

Health Humanities and Medical Education: Joined by a Common Purpose

I learned the art of storytelling from my father. He would tell us bedtime stories upon his return from a day of delivering fuel oil to his various customers around Boston, his hands reeking of the acrid smell of oil that would not wash away in spite of scrubbing with abrasive soaps. But my brothers, sister, and I did not mind the smell. In fact, it was the familiar smell of Dad that settled us down for the story to come as we huddled around him on one of our beds. We were in for an adventure, a true story no less, usually based on his experiences in World War II. Every story had unexpected dangers, battles of good versus evil, villains, heroes, and a happy ending that sent us off to a restful sleep. Later in my life, I tried to follow his example by telling stories to my own children. I remember how I would sometimes be wide awake and animated as I built up to a story's climax, only to notice that the children were already asleep. I was tempted to wake them up so that they could appreciate the clever plot twists of my tale, but then I realized that the purpose of the story was to get them to drift off to a peaceful sleep, not for me to win the Pulitzer Prize for bedtime stories.

The purpose and value of bedtime stories are easy to understand and support. But what are the purpose and value of stories and other art forms in medical education and health care delivery? In short, what are the contributions of the medical humanities? This important question is worthy of our consideration because as medical education has become competency based with measurable milestones requiring evidence of outcomes, the role of the medical humanities as a contributor to physician competence has come into question. In a literature review, Ousager and Johannessen¹ describe the problem of the medical humanities well: "It is, however, very difficult to measure with any certainty to what extent the inclusion of humanities in medical curricula makes

better doctors." Their extensive review concludes that

there is a shortage of studies delivering evidence for the long-term impact of humanities in undergraduate medical education on the development of medical proficiency.... We suggest that the lack of evidence for relevance to the work of doctors could pose a threat to the continued development of humanities-related activities in undergraduate medical education.

The historical basis for including the humanities in medical education may provide some guidance about how to approach the threat identified by Ousager and Johannessen. Jones et al² note that the history of medical humanities is marked by the need for a "cultural transformation that would address the imbalance between technological aspects of medicine and the human facets of health and caregiving." The authors describe the historical description of medical humanities as "the intersection of medical phenomena (e.g., physicians, patients, illness) and the traditional disciplines of the humanities, including history, literature, philosophy, and visual arts." Thus medical humanities programs developed partly to provide a counterbalance to the technological and scientific information dominating medical education curricula. Jones et al propose to replace the term *medical humanities* with a more inclusive term, *health humanities*, to recognize the numerous nonmedical elements that affect health, such as poverty, education, and race, as well as the participation of many nonphysicians in the health care delivery system.

Health humanities may be justifiably included in curricula for health professionals if the goals of the health humanities and the purpose of medical education are aligned. But what is the purpose of medical education? I suggest that a reasonable purpose of medical education is to prepare students through educational experiences to be doctors who can meet the goals of the Triple

Aim: better health, better health care, and lower cost described by Berwick et al.³ Bodenheimer and Sinsky⁴ expanded the Triple Aim to be the Quadruple Aim to include physician wellness. By looking beyond the traditional areas of health care delivery to a broader purpose of promoting population health, preventing illness, and efficiently using societal resources, we discover that many of the same areas identified by Jones et al that concern the health humanities—such as poverty, race, and violence—are also concerns of medical education. McGinnis et al⁵ and Braveman and Gottlieb⁶ have described how these social determinants of health account for a substantial burden of disease, most of which is not influenced by medical care.

Health humanities have concerned themselves with the social conditions associated with health and illness through novels, plays, opera, music, poetry, and other art forms that communicate the effects of these conditions on individuals and groups. The health humanities use the rich and evocative resources of art to expand medical education to include the values and experiences of patients, families, and communities as well as the environmental stresses that influence health. To illustrate, I contrast a traditional medical case description of one of my recent patients with a health-humanities-oriented case description of the same patient.

A nurse rolled Mr. Sanchez (name changed) into the emergency resuscitation area on a stretcher and told our team that the patient had a "critically high" potassium level based upon blood drawn in the waiting room. After a resident reviewed an EKG, which showed the characteristic peaked T-waves of hyperkalemia, we immediately began treatment with calcium, insulin, and glucose. But minutes later Mr. Sanchez's eyes closed, his breathing slowed, and he went into cardiac arrest. We began CPR and after another ampule of calcium and an ampule of epinephrine the patient's heart began to beat, a pulse returned, and his eyes opened. Minutes later he was whisked to the intensive care unit for emergency dialysis.

This bioscientific description of Mr. Sanchez's case focuses on the medical problem. My students used this case to review how elevated potassium levels affected the cardiac muscle and its function, what pharmacological interventions would be effective, and how to read the EKG to verify the diagnosis.

Here is a health humanities depiction of Mr. Sanchez's case.

Mr. Sanchez lay his head back on the chair in the emergency room waiting room. He felt exhausted and dizzy. But he also felt fortunate to have a chair, even if the plastic was torn on the seat and the legs shook when he moved. It was better than the jail cell where he had been for the past three days. And it was better than the floor. He told them at the jail that he needed his dialysis, but the guards said he could get the dialysis later. So when the jail let him out he began walking up the hill to the hospital. It was about a mile. He had to stop to catch his breath after a few steps. After a while he sat down on the sidewalk to rest and some police officers stopped to see what was wrong. One of them recognized him. "Hey, Joe," the officer called out, "You okay?" Mr. Sanchez told him that he was on his way to the hospital for dialysis, and they gave him a ride. When he got to the ER, a nurse with a red and green dragon tattoo on her arm poked him with a needle and told him to sit down. He was thinking about that dragon, its sharp teeth and claws, when he passed out.

In the health humanities perspective we begin to picture Mr. Sanchez and care about him and his struggles to get medical care; the crowded emergency department where he has to wait for care; and the issues of power, poverty, and race that may contribute to his crisis. A health humanities perspective might inspire the health care team to better understand how they could work with the jail and the social services agencies to prevent similar problems in the future. In this way, the health humanities could do their part to help the team achieve the Triple Aim.

Dennhardt et al⁷ published a scoping review of research about the health humanities in which they identified three focal areas: art as expertise, art as dialogue, and art as a means of expression and transformation, which includes personal growth and activism. I discuss these areas below as I suggest how the health humanities might demonstrate their contributions to making better doctors and improving health.

First, in considering art as expertise, health humanities may be able to help sharpen the abilities of health providers to elicit and to better understand the stories of their patients. As I demonstrated in the story of Mr. Sanchez, there are many ways to tell a story about an illness. The story could be limited to the critical care encounter and various lab tests, medications, vital signs, and imaging studies. That part of the story, while useful, would leave out the information that explained how the problem began and grew to threaten his life. Through the power and richness of stories, we might be able to make the connections between the technological and the human experience of illness, which was the original impetus for including the health humanities in medical education. The use of such approaches as reflective writing, improvisational theater, music, and painting can help health professionals to develop deeper awareness and better communication skills that will give them access to the stories of patients and provide a face and a context to a medical problem.

Baruch⁸ has eloquently described the importance of creativity as part of the clinical skill set for physicians and how teaching students to recognize the nature of creativity in artistic habits and mind-sets can help them learn creative skills, which

are not habits for humanizing future physicians but another set of tools ... for health care providers to use to care for patients with unimaginably complex problems.... Maybe [providers] will ask different types of questions, engage in conversations, seek compassionate solutions—not because they are striving to be more empathic but rather because they are trying to be more creative.

Second, in considering art as dialogue, health humanities could help open a dialogue about areas of the health care system that are costly, poorly understood, and of uncertain quality. For example, Frist and Presley⁹ describe controversies related to end-of-life care, which they report is responsible for around 27% of health care spending in the Medicare system. They note that

in talking to young students and residents at our institution ... it is clear how uncomfortable most of them are with walking into a patient's room and addressing code status, much less navigating the issues of a terminal diagnosis.

An understanding of end-of-life care requires knowledge of the law, ethics, religion, political sciences, anthropology, and social determinants like poverty and education. But additional understanding could be fostered by using the health humanities and could help improve patients' experiences and reduce health care costs—and lessen the anxiety of learners that Frist and Presley mention. In this issue, Wellbery et al¹⁰ describe a medical student course focused on social determinants of health with a reflective writing assignment related to the case of a woman whose medical care became very complex and costly because her social circumstances and behavioral problems were not addressed as part of her health care.¹¹ The case raised questions about empathy for individual patients and vulnerable groups. Wellbery et al conclude that "reflection and writing about social aspects of clinical medicine are ... valuable tools for engaging students in discussions of social empathy."

The third area identified by Dennhardt et al,⁷ art as a means of expression and transformation, which includes personal growth and activism, I divide into two parts. The part related to personal growth links well with Bodenheimer and Sinsky's inclusion of provider wellness as an aim of medical education. The health humanities can provide tools for health care providers to address their own psychological and physical health needs. Krasner et al¹² described lower rates of burnout in primary care providers participating in a program that included sharing and discussion of stories and practice of mindfulness. In this issue, Branch et al¹³ describe a national longitudinal faculty development program utilizing reflective writing to strengthen humanistic teaching and role modeling. Reflections of health professionals may sometimes be shared with others to create supportive communities of practice and with patients, families, and the public to improve all participants' understanding of the health system.

The reflective and creative process can also provide support for learners' identity development, which is a critical part of the educational process. The development of identity is a theme of both health professions education and literature. Wald et al¹⁴ described how they have used reflective writing, portfolios, and faculty feedback to support professional identity formation. Whether through reading

Kafka's *Metamorphosis*,¹⁵ William Carlos Williams's *Doctor Stories*,¹⁶ or Abraham Verghese's *My Own Country*¹⁷—to give only a few examples—students can use stories to reflect upon their own identity changes and gain perspective by looking at themselves through the lenses of others who have experienced identity challenges.

Finally, the second part of the third area sees art as a means to foster activism. I believe that the humanities could have a critical role in the current policy discussions about proposed changes to the Affordable Care Act (ACA). While many people respond to data about the numbers of those currently insured under the ACA who would lose their insurance in a variety of policy scenarios, the stories of individuals who would be affected by losing their coverage are even more compelling and give life to the numbers. Our ability to have conversations about the effects of changes in insurance will have consequences for our patients and students. The health humanities facilitate these conversations through images and stories that are memorable.

Huyler¹¹ expresses these sentiments well:

Studying the humanities in medicine is about helping doctors and medical students become more aware, more insightful, more reflective and—ultimately—more influential in shaping the trajectory of health care. It's about encouraging the faculty, willingness, and ability to enter into the larger public debate in these cacophonous times when collective silence will not serve the medical profession well.

I suspect that more people are influenced by the stories in Atul Gawande's essays and books or the television depictions of health care in *ER*, *House*, *Scrubs*, or *Chicago Med* than by our latest scientific journal articles. For all of us—especially medical educators, their students, and practicing physicians—the health humanities can bridge scientific advances with the human experience of health and illness and help us “enter the larger public debate” about the values we hold dear about what we want from our health care system.

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Editor's Note: The opinions expressed in this editorial do not necessarily reflect the opinions of the AAMC or its members.

References

- Ousager J, Johannessen H. Humanities in undergraduate medical education: A literature review. *Acad Med.* 2010;85:988–998.
- Jones T, Blackie M, Garden R, Wear D. The almost right word: The move from medical to health humanities. *Acad Med.* 2017;92:932–935.
- Berwick DM, Nolan TW, Whittington J. The triple aim: Care, health, and cost. *Health Aff (Millwood).* 2008;27:759–769.
- Bodenheimer T, Sinsky C. From triple to quadruple aim: Care of the patient requires care of the provider. *Ann Fam Med.* 2014;12:573–576.
- McGinnis JM, Williams-Russo P, Knickman JR. The case for more active policy attention to health promotion. *Health Aff (Millwood).* 2002;21:78–93.
- Braveman P, Gottlieb L. The social determinants of health: It's time to consider the causes of the causes. *Public Health Rep.* 2014;129(suppl 2):19–31.
- Dennhardt S, Apramian T, Lingard L, Torabi N, Arntfield S. Rethinking research in the medical humanities: A scoping review and narrative synthesis of quantitative and narrative synthesis of quantitative outcome studies. *Med Educ.* 2016;50:285–299.
- Baruch JM. Doctors as makers. *Acad Med.* 2017;92:40–44.
- Frist WH, Presley MK. Training the next generation of doctors in palliative care is the key to the new era of value-based care. *Acad Med.* 2015;90:268–271.
- Wellbery C, Saunders PA, Kureshi S, Visconti A. Medical students' empathy for vulnerable groups: Results from a survey and reflective writing assignment. *Acad Med.* 2017;92:1709–1714.
- Huyler F. The woman in the mirror: Humanities in medicine. *Acad Med.* 2013;88:918–920.
- Krasner MS, Epstein RM, Beckman H, et al. Association of an educational program in mindful communication with burnout, empathy, and attitudes among primary care physicians. *JAMA.* 2009;302:1284–1293.
- Branch WT Jr, Frankel RM, Hafler JP, et al. A multi-institutional longitudinal faculty development program in humanism supports the professional development of faculty teachers. *Acad Med.* 2017;92:1680–1686.
- Wald HS, Anthony D, Hutchinson TA, Liben S, Smilovitch M, Donato AA. Professional identity formation in medical education for humanistic, resilient physicians: Pedagogic strategies for bridging theory to practice. *Acad Med.* 2015;90:753–760.
- Kafka F. *The Metamorphosis*. Moliken P, ed; Roberts MA, trans. Clayton, DE: Prestwick House Literary Touchstone Classics; 2008.
- Williams WC. *The Doctor Stories*. Coles R, compiler. New York, NY: New Directions Books; 1984.
- Verghese A. *My Own Country*. New York, NY: Simon and Schuster; 1994.