


Creating Alignment: How the Humanities Can Help Heal Physicians and Patients

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ABSTRACT: The medical humanities, an umbrella term for the fields of ethics, social science, and fine arts, are increasingly recognized as an important component of medical education. Since the Flexner report, the primacy of science and evidence-based medicine has replaced subjectivity and nuance. While this has been critical for standardization of care and patient safety, an exclusive emphasis on science in undergraduate medical education can devalue more humanistic pursuits. Modern medicine is now plagued with burnout, pandemics, and societal ills that permeate into medicine. Addressing these requires a thoughtful, holistic approach where we extend our sights beyond strict evidence-based medicine.

KEYWORDS: health humanities, medical humanities education, art of medicine, burnout

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Introduction

Many of us in medical education acknowledge that educating excellent future physicians requires more than assimilation of facts.¹ How to best imbue more intangible skills such as compassion, empathy, resiliency, and self-reflection is still a matter for much debate.^{2,3} However, exposure to and engagement with courses outside of science has been recognized to have beneficial impacts on students.⁴ The umbrella term of the medical humanities has broad appeal and is often considered a means to augment the pre-clinical curriculum with non-scientific content.

The medical humanities are sometimes co-mingled with health humanities which also broadly link health and social care disciplines with the arts and humanities.^{5,6} The medical humanities “encompass an interdisciplinary field of medicine which links the *humanities* (philosophy of medicine, medical ethics and bioethics, history of medicine, literary studies and religion), *social science*, and the *arts* to their application in medical education and practice.”^{7,8} *The medical humanities have expanded from topics such as medical ethics and the history of medicine to include religion, philosophy, and literary studies. Social science includes those relevant topical areas of psychology, medical sociology, medical anthropology, cultural studies, and health geography while the fine arts expose students to literature, theater, film, music, and visual arts.*

In order to better understand the role the humanities can and should play in educating future physicians, we should look at these categories in greater detail. We do not have medical students spending hours dissecting Shakespeare or considering the sociocultural foundations of Beckett. They do not generally create large-scale paintings or compose short

operas, nor should they. Medical students need to understand medicine. They need to understand pathophysiology, pharmacology, anatomy, and embryology. This is all foundational but insufficient. Patients expect technical excellence as a baseline but they also expect compassion, emotional intelligence, and professionalism.⁸

Similarly, we medical educators who teach the medical humanities are often not ourselves doctors of philosophy or art or music but clinicians and educators with an appreciation of the wisdom found in the humanities and an understanding that caring for patients extends beyond the collection of organs involved in a disease to the whole person. Increasingly, the process of professional identity formation is being recognized as the layering of experience and wisdom on top of this technical foundation. It is a process of character development that can be informed by the various humanities though it is certainly not their exclusive domain.⁹

As such, the humanities provide a means for grappling with the inherent uncertainty in medicine.^{10,11} Participating in courses on spirituality directly relates to patient care needs throughout their life, influencing medical decisions. Courses on racism in medicine or medical anthropology address important currents that may undergird the societal structures in which we practice medicine. Art courses have been shown to increase our ability to observe, expose our assumptions, and build tolerance for ambiguity.^{12–15} Classes on medical improvisation and communication can expand our repertoire of interpersonal skills and build empathy with our patients as we seek to understand their unique perspectives.^{16,17} In short, the medical humanities can enrich our lives in medicine and promote those qualities that make us better doctors and better humans.



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Beyond these considerations, practicing medicine in the current environment requires inoculating our students with a humanities background in the hope that they may draw on these skills when faced with many of the uncertainties of future practice. These come in various forms from political instability and conflict to climate change. We have seen the consequences to healthcare from the COVID-19 pandemic and need to be prepared for the next pandemic. The epidemic of burnout among physicians has been an issue smoldering for years which is now burning over.

What We Learned From the Recent Pandemic

COVID-19 profoundly affected both the pre-clerkship and clerkship learning environment.¹⁸ In the clinical environment, there were multiple factors limiting the role of students in this environment including a lack of adequate personal protective equipment, concern for infection, and a diminished valuing of education. With cancellation of surgical procedures and routine appointments and the transition to telehealth formats, students were relatively cut off from the traditional educational experience.¹⁹ In the pre-clinical setting, restrictions on in-person teaching facilitated the expansion of online learning platforms and led to increased demand for educational sessions that could be delivered in an online format. This over-reliance on technology-facilitated education has been shown to have detrimental effects on the students' educational experience.²⁰ The pandemic showed the limitations of only learning online, highlighting the need for imaginative blended models of teaching that respond to the pedagogical imperatives of the three types of learning (informative, formative, and transformative) identified in a 2010 Lancet Commission.²¹

The medical humanities by their very nature cross the boundaries of "traditional" medicine and medical education techniques. They are often multimodal, requiring engagement with an art form or small group discussion. They promote interaction and reflection, leaning on personal and shared experiences rather than facts. While at the height of the pandemic, these too were conducted virtually, they highlight the need for interpersonal communication skills. Collaborative work such as the American Association of Medical Colleges's Fundamental Role of the Arts and Humanities in Medical Education seeks to provide resources for medical educators through creation of a longitudinal, cross-continuum initiative to create medical school programs in the arts and humanities.²² More foundationally, the medical humanities can offer an even deeper critique of the handling of the COVID response. The overemphasis on science, technology, engineering, and mathematics (STEM) approaches to medicine with relegation of social sciences perspectives to the background can be myopic.²³ When government and the media ignore these perspectives and do not allow the humanities and social sciences to inform public policy and informational campaigns, the

outcome may have contributed to the ineffectual programmatic roll-outs that many countries faced.

Impact on Burnout

The crisis of burnout in healthcare has been accelerating such that physician burnout levels at the end of 2021 were at record highs, with 63% reporting at least one element of burnout.²⁴ The root causes of physician burnout are certainly multifactorial, including overwhelming documentation burdens and administrative tasks, low control of the work environment, payment systems, and insurance structures that fail to prioritize the patient, and unforgiving systems that do not support physician needs and incorporate flexibility. To be sure, no one thinks that an art course will solve the medical system woes of this country. While it would be naïve to say that the medical humanities are the key to alleviating this crisis, learning from the wisdom of past and current generations and developing interests outside of medicine may be one component of a multifaceted solution.²⁵

Medical students have noted that these aforementioned topics promote a consideration of the challenges and complexities of medicine. It prompts discussion of difficult topics such as the vulnerability and frailty of us as clinicians.²⁶

Debates about the medical humanities also re-center the conversation squaring on the doctor-patient relationship, which is foundational to all our work and efforts. This is the core of medicine and leaning into this relationship, cultivating compassionate care of others, may have substantial benefits in mitigating burnout.²⁷ Medical students with compassion training had a rise in compassion and decreased depression.^{27,28} Physicians with higher empathy and the ability to take their patients' perspectives were 69% less likely to show signs of burnout.^{27,29} Ninety-one percent of chief medical officers felt that showing compassion for others reduced their stress levels and risk of burnout.³⁰ Increased activity in compassion centers of the brain among nurses predicted lower burnout.³¹

Impact on Empathy

At no other time in our recent history has the ability to empathize with those with views different from our own become more important. Science often seems to hold the hope of a single response to a multiple-choice question for students and for many practicing physicians as well. The arts and humanities provide no easy answers, no black or white, but rather thrive in the murky gray. They encourage people to engage with art and sit with that discomfort of not knowing and possibly not being able to know. There is no quick resolution in deciphering an abstract work of art. Programs such as medical improvisation and art have been shown to increase tolerance for uncertainty and ambiguity.^{13,32}

The humanities help us to give context to our experiences and those of others, extending our view beyond our immediate reach across time and space. The arts help us see the world

through the eyes of another, adopting the perspective of others. They help us to appreciate and analyze the structure of an argument such that we can begin to understand why someone would not want treatment, why they choose paths different than we would, and how their experiences drive life and perspective perhaps vastly different than our own. Building one's capacity for empathic understanding is an important, though not exclusive purview, of the arts and humanities.³³ These courses have been noted to provide insight into the patient experience and the interdisciplinary nature of the work has been cited by medical students as a source of inspiration and insight.²⁶

Stories, through their various forms whether art, literature, music, or narrative, are one of the most effective means to communicate the meaning of an existentially important experience to another and can offer a glimpse into another's worldview.³⁴ The two-dimensional portrayals of patients in sample cases do not allow for personal and constructive engagement. Textbook learning sets up patients with diseases as statistics and abstractions whereas encountering a patient through art with all the messiness and reality of the lived experience creates a more empathic connection.

Through walking in another's shoes in a play or novel or through a work of art, physicians can more deeply understand the human condition and hence a patient's suffering. Students report insight into the patient experience and a greater understanding of the stigma of illness.²⁶ A former *New York Times* critic summarized the experience: "To most physicians, my illness is a routine incident in their rounds, while for me it's the crisis of my life. I would feel better if I had a doctor who at least perceived this incongruity."³⁵ The core of medicine, the doctor/patient interaction, is often lost in the reductionist tendencies to consider the biological phenomena of various organs rather than a whole person.^{36,37}

Course development is often grounded in theories of empathy and moral development.³⁴ The ability to facilitate multiple perspective-taking can also inspire recognition of social injustice. By seeing the universality of the human experience and of emotions across race, gender, class, and time, medical students are forced to face the similarities of lives with others who may be very different.³⁸ Thus, empathy can also expand beyond the patient in the room with you to those you may never treat.³⁹

In a culture that does not value liberal education and is skeptical of virtue, altruism may be undervalued in favor of egoism. A society promoting moral relativism may also leave medical students and physicians unmoored, with a sense that cynicism, entitlement, and self-focus are the answers to the burnout question. Exposure to the medical humanities may help students cultivate empathy and understand a multi-perspectival approach as they walk in the shoes of an artist who may see the world very differently from them or who may reveal the emotional life of the other.³⁹ This kind of understanding may buttress one's personal well-being, even while it does not undo the structural ills of our current healthcare system.

Impact on Practical Skills

When Einstein was stuck on a particularly challenging question, he stopped and played the violin. The arts provide more than a mental break. Engaging different parts of the brain may well encourage more creative problem-solving.^{40–42} The humanities cannot only grease the mental wheels but can help create a better wheel. Thinking creatively can generate solutions that would never originate from linear, process-oriented approaches.

There may also be tangible and transposable benefits derived from individual coursework.⁴³ For example, studies of observational art courses have yielded improved pattern recognition and detailed physical diagnosis reporting.^{12,14,15} The orientation of medical education, in general, does not look kindly on conflicting interpretations or situations with no clear multiple-choice answer. However, the world of clinical practice abounds in gray. Literature may foster tolerance for ambiguous situations⁴⁴ as have programs in medical improvisation and art.^{8,26} Narrative medicine can promote self-reflection.^{16,45} The arts teach creative means of expression, understanding of different perspectives, an awareness of knowledge and emotions throughout the human experience, and the shaping and sharing of perceptions through artistic creation and practices in the expressive world, all skills valuable in a pre- or post-pandemic world.³³

While not a means to an end, the arts and humanities do complement the reductionist tendencies of organ-based system education, details of pharmacology and pathophysiology, and rote memorization of tomes of knowledge. Engaging the humanities requires the individual to adopt a holistic and inclusive approach. Certainly, clinical reasoning and detailed analysis is the cornerstone of medicine. However, such analysis should be in service of understanding the larger whole, such that the whole is never subordinate to the parts. When one stands in front of a painting or hears a piece of music, all the senses are involved. Integration is built into the experience. Often in medical education, the parts can become the focus, and integrating the pieces together in a comprehensive and complete whole is not only challenging but difficult to explicitly state. The humanities serve as an example and a vehicle for holistic aggregation and re-integration.

Beyond their intuitive appeal, many advocate that the medical humanities impact personal development and professional identity formation.^{26,34,38,45,46} Students explore the doctor-patient relationship, are called to question their biases and pre-existing beliefs and examine ethical dilemmas where their personal beliefs may collide with professional expectations. They wrestle with what it means to be a doctor in this present moment and are often forced to articulate their struggles and concerns, prerequisites for becoming a professional.²⁰ While there are many factors that feed into professional identity formation both clinically and non-clinically, medical humanities comprise only a small fraction of students' educational

experiences, these courses still offer a safe space to explore what it means to be a physician and what kind of physician they want to become.

Many medical schools have been able to integrate the medical humanities without detracting from course content or students' success. Some programs have longitudinal tracks or scholarly concentrations.^{9,47} While some have optional course work, others including our own have compulsory courses that occur alongside traditional medical content.⁴⁸ These courses can be in the pre-clinical years or can extend into the later clinical years, especially as fourth-year electives. Still others offer optional humanities content for medical students.⁴⁹ Schools use the humanities to promote social consciousness and raise critical issues in the community.⁵⁰ It can also serve as a source of scholarship and reach into the health care environment as it seeks to enrich the physician–patient relationship.^{52,53}

Limitations

As alluded to, the humanities are a heterogeneous bunch. However, we frequently consider them *in toto*, extolling their virtues as a panacea. Certainly, the benefits derived from a narrative medicine course may be different than an observational art course. Commonalities may persist such as promotion of self-awareness and engendering a reflective practice. Many also cultivate empathy and a deeper understanding of the other, a critical skill in our practice. This does not mean the medical humanities are the only way to build these important skills and values. There are plenty of resilient, empathic physicians who have never taken humanities courses so the medical humanities are not the *sine qua non* of professional identity formation. However, the arts and humanities have stood the test of time and should inform our educational strategies of the future. We should not disregard their wisdom in the education of our medical students.

Conclusion

Cultivating a multidisciplinary background in education should not be the exclusive purview of undergraduate studies. Rather, medical education should be imbued with a balance of science and art. The principle of intellectual inclusivity should permeate medical training from medical school through graduate medical education and ideally be a component of lifelong learning, as intellectual curiosity need not have boundaries drawn around it. Incorporating a multimodal system of medical humanities throughout the curriculum not only sends the message that art is as important as science in treating patients and developing empathic relationships but also facilitates creativity, open-mindedness, empathy, and perspective-taking, all qualities we seek in a physician.


Author Contributions

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