit the technically correct action into the unique context of a particular person's problems that cannot ever be taught by lectures. The respected clinician gives the kind of verisimilitude to an ideal that only its actual practice can give.

But the clinical teacher can also shatter that ideal. For a respected clinician, at the wrong moment, to turn his back on a patient is to undo hours of lectures about compassion. Such behavior tends to legitimate morally indefensible behavior and distorts the students' standards of what is acceptable. Less directly, but just as effectively, the clinical teacher can do damage by belittling attempts to teach compassion by his/her colleagues.

The curriculum, its content of humanities and social sciences notwithstanding, is not what determines the character of a medical school. The preoccupations, qualifications, and values of the faculty are far more determinative. If there is a failure in the teaching of compassion today, it is a failure primarily of clinical teachers. Theirs is a heavy responsibility. And, while compassionate clinicians are represented on every faculty, there are far too few of them. Only by increasing their number can there be any reasonable expectation that students and residents will receive, or be impressed by, other attempts to teach compassionate medicine.

Can anything be done to improve the capacities of clinical faculties to teach compassionate clinical medicine? This is a far more formidable task than teaching medical students or residents. What faculty member would recognize, much less admit, the need for such education? Still, there are signs that if approached skillfully, by indirection, and without fanfare, something is being, and can be, accomplished.

For example, current medical school programs in medical ethics often involve clinicians in such things as ethics rounds, seminars, and conferences or as small group leaders. Discussion of clinical ethical dilemmas is now commonplace in all clinical services, as are contacts with professional ethicists or theologians who often act as consultants to clinicians. Students now frequently raise ethical questions in all classes as a matter of course. Ethics is becoming one of the more popular subjects for national conferences, continuing medical education, and in clinical specialty journals. Clinicians are serving on ethics committees.

While none of these things will make every clinician an ethicist, humanist, or humanitarian, widespread sensitization to ethical and value questions is now unavoidable. The same can be said, though to a lesser degree, of the ripple and trickle down effects of the courses in literature, history, philosophy, and social sciences offered in many medical schools.

There are even more hopeful signs for the future in the emergence of a small, but enthusiastic, group of clinicians, young and old, who are taking sabbaticals, intensive courses, and formal graduate work in the humanistic disciplines. Most are returning to their clinical departments to serve as leaders of programs teaching ethics, human values, or humanities. They promise to be the most influential teachers of medical humanism in both its cognitive and affective dimensions in tomorrow's medical schools.

Teaching compassion, even with the help of faculty models, will not be fully effective if compassionate behavior is not exhibited in other relationships as well. Unfortunately, there are clinical teachers whose relationships with patients are admirably humanistic but who are less compassionate in their dealings with students, their own families, and colleagues. Humane treatment of students must cover a wide range of experiences: in evaluating them, in helping them confront the emotional and personal crises of socialization and professionalization, in their hours on call or their class assignments, or in the many other stressful experiences that often punctuate medical or residency education.

Allowing for a certain degree of self-pity—some excusable, some not—there is much more we can do to make the student's experience of medical education a less unpleasant, gruelling, or infantilizing process. This is not to trivialize the serious nature of the obligations for which students are training. Nor is it to accept the structures of medical education as excuses for immoral or inhumane treatment of patients. Rather, it is to recognize that the student, like the patient, is dependent, anxious, and vulnerable and therefore in need of compassion as well.

While doctors can be trained in medical schools without close university connection, it is improbable that the goals of medical humanism are achievable without that connection. The university is the place where research and scholarship, the attitudes of mind essential to self-criticism, and the dialogue between medicine, the sciences, and the humanities can best be cultivated.

Moreover, if medicine is to be taught liberally—that is to say, as a sophisticated intellectual enterprise and not a prolonged fact-packing catechetical exercise—it must be done in a university. Vexed as their relationships have always been, university and medical schools are like loving and warring spouses: they cannot live with or without each other. Most of the reforms recurrently proposed for medical education (the latest being the GPEP report) depend on “liberalizing” medical education in the sense I have suggested here. For that, the university connection is indispensable.

Some combination of these five ways of injecting compassion into medical education should, as a matter of pedagogical responsibility, be part of a medical education. This is a moral responsibility of educators because if we focus on the tasks of medicine, it becomes clear that competence without compassion and compassion without competence are equally indefensible. To educate in one dimension to the exclusion or detriment of the other is to fail in the prime moral task of a medical education itself. Flexner, whose philosophy of medical education is often misunderstood as over-emphasizing science at the expense of humanism, put it very well:

In respect to the position I have thus far taken, a curious misapprehension not uncommonly arises. The careful scrutiny, reflection, and decision (which is the essence of scientific method), the employment of every weapon by means of which the causation of disease may be ferreted out and health restored (which is the essence of scientific procedure)—these are sometimes regarded as in conflict with the humanity which should characterize the physician in the presence of suffering. Assuredly, humanity and empiricism are not identical; with equal assurance, one may not assert that humanity and science are not contradictory. . . . It is equally important and equally possible for physicians of all types to be humane and at the same time to employ the severest intellectual effort that they are severally capable of putting forth.¹²

Flexner also understood the roles of the liberal arts, humanities, and ethics, not only in educating the physician, but also in the humane use of medical knowledge itself:

Now science, while widening our vision, increasing our satisfactions, solving our problems, brings with it dangers peculiarly its own. We can become so infatuated with progress in knowledge and control—both of which I have unstintingly emphasized—that we lose our perspective, lose our historic sense, lose a philosophic outlook, lose sight of relative cultural values. . . .

In the modern university, the more vigorously science is prosecuted, the more acute the need that society be held accountable for the purposes to which larger knowledge and experience are turned. Philosophers and critics, therefore, gain in importance as science makes life more complex—more rational in some ways, more irrational in others.¹³

We have, in America, since Flexner’s 1910 report,¹⁴ carried out one part of the reform he recommended for medical education. Medicine and the education of physicians have been put on a firm scientific basis. We have yet to complete the second part of Flexner’s legacy, the marriage of humanism with science—the reconciliation of hand, heart, and head—each of which is necessary to the task of medicine. I believe the emergence of the teaching of ethics, human values, and humanities in medical schools in the last decade and a half has taken us a little closer to Flexner’s ideal and, thus, to better serving society and the sick.

In this endeavor, family practice, because of the nature of the tasks it has set for itself, has a special role and obligation. Compassionate competence is indispensable to the care management of the personal predicament of illness and, thus, for the authenticity of family practice. To put the matter most directly, family practice, more than any other specialty, has the obligation to establish the right order between head, hand, and heart. In doing so, it will provide an example for every other field of medicine, each of which, in its own more limited sphere, must do likewise.

References

1. Report of the Panel on the General Professional Education of the Physician and College Preparation for Medicine. Physicians for the twenty-first century. Washington, D.C.: Association of Medical Colleges, 1984:1-48.
2. Anonymous. Evaluation of humanistic qualities in the internist. *Ann Intern Med* 1983; 99:720-4.
3. Farrington B. Head and hand in ancient Greece: four studies in the social relations of thought. London: Watts and Co, 1947:28-54.
4. Jones WHS, translator. Hippocrates on ancient medicine. Vol. 1. Loeb Classical Library. Cambridge, MA: Harvard University Press, 1972: 1-63.
5. Pellegrino ED. Scribonius Largus and the stoic origins of medical humanism: philosophical and historical aspects. Presented to the American Osher Society, Minneapolis, Minnesota, May 3, 1983.
6. *Idem*. The anatomy of clinical judgments: some notes on right reason and right action. In: Engel-

- hardt HT Jr, Spicker SF, Towers B, eds. *Philosophy and medicine*. Vol. VI. Los Angeles: D. Reidel, 1979:169-94.
7. Temkin O. *The double face of Janus and other essays in the history of medicine*. Baltimore: Johns Hopkins University Press, 1977.
 8. Buchanan S. *The doctrine of signatures*. New York: K. Paul, Trench, Trubner and Co, LTD, 1938.
 9. Pellegrino ED, McElhinney TK. *Teaching ethics, the humanities and human values in medical schools: a ten-year overview*. Washington, D.C.: Institute on Human Values in Medicine, Society for Health and Human Values, 1982.
 10. Hamilton E. *The ever present past*. New York: Norton, 1964:10.
 11. Gilligan C. *In a different voice: psychological theory and women's development*. Cambridge, MA: Harvard University Press, 1982:184.
 12. Flexner A. *Medical education: a comparative study*. New York: The Macmillan Company, 1925:11-2.
 13. *Idem*. *Universities: American, English, and German*. New York: Oxford University Press, 1930: 33-4.
 14. *Idem*. *A report to the Carnegie Foundation for the advancement of teaching*. New York: The Carnegie Foundation, 1910 (bulletin no. 4).

Editorial Comment

In this special guest essay, Pellegrino expresses the need for balance in the triad of the proficiencies of cognitive and technical skills with compassion. He states that "in no field of medicine is the balance more crucial than family practice." The leaders in family practice have been aware of this need for balance since the inception of the specialty even to the use of the metaphorical figures "head, heart, and hands." *

Pellegrino's essay is particularly cogent in today's world where, thanks to the enunciations of the *illuminati*, the "art" of medicine and "humanistic" medicine waft favorably in the drafts of the *aura popularis*.

Pellegrino's message, then, seems not only a timely reminder of the balance necessary among head, heart, and hands, but it is particularly fitting for this inaugural issue of *The Journal of the American Board of Family Practice* to serve as a reminder of our heritage and original objectives as a major medical specialty and as a prescript to be read and reread by all family physicians and their trainees.

NJP

* "In short, when a resident completes his or her training, that resident has been carefully and continually evaluated as a thoroughly trained Family Physician, one whom we euphemistically declare as having head, heart, and hands." Pisacano NJ. Dedication of the Joseph H. Woolf Family Practice Center, University of Alabama, Birmingham. *The Alabama Journal of Medical Sciences* 1981; 18:432.