Toward “Harder” Medical Humanities: Moving Beyond the “Two Cultures” Dichotomy

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Abstract

Using the current international debate surrounding the incorporation of medical humanities into medical curricula as a starting point, the authors address both the legitimacy and didactics of teaching medical humanities to medical students. They highlight the paradox of the increasing prevalence of medical humanities in medical curricula and the often critical reception humanities courses receive. The alleged lack of empirical evidence linking such courses with improved patient care cannot alone explain the criticism they engender. After a short overview of the debate surrounding medical humanities and their inclusion in outcomes-based education, the authors outline the medical humanities block, “The History, Theory, and Ethics of Medicine,” which is part of the German medical curriculum. A model developed at Ulm University exemplifies the integrated inclusion of the heterogeneous aspects of medical culture into medical education. This model emphasizes a reflexive approach (i.e., understanding how the humanities are manifested in medicine) as an alternative to the currently dominant narrative approach (i.e., liberal arts, moral development, and/or mental retreat), which has gradually been limited to a quasi-“secular religion” for doctors. This model uses established concepts from science and cultural studies as the “instruments” for seminars and courses; paradigms, discourses, social systems, and cosmologies constitute the tools for teaching and learning about the historical, theoretical, and ethical dimensions of medicine. The authors argue that this approach both precludes the need to justify the medical humanities and overcomes the dichotomy that has heretofore existed between the two cultures of science and the humanities in medicine.

The debate about the legitimacy of including the humanities in medical curricula has a long history in Europe and the United States. The biomedical paradigm that posits science as the foundation of medical knowledge and practice leads to questions about whether the inclusion of humanities courses in medical curricula produces better doctors. Medical educators widely accept—at least in political or grandiloquent speeches—that good doctors require more than technical skills and knowledge of physics and chemistry. However, educators have given various answers to the question of what more is needed. Some believe that the humanities can offer physicians the skills, knowledge, and attitudes required to cope with their professional role in society and to meet the expectations of patients and other health care consumers. However, critics persistently question whether it is possible to prove or measure the long-term effect of medical humanities education on clinical practice. Is the medical humanities project viable if educators fail to verify its usefulness within the framework of an empirical, evidence- and outcomes-based education?

Ousager and Johannessen1 raised similar questions in a review of the effects of humanities courses. Their literature review gave rise to a vehement debate in the summer of 2010.2,3 The recent debate demonstrated the persistent lack of general consensus about the definition and function of the medical humanities, which originated as an educational concept in U.S. medical schools in the 1960s. The term “medical humanities” broadly encompasses the medical applications of a number of disciplines, including philosophy, ethics, history, social science, and fine art. In the narrow sense typically used in the English-speaking world, this term focuses on the inclusion of fictional texts and fine arts in medical education and practice. Herein, we describe a model developed at Ulm University that more seamlessly integrates the heterogeneous cultural and theoretical aspects of medicine into the medical curriculum. First, we provide a short overview and discussion of the current international debate surrounding medical humanities and their inclusion in outcomes-based education. Then, we outline the History, Theory, and Ethics (HTE) of Medicine block that is part of the German medical curriculum as an example of how to teach the medical humanities through an integrated approach.

The Current Debate

In their systematic review, Ousager and Johannessen1 analyzed publications from 2000 to 2008 that concerned the medical humanities in undergraduate medical education. These authors applied the paradigm of outcomes-based education to the articles and studies they reviewed. Outcomes-based education is a reform concept emphasizing measurable results in practical skills rather than the completion of courses and rotations in training. It has become increasingly popular since its inception in the 1980s in other educational fields. Influential schools and accrediting bodies in the United States and Great Britain began to adopt outcomes-based models for medical education in the 2000s.4 Ousager and Johannessen noticed that the authors of a majority of the analyzed publications...
made no attempt to provide empirical evidence of the long-term usefulness of medical humanities courses. They wrote that although a few of these authors did detect and report positive results, most simply espoused a blind faith in the humanities. Ousager and Johannessen anticipated that the paucity of hard empirical evidence would threaten the existence of medical humanities because, simply, “outcomes-based education ... is currently on the agenda.”

Ousager and Johannessen’s attempt to apply the criteria of outcomes-based education to the medical humanities might be generally rejected as “utilitarian” and “discriminatory.” However, two particular aspects of their literature review deserve attention. First, we believe that the authors’ methodology called into question the very legitimacy of the medical humanities. In focusing solely on long-term outcomes, the authors masked the more important consideration of how best, in the short term, to incorporate medical humanities courses into the curriculum (even though many of the articles they reviewed covered this topic). Such courses are known to vary considerably in quality and conceptual content. Several schemas coexist within the medical humanities; Brody has classified these as follows: (1) liberal arts education, (2) doctors’ moral development, and (3) supportive mental retreat for doctors. We would label these, respectively, “universalistic ideal,” “humanistic ideal,” and “hedonistic ideal”. Thus, we believe that Ousager and Johannessen imposed a homogeneity on the medical humanities that does not exist, and in so doing they undermined the potential validity of these curricular elements.

Second, by not distinguishing among the concepts of “human,” “humanistic,” and “humanizing,” the authors may have restricted the parameters of the goal “better doctors” to only physicians’ moral qualities (their ability to feel empathy and compassion). Thus, Ousager and Johannessen seemingly defined the medical humanities as a program of moral development—a “soft” program with abstract and unmeasurable goals. Belling has described this characterization as stigmatizing; she believes that portraying the medical humanities only as a program of moral development squeezes them into the dichotomy of “soft” and “hard” sciences. This dichotomy occurs on two intertwined levels. On the functional level, the education of the “hard” physician in the medical humanities is considered to imbue him or her with greater humanity; on the methodological level, a humanistic education is assumed to contain no “hard” procedures or precise disciplinary norms. These discourses on the homogeneity and “softness” of the medical humanities remind us of the “two cultures” debate that occurred in the 1960s, concerning the dualism of science and the humanities. The current debate about the role of medical humanities in medical education underscores the failure to overcome that dualism in the medical ambit.

Others have also questioned the legitimacy, utility, and inclusion of the medical humanities. The faculty of the Department of Clinical Sciences at Lund University have actually felt compelled to introduce a course called “Airbags for the Culture Clash” in an effort to bring the two cultures of science and humanities closer to one another. An analysis of students’ criticism of a lecture course in the medical humanities clarifies how urgently needed such détente initiatives have become. Shapiro and colleagues reported a consistent aloofness among students who had taken humanities courses; at best, the students tolerated the material as “very relaxing,” but they often dismissed it completely as “vague” and “open-ended,” “too personal” and “pointless,” “irrelevant,” and “just plain stupid.”

Ousager and Johannessen are not alone in their questioning of the effectiveness of medical humanities, but the argument—that ostensibly no hard evidence exists to justify the medical humanities—merely masks a vague feeling of unease about the “softness” of this discipline. The distrust of the medical humanities seems to result from a discourse that relegates them to the three “soft,” antiquated, and subordinate-appearing services of the “other culture”: liberal arts education, moral development, and supportive mental retreat. The medical humanities seem, from the perspective that demands proof of their utility, to be a sort of “secular religion” for doctors.

The discussion regarding the effectiveness of humanities courses in medicine represents a paradox: These courses are increasing in prominence even while their reception often remains critical. This conflict, which also occurs in the German medical education community, may be symptomatic of the discrepancy between the demand for HTE curricula and the underestimation or perceived excessiveness of the investment required to teach and learn these disciplines. Additionally, the content-related hopes for the medical humanities have not been fully met, leading to questions that the debate surrounding them rarely addresses; for example, is the integration of medicine-related poetry and prose into the curriculum—modeled on American experiences—an optimal way of satisfying educators’ demands for HTE courses? How should the medical humanities be taught? What should the medical humanities actually be? To demonstrate how the last question is being answered in some cases, we cite Charon’s eloquent description:

A medicine that makes contact with the mysteries of human experience along with its certainties—a medicine that appreciates the deep beauty of health, the silence of health, the wisdom of the body, and the grace of its genius.

However, describing the medical humanities this way may further deepen the rift between the cultures of science and the humanities, reinforcing the conception of “softness” that, according to Wear, has since become a “straw man.” The principle question then, is that which Belling raised: “Why should exacting standards and precision be at odds with humanity?” Although her concrete proposals move in a direction different than ours, her guiding idea—that the medical humanities be given a more solid methodological and theoretical basis—may constitute a practical approach. Here we return to Brody, who argues that the “three conceptions of the medical humanities are each individually incomplete and require the others to fill critical gaps.” However, in our view, even the combination of these three concepts (liberal arts education, moral development, and supportive mental retreat) cannot be the theoretical foundation on which medical humanities curricula rest. The development of a reflexive approach to medicine that satisfies the current academic standards requires an alternative pedagogy.
In concrete terms, this alternative approach might place HTE in a field that the science historian Wolf Lepenies has called the “third culture”—that is, in the field of the theory of culture, science, and the social sciences. Although other medical educators have advocated a similar shift in focus from narrative humanities to a more theoretical approach, the theories and epistemologies that underpin HTE are the least represented components of medical humanities courses in Germany and some other European countries. A Swedish study provided the criticism that students “come away lacking theoretical structure to understand what they have learned.” In the broadest sense, “theory” has the ability to improve the relationship between the two cultures of science and the humanities—that is, the capacity to advance the medical humanities beyond a secular religion for doctors.

**Medical Humanities Education Reform in Germany**

The ongoing debates about the medical humanities are well known in Germany as elsewhere. The German medical historian Heinz Schott expressed his fear that “the present era of molecular medicine,” could lead to a “reductionist scientific monoculture” in which the concepts of “nature” and “spirit” become blind spots or are lost to physicians. Schott’s appeal to include the trinity of history, theory, and ethics in medical education has been heard. In the *Deutsches Arzteblatt*, the official journal of the German Medical Association, a group of authors proposed the reintroduction of a “philosophicum”—a course that intentionally combines philosophical and scientific concepts—into the medical curriculum. Further, in 2002, the German Medical Licensure Act demanded that the medical education of physicians in Germany cover the “spiritual, historical and ethical foundations for the behavior of physicians on the basis of the current state of research.” In accordance with this reform, the cross-sectional field of the HTE of medicine has been established in German departments of medicine since 2003. Although individual institutions have determined for themselves what particular content to include, the German Association for Medical History and the Academy of Ethics in Medicine have provided recommendations in a joint position paper. The goal of these recommendations is to bridge the divide between the two cultures of science and the humanities. The recommendations acknowledge that because medicine is not a purely natural science, students should learn to critically reflect on the historical, sociocultural, and epistemological aspects of modern medicine. Since the 2002 revision of the German Medical Licensure Act, recommendations have addressed the frequently articulated pleas for a new “culture of medicine” that embraces HTE.

**The Four-Instrument Approach—The Ulm Model**

In an effort to embrace the spirit of the German Medical Licensure Act and to bridge the gap between the humanities and medicine, the faculty at Ulm University have, since 2009, pursued an approach that recognizes the role of the theoretical components of HTE.

As in most departments of medicine at German universities, the cross-sectional HTE curriculum is offered at Ulm University in an integrated form consisting of three educational elements: two seminars and one lecture course during the clinical years of training (Figure 1). As one of 38 required modules during the final two years of medical education, the HTE component consists of 34 lessons—more lessons than the social medicine (28) and forensic pathology (22) components, but fewer than the dermatology/venereology (38) and otorhinolaryngology (40) components.

All HTE courses take an interdisciplinary approach, but their emphases differ. Students participate in the first seminar, HTE1 (10 lessons), in their eighth or ninth of 10 terms. HTE1 is mainly an introduction to the major moral and philosophical paradigms and the major historical perspectives of medical ethics. The second seminar, HTE2 (14 lessons), occurs during the 10th term and emphasizes the history and theory of medicine. During this seminar, students again consider issues of medical ethics, but principally from the perspective of the history of culture. An accompanying lecture course (10 lessons) resynthesizes the HTE components in segments titled, for example, “The Identity of the Physician,” “History and Ethics of Psychiatry,” and “Medicine in National Socialism.” Research has shown that HTE students at other German medical schools were generally more accepting of the ethics—rather than the history—components of HTE courses. Thus, we took great care in developing the didactics and contents of the history component.

To explain our theoretical approach to medical humanities, we have provided a detailed description of the HTE2 seminar. During this seminar, we ask the students to put away their typical medical instruments—for example, their scalpels and stethoscopes—so that they can become acquainted with four, perhaps unfamiliar, instruments. We ask the students to use “paradigms,” “discourses,” “social systems,” and “cosmologies” for thinking about, and applying to the field of medicine, the history of culture and science. Equipping students with these tools demonstrates that we do not want merely to impart facts. The use of the tools establishes our pedagogical approach to the course, which can be summarized by the Kantian principle that “Thoughts without contents are empty, perceptions without conceptions are blind.” In other words, the ability to develop independent thoughts demands not simply a greater exposure to various fields and experiences but also a theoretical framework to make use of new knowledge and to guide perceptions. Hence, our course is typical of humanitarian lecture courses in its foundation on the primacy of theory and method over detailed and specialized knowledge. At the same time, the course focuses on the milestones and central points in the history and ethics of medicine.

The seminar is offered either en bloc or on a weekly basis, and the contents are arranged into five modules. The goals of the introductory module, “Medicine and Culture,” derive from the challenges of the modernization of medicine, which we conceive as the interplay of the highly ambiguous medical consequences of social differentiation, rationalization, individualization, and acceleration. The “reflexive modernity” approach described by Beck et al is especially well suited for this purpose because it raises medical students’ awareness of the temporal dimension of knowledge and encourages
them to recognize the place of their profession within the social system. The introductory block of the program encourages course participants to change their perspectives in a manner that will lead to a deeper understanding of the notions of “culture” and “nature.” Next, we focus on fundamental epistemological components and concepts in medicine and medical anthropology: body and corpus, suffering and pain, gender and sex, disease and health, diagnosis and medicalization. Throughout the course, we use concrete examples to discuss the historical conditionality and sociocultural relativity of issues within these categories. For instance, to explain the concept of medicalization, we relate the history of “C-hypovitaminosis,” which was “invented” and established in the 1930s in Switzerland through the development of a urine test.

Each of the subsequent four modules expands on these same concepts (body, suffering, gender, disease, etc.) through the use of paradigms, discourses, social systems, and cosmologies. After a brief introduction to each theoretical instrument, we guide the students through one to three historical or topical examples. The seminar leader may incorporate his or her own research into these examples to present findings from the most current lines of research and to illustrate that some ideas have not yet been canonized.

The second module begins by discussing Kuhn’s concept of “paradigm” as a legitimate approach to the history of science that allows for reflection on the genesis, establishment, and deconstruction of scientific and medical explanatory models and styles of thought. We use the theory of signatures developed by Giambattista della Porta to illustrate Kuhn’s incommensurability thesis. We exercise the theory of medical signatures (i.e., the correspondence between some human body parts and some plant or animal shapes, which can be used for treatment) with a file-card game that we developed expressly for this purpose. We illustrate the concept of “scientific revolution” (versus “normal science”) through the example of the discovery of blood circulation by William Harvey. Finally, we incorporate the current context of theoretical medicine by asking the students to consider whether and to what extent (post-) modern medicine, with its increasingly pragmatic orientation, is likely to abandon its monoparadigmatic purism.

These relatively practical and simple exercises are followed by a third module that places somewhat greater cognitive demands on the students. In contrast to the second module, which focused on dynamics internal to medicine and the development of logic, the third module uses the categories of “collective symbols” (e.g., metaphors, allegories) and “discourse transfer” to investigate, from Foucault’s theoretical discourse perspective, the interactions of science and society. This approach aligns with that taken by Corbin in the well-known book, The Lure of the Sea: The Discovery of the Seaside in the Western World. Corbin describes the emergence of bathing holidays and seaside cures as a discourse-related interplay among medicine, philosophy, religion, and the arts. We discuss how Edmund Burke’s and Emmanuel Kant’s aesthetic theory, used for characterizing the sea as “sublime” or a “delightful horror,” transformed in 19th-century England into the hydrotherapeutic treatment of “spleen.” Using this approach, we ask the students to recognize that just as the development of medical knowledge is always embedded in a sociocultural context, the development of modern everyday culture has been profoundly affected by the history of medicine.

In this third module, we also explain the concepts of “biopower” and “biopolitics,” which are often used in an inflammatory manner in the field of bioethics. To this end, we expound on the political implications of science and medicine. For example, to illustrate the well-known analogy of the human body as a political “body,” we use a popular science fiction film, Healing Words, which was produced in 1959 in the communist German Democratic Republic. The plot follows a young engineer who secludes himself from “common” workers. After an industrial accident, his right hand is paralyzed as a consequence of a “repression in the brain,” but later the “healing words” of a psychiatrist cure him and he regains the use of his hand.

On a metaphorical level, this film relates Ivan Pavlov’s concepts of disease and higher nervous system activity to the political system and individual status of the workers and peasants. Using a method for critical discourse analysis developed by Jager and others, we examine the collective symbols and political messages inherent in the film. We ask the students to link the political and medical discursive symbols: brain as engineer, hands as workers, and psychiatrist as communist leader.

The fourth module further explores the sociological view of medicine. We have found that the functional-structural systems theory of Luhmann is...
particularly well received by medical students at Ulm University because it borrows key concepts from the biosciences. Using a long-term historical perspective, we engage the students in a discussion of the genesis, functional differentiation, and achievement of independence of medicine as an autonomous social system which occurred through and during modernization and secularization. We begin with the term “sacred disease,” an ancient name for epilepsy, which was explained as demonic possession and with the Hippocratic criticism of this view as a quasi-secular “disenchantment of the disease.” We then move through history to the point at which the practice of healing becomes separate from religious cult. The concept of disease as unrelated to external referential relationships provides an opportunity for us to discuss reports and documentaries that have either examined the relationship between medicine and religion or explored complementary and alternative medical therapies. In this module we critically examine the construction of social systems by asking the students, for example, whether the public’s reproach—that, in modern medicine, treatment has become an end in itself—is justified. Finally, we debate medical ethics within the context of colliding values representing different social systems (medical, legal, scientific, religious, etc.). We take precautions to avoid the justly deplored “chronically unfriendly relationship between medical ethics and social theory.”

The fifth and final module encourages students to change their perspectives again by promoting ideas and concepts from empirical sociological surveys. At the center of this module is the cosmological concept elaborated by Gill, which is a further development of Douglas and Wildavsky’s cultural theory of risk, which explains societal conflicts regarding health as not purely rational. We use the concept of cosmologies to describe the development of enduring preferential patterns for viewing nature and the lifestyles that correspond with these views. Gill attributes the development of such patterns and lifestyles to the dominant cosmologies of three major historical epochs: the premodern era, the industrial modern era, and the late modern era. We illustrate his main idea by having the students analyze public debates about the origin of AIDS. After showing a sequence of clips from documentary films that depict widely ranging forms of AIDS denial, we divide the students into three groups and provide each group with one legend about the origin of AIDS. Using a questionnaire we developed, the students attribute the main features of their legend to more abstract premises derived from predominant cultural views of nature. In this process, they reconstruct and describe, in their own words, the three cosmologies.

Thus far (September 2011), more than 850 students have completed the HTE course at Ulm University, and the majority have evaluated the course very positively. Students have given the course high assessment ratings, and they have expressed interest in and demand for the inclusion of more courses of a similar nature in the medical curriculum. We hope that through this approach, by implementing “harder” humanities, we are bridging the chasm between science and the humanities in medicine. The course is a response to Belling’s plea to develop, through courses in the medical humanities, medical students’ ability to think more precisely.

The Challenges Ahead

In our opinion, a thoroughly structured program, such as the one described here, allows both educators and students to more closely approach the necessary “trinity” of history, theory, and ethics that Schott has recently advocated. The trinity can be achieved while still promoting a reflexive theory as the spiritus rector in medical humanities. As Schott writes, “philosophical, cultural, and medical-anthropological, and phenomenological approaches are subsumed into this theory of medicine” that integrates the humanities and science. Only when the medical humanities use cultural theoretical analysis, rather than medical self-description, will they fulfill their role as an inherent component of medicine and medical education. The widespread prejudice among medical students that the history of science is merely an exercise in memorization, that medical ethics is an emphatic moral sermon, that some humanities courses are like coffee breaks, is countered directly in courses such as those at Ulm that employ cognitive instruments.

Ulm’s four-instrument approach does not simply represent a defensive call for a return to some sort of traditional, universal educational ideal, which many might view as antiquated. The main goal is not merely to produce moral, humanistic physicians who are liberally educated (although these, too, are desirable characteristics) but, rather, to develop medical professionals who understand the basic theoretical background and possess the analytical skills necessary to negotiate the epistemological and cultural dimensions of the medical system.

References
