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The Impact of Baccalaureate Medical Humanities on Subsequent Medical Training and Practice: A Physician-Educator's Perspective

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Abstract This reflective essay is an attempt to organize trends in feedback I have observed during ten years of coursework, conversations, and correspondence with former students associated with the Medical Humanities Program at Baylor University. Over the years, recurrent themes arise when speaking with alumni about whether and how their medical humanities experience intersects with their current training. I have identified five particular domains in which baccalaureate medical humanities training affects students' subsequent healthcare professions training and practice: context and complementarity, clinical relevance, reflective practice, professional preparedness and vocational calling. I created an instrument of open-ended questions for each of these categories and posted it to social media with an invitation for alumni to respond. This informal survey was conceived as an exploratory exercise with the intent to help generate a foundation for more formal qualitative research in these five domains. In this essay, I offer my own reflections together with those of former students on the impact of baccalaureate-level medical humanities training in order to illustrate the benefits in each domain for subsequent healthcare training and practice. The need for qualitative research that explores the impact of baccalaureate medical humanities merits collaboration between multiple centers of investigation across many disciplines, and across the divide between premedical and medical educators.

Keywords Medical humanities · Health humanities · Premedical education · Baccalaureate · Medical training · Medical education

What impact does preparation in medical humanities have on students at the baccalaureate level? What influence will this education have during their subsequent years of training, their transition to professional life, or their work as seasoned practitioners? What difference does a background in medical humanities actually make?

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I would like to attempt a partial answer to the question of impact based upon trends I have observed during ten years of coursework, conversations, and correspondence with former students associated with the Medical Humanities Program at Baylor University. I have chosen to use the term 'medical humanities' rather than 'health humanities' throughout this essay because of its connection to the name of our program and because of the connotations I associate with the word 'medical' in the broadest sense of the word. As in the phrase 'medical centers,' I use the word medical here to encompass the work not only of physicians but of all those working in the entire enterprise of healthcare. I recognize that our central concern should always be the health of our patients and that the term 'health humanities' is preferred by the editors and other authors in this issue; however it is far more often the perceived threat to health and not health itself that drives patients to seek out healthcare practitioners (of all stripes, not just physicians). For this reason and for the purposes of this paper, I will use the term 'medical humanities' in the broadest possible sense.

Over the years, recurrent themes arise when speaking with alumni about whether and how their baccalaureate medical humanities experience intersects with their current training. I have identified five particular domains in which baccalaureate medical humanities affects students' subsequent healthcare professions training and practice: context and complementarity, clinical relevance, reflective practice, professional preparedness and vocational calling. In this essay, I offer my own reflections together with those of former students on the impact of baccalaureate-level medical humanities training in order to illustrate the benefits in each domain for subsequent healthcare training and practice.

I come to this topic both as a practitioner and a medical educator; as a family physician with twenty years of experience that is equal parts patient care and medical pedagogy. I have a background in academic medicine, having completed a fellowship in academic medicine while serving on the faculty of the family medicine residency program in Waco, Texas. I am now teaching pre-health students of all stripes at Baylor University, one of the first universities in the nation to offer a Bachelor of Arts degree in medical humanities. Our program has experienced immense growth. In 2007, the first class of medical humanities majors numbered seven students. As of the 2016-2017 academic year, we have approximately 250 students enrolled as medical humanities majors. The increasing interest in medical humanities is also reflected in the increasing number of programs in universities all over the United States, occasioning the publication of the special issue of the *Journal of Medical Humanities* that you are now reading (Berry, Lamb and Jones 2016).

At Baylor University, most of our medical humanities students are planning careers as healthcare professionals. Most plan to work in clinical practice as physicians, allied health professionals or in public health. Some have goals to work in healthcare administration or healthcare policy, and a small minority pursues graduate work in fields such as law, social work, philosophy, theology and medical ethics. For the purposes of this paper, I will be focusing on alumni who are now training as physicians, physician assistants, allied health professionals or public health researchers and educators—in other words, clinical practitioners who will be at the bedside of patients.

From my viewpoint as both a practicing family physician and a medical educator at the university level, I hope to contribute to the discussion surrounding the significance of the medical humanities on baccalaureate students and how we might go about measuring this impact.

The five domains of impact in baccalaureate medical humanities

Over the years, I've observed recurrent themes when speaking with alumni about whether and how their medical humanities experience intersects with their current training. I have attempted to capture these themes in five separate but related domains: context and complementarity, clinical relevance, reflective practice, professional preparedness and vocational calling. I created an instrument of open-ended questions for each of these categories and posted it to social media with an invitation for alumni to respond. Thirteen alumni completed the survey. Excerpts from their responses are used in this essay to illustrate and expand the discussion in each of the five domains. I selected passages from the alumni responses that were both representative and worded with particular insight. This informal survey was conceived as an exploratory exercise with the intent to help generate a foundation for more formal qualitative research in these five domains.

Context and complementarity

One of the greatest strengths of the medical humanities is the provision of a context for and a complement to coursework in the basic sciences. There is no way around some of the rote memorization that must occur to acquire the necessary fund of knowledge in the basic sciences. But the medical humanities provide students with a context and framework for the way in which those memorized facts will be used. One gets a sense of the appreciation that students have for the way in which the medical humanities complement the basic sciences in the following comment from a recent graduate taking a gap year before entering medical school:

> *The coursework in many of the basic sciences rarely felt relevant in regards to medical education whereas nearly every medical humanities course I took was instantly recognizable as relevant and practical in a medical setting. In addition, the methods of learning for the medical humanities and sciences were drastically different. The basic sciences were almost exclusively memorization and required very little "thinking"…The medical humanities courses were completely different and actively encouraged critical thinking and developing novel ideas and questions. Overall, my exposure to medical humanities courses led me to seek a greater level of understanding and comprehension in my study of sciences. Had my background not been in medical humanities, I likely would have devoted more of my time to strictly memorizing material rather than truly attempting to understand it.*

Notice here the synergistic and complementary effect of the medical humanities with the basic sciences, leading the student to "seek a greater level of understanding" rather than "strictly memorizing material."

The next excerpt is from a student currently in her fourth year of medical school. She characterizes the 'two halves' of her education as fitting together, with medical humanities serving to "animate" the basic sciences:

> *These two "halves" of my education fit together seamlessly. I do not think that I could fully appreciate one without the other for several reasons. First of all, having both provides excellent balance in the type of thinking that we do as students…in a sense, the variety provides a little bit of a safeguard against burnout. On a deeper level, I appreciate both "halves" because of the way the medical humanities animate the basic sciences, and the basic sciences give the medical humanities something to talk about.*

The balance that medical humanities courses provide when set against the basic sciences is a frequent theme in our students' feedback. Nevertheless, for the vast majority of premedical and pre-health professions students, exposure to the liberal arts is often perceived as far less significant than coursework in the basic sciences. If you are reading this article, you likely already know that medical schools welcome applicants with bachelor's degrees in the humanities. Yet this fact is still not widely known among premedical students, even though the American Association of Medical Colleges validates the importance of the humanities alongside the sciences in its 2009 report on the "Scientific Foundations for Future Physicians" which states:

> [T]he undergraduate years are not and should not be aimed only at students preparing for professional school. Instead the undergraduate years should be devoted to creative engagement in the elements of a broad, intellectually expansive liberal arts education. Therefore, the time commitment for achieving required scientific competencies should not be so burdensome that the medical school candidate would be limited to the study of science with little time available to pursue other academically challenging scholarly avenues that are also the foundation of intellectual growth (4).

Baccalaureate studies in medical humanities are therefore completely in line with AAMC recommendations for the preparation of students for professional school. The beauty of medical humanities is that it not only enhances education at the baccalaureate level but also provides a clinically relevant foundation in the humanities upon which subsequent training can be built.

Clinical relevance

Another significant theme in conversations with former students is the relevance of their medical humanities background to the clinical settings they enter later in training. They value the time invested in thinking about patients holistically, in learning about compassionate care, and in considering the significance of interpersonal relationships between patients and practitioners—topics that are not always emphasized later in medical education. In other words, the subject matter of their courses during the premedical years has direct relevance to the clinical setting.

From my own experience as a medical student, I can attest that human beings are deconstructed (literally and figuratively) on the first day of medical school—and are never quite completely reconstructed again. Despite the rise of "person-centered medicine" in healthcare, very little attention is paid anywhere in medical education to the definition of persons (Eric Cassell, emails to author, September 2015). The good news, however, is that the premedical years are the perfect time and place to introduce the primacy of persons—before Day One of medical school. Medical humanities emphasizes the personhood of the patient (and the practitioner, for that matter), serving as ballast for the emphasis that will be placed on pathophysiology for the balance of education and training in healthcare.

The following excerpts illustrate the way in which time spent exploring the personhood of patients is carried from the premedical period into the clinical years:

> *.... a particular disease can change someone's whole life in more ways than one. For example, a person doesn't just get cancer; they have a story that brought them to that point…But no one just gets the disease, they get a whole slew of obstacles: mental health is impacted, relationships with others change, body image changes, the idea of death has to be entertained. Studies in medical humanities allow a student to understand that*

there is much more to treat than the disease itself. A patient's whole life has been impacted…it's going to take more than just a prescription.

People are more than their biology. Only understanding a person's biology does not equip you to care for them. Humanities help teach us how to connect with patients, empathize with patients, and understand why we should strive so hard to take care of our patients.

These comments demonstrate an appreciation for the person of the patient. After all, medicine is now officially person-centered, is it not? References to person-centered medicine are not only ubiquitous in the literature but also in the mission statements and advertising of hospitals and clinics across the country. And yet—where, in the medical school curriculum, is there the opportunity for a substantial conversation about what it means to be a person, or the nature of personhood, or the significance of the personal experience of illness? If medicine is "person-centered," then what could be more relevant to the practice of medicine than learning about the nature of persons? We learn about the nature of persons through the medium of the humanities. We learn about the nature of sick persons through the medium of the medical humanities.

Reflective practice

Reflection is increasingly emphasized throughout the continuum of medical education as a crucial skill to develop as a mature practitioner, both in the service of individual lifelong learning and as a way of improving clinical competence (Hargreaves 2016). Several articles have reviewed the literature on reflection and reflective practice in medical education (Smith 2011, Chaffey et al. 2012). These reviews have detailed such different definitions of "reflection" and "reflective practice" and have highlighted such variability in purposes, methods and outcomes, that generalization about reflection and reflective practice becomes difficult. I find Sandars' (2009) description of reflection to be one of the most accessible, generalizable, and practical definitions in the literature; he describes it as a "metacognitive process that creates a greater understanding of both the self and the situation so that future actions can be informed by this understanding" (685). Although Sandars acknowledges that there "is little research evidence to suggest that reflection improves quality of care," he hastens to emphasize that "the process of care can be enhanced" (694). One of the most compelling statements of the significance of reflection in medical education, despite the lack of convincing objective research that "proves" its effectiveness, is made by Hargreaves (2016), who states that "the process of reflection and reflective competency are powerful for maximizing deep and lifelong learning, and for achieving higher levels of responsive professional practice in a medical career" (1).

The nature of medical humanities courses, which tend to focus on more conceptual work and critical thinking, lend themselves to opportunities for reflection and reflective practices such as group discussion and reflective writing assignments. Initial resistance to assignments that require written reflection is not uncommon in my classes, but students usually make the discovery fairly quickly that they are able to extract much more from their classroom experiences than they realized. Insight into the process and the practice of reflection are particularly valuable for baccalaureate students, since less and less time is arguably available to acquire this skill as the demands of professional training and practice accrue. One of our graduates, now in medical school, captures her experience with reflective writing assignments this way:

In the midst of busy times, a reflection assignment may seem like another thing on the to-do list, but I found that these assignments were some of the most rewarding. Instead of adding yet another item to a long day, it gave a sense of completion to the things I had learned in the classroom and the clinic that week. When I sat down to write, I remembered things that I didn't even know I remembered—things that I did not even realize I had noticed. I began to connect these things to the other things I had learned in various settings, which further solidified these experiences and lessons in my memory. And even when these things fade from the forefront of my mind, having these written reflections makes it easy to remind myself of the truths that I have learned in my experiences and connect them with the lessons I learn years down the road. PS- Even writing this short reflection reinforced how much I want to continue to write about the things I learn in medical school and beyond!

In the next excerpt, a student describes different styles of reflective practice (journaling and drawing) and the benefits reflection has in terms of critical thinking:

As fast-paced as life is…it is oftentimes difficult to make time for reflection. By learning multiple avenues for self-reflection including journaling or drawing, students learn both the value and ease by which they can incorporate personal reflection in their day-to-day lives. Personally, the medical humanities focus on critical thinking has helped me enormously, mostly by encouraging me to slow down and think. When one is faced with a large amount of new information to process, oftentimes the tendency is to skim over it, taking in as much general, albeit superficial, information as possible. By slowing down and becoming aware of one's assumptions, one is able to approach new information from a different level and not only process and retain more information, but also develop more accurate conclusions.

The ability to engage in reflection—whether that reflection is a source of previously unexplored insight; a means of connecting learning in the past, present and future; a way of slowing down and thinking more deeply; or as a strategy for self-care—is an important aptitude in medical education and practice. Medical humanities coursework is rich with opportunities to encourage reflective practices, skills that can continue to be cultivated in advanced levels of training and practice.

Professional preparedness

Professional preparedness is another dimension that is being influenced by baccalaureate-level medical humanities. I have chosen to use the term professional preparedness to describe the way in which medical humanities seems to facilitate readiness for the next step in medical training. I have rejected the phrase "professional development" because this is often used in connection with continuing medical education and career advancement. Several of our medical humanities courses are taught by clinicians who—by virtue of their appointment to our faculty—obviously hold the humanities in high esteem. The following excerpts from recent alumni support the notion that their background in medical humanities with clinician guidance accelerated their preparation for professional training:

My interactions with physicians through the Medical Humanities Program have given me confidence as I prepare for medical school. I not only feel more confident about my vocation to medicine, but also about interacting with doctors in the future… I know the kinds of questions I want to ask them because I have seen some of the things they face

every day. I feel more comfortable in the healthcare setting because I have had the privilege of learning from physicians.

One of the parts of a medical humanities education that contributed most to [my readiness for medical school] was the presence of clinicians as teachers and guest speakers. This constant interaction with clinicians gave me a more realistic idea of what daily life as a medical professional in several specializations looks like…

Lectures, readings and class activities cannot but be vividly colored by the experiences these faculty bring from the bedside. We also see indications that our students have a better understanding of the profession, more realistic expectations about the rigors of training and practice, and a greater awareness of the hazards of the profession:

You cannot truly understand the weight of caring for someone unless you have experienced it. This experiential knowledge allows clinicians to help prepare future healthcare professionals for the emotional and academic challenges they will face.

The following excerpts imply that readings and discussions in medical humanities classes helped students to prepare for the possibility of burnout and even to protect themselves from it:

The work I currently do leaves me and the members of my organization mentally and emotionally exhausted at times. It's not uncommon to feel like we're beating our head against a brick wall. However, my medical humanities experience has given me solid footing to stay the course. I've found myself returning to many of the literary works we explored in our coursework for guidance and inspiration.

Burnout is a scary and ever-present reality. Unless you actively equip yourself to combat the causes and manifestations of burnout, medical school becomes a daunting task. I have watched my classmates struggle with their emotional and mental health because they didn't have the tools to cope with the stress. Having awareness of the danger and tools to safeguard yourself from burnout is something I learned in my time as a medical humanities student at Baylor before I started medical school and has made the experience more enriching, rewarding, and joyful.

Both the sense of preparation for entering professional training and having realistic expectations about the demands of professional training, together with having been equipped with strategies for grounding and self-care are frequent topics in feedback from our graduates.

Vocational calling

Medicine at its best has about it the sense of vocation. Although the word ‘vocation’ today often is used synonymously with ‘profession’ or ‘career,’ vocation originally had the connotation of a sacred call or summons (Astrow 2013). This notion of medicine as a sacred summons bears recovering, and it is in that spirit that we explore vocation with our students. We find our students eager to discuss matters of spirituality and to find ways in which to integrate their faith, service, and learning.

Our program draws not only upon our Christian heritage—in which many aspects of healthcare have historical roots—but also upon the Hippocratic tradition and the sacred role of the healer in antiquity. Several of our medical humanities course offerings (such as Christian Spirituality and Healthcare; Healers and Healing; and electives like World Religions offered

through the Religion Department) explicitly incorporate religious themes. However, any course dealing with illness by definition will deal with spiritual themes because:

> Illness is a spiritual event. Illness grasps persons by the soul as well as by the body and disturbs both. Illness ineluctably raises troubling questions of a transcendent nature—questions about meaning, value, and relationship. These questions are spiritual. How health care professionals answer these questions for themselves will affect the way they help their patients struggle with these questions. (Sulmasy 2006, 17)

The role of spirituality in medicine is no longer taboo. It is now increasingly likely that medical students will be taught to incorporate a patient's spiritual history into their history and physical exam. If we accept the notion of illness as "a spiritual event," then it is only reasonable for medical humanities programs to offer coursework that addresses spiritual or religious themes. And if illness is a spiritual event for patients, then, by extension, the role of healthcare professionals can be considered in spiritual dimensions as well. This is where the concept of medicine as vocation comes in. The following excerpts illustrate ways in which our students construe their work in medicine as a vocation—in other words, as possessing an inherent spiritual quality:

> *The expanded view of the medical humanities allows one to think introspectively in order to discover why medicine matters to him/her and prepare for the level of sacrifice required to be a clinician.*

> *The service we provide to others comes from the heart, and my medical humanities background gave me the tools to cultivate that. Having a sense of calling to the work I do and will do in the future connects me to my service in a way that benefits both me and the people whom I serve.*

> *My classes in medical humanities have affirmed that medicine is a vocation because of the spiritual nature of the work of healing fellow humans…This understanding of vocation informs why we do what we do and gives future healthcare professionals a deeper reason for their work than money or a certain lifestyle.*

A sense of vocational call to medicine is a very personal and individual matter and not one that is generalizable to all students, but we find that students for the most part seem eager to discuss the spiritual dimension of healthcare. Medical humanities classes provide many opportunities for an ongoing exploration of the healthcare professions as an expression of vocation. This may take the form of readings, of reflective assignments, of class discussion, of mentoring and role modeling—or it may occur in extracurricular settings. For example, our program sponsors an annual retreat for current students in which the focus is on the spiritual nature of medicine and the concept of medicine as not just a career but also a vocational calling. The fact that every year we attract more and more alumni to the retreat from surrounding medical schools further underscores this observation.

How do we measure the impace?

I have listed five themes based on my personal and professional experiences together with formal and informal interactions with medical humanities students at Baylor. To reiterate, these themes are: context and complementarity, clinical relevance, reflective practice, professional preparedness and vocational calling. I believe that medical humanities studies are unique in

their capacity to influence this cluster of categories—as opposed to humanities courses without medical themes—because of their direct bearing on caring for and communicating with persons in medical environments.

But how do we go about measuring the impact? What sorts of studies do we need and how should they be designed? In broad strokes, Sharan B. Merriam describes quantitative research as having goals that are aimed at prediction and control and design characteristics that are predetermined and structured. They use large and random samples; inanimate instruments for data collection; and deductive and statistical modes of analysis. Quantitative research generates findings that are rendered in precise and numerical terms. On the other hand, qualitative research has goals that are directed at understanding, description, discovery, and meaning; design characteristics that are flexible, evolving, and emergent; sample populations that are small, nonrandom, and purposeful. Data collection uses interviews, observations, and documents with the researcher as the primary instrument; induction is the primary mode of analysis. Finally, qualitative analysis generates findings that are comprehensive, holistic, expansive, and richly descriptive (Merriam 2009). We are in need of findings from both quantitative and qualitative studies.

Quantitative studies might compare students with medical humanities backgrounds to students with majors in the basic sciences on a variety of parameters such as academic achievement, performance during the clinical years and patient outcomes and patterns in patient perceptions. Other possibilities include tracking subsequent choice of medical specialties, practice settings, and career satisfaction, among many other possible parameters. Obviously, such studies would require close cooperation between faculty working in both baccalaureate programs and medical centers.

But we want to know about more than mere numbers for a given parameter. We also want to know about consequences that are complex, nuanced, and not easily quantifiable. In reviewing the respective properties of qualitative and quantitative modes of research, qualitative methods are more consistent with the intrinsically "flexible, evolving, and emergent" character of medical humanities. And if, as Brené Brown (2010), a qualitative researcher in the field of social work, suggests, "stories are data with a soul," then there are massive stores of data already available to mine in the form of the lived experiences of our students and alumni.

When thinking about the complexities of measuring the impact of medical humanities and the challenges of qualitative research, the axiom "not everything that matters can be measured and not everything that can be measured matters" comes to mind. But it is time to try. As a field we must develop methods for measuring the impact of medical humanities for baccalaureate students. If it is true that a baccalaureate background in medical humanities has advantages for both aspiring practitioners and their patients—we need to know how and why. If there are disadvantages, then the proliferating number of medical humanities programs at universities across the country need to redirect their energy and effort. These questions are important enough to merit collaboration between multiple centers of investigation across many disciplines and across the divide between premedical and medical educators. It is my hope that this essay incites the interest of our colleagues in the social sciences and humanities in both pre-professional and professional settings to collaborate on designing and carrying out meaningful impact studies.

Conclusions

Something special is happening here. We are at a momentous point of change in traditional pre-medical education. What is drawing so many premedical students to the medical

humanities, and why is there such a demand? Taken as a whole, medical humanities can create a vision of medicine at its noblest. I believe this vision is helping to nurture and sustain our graduates in their subsequent training and as they transition into practice. My impression as a clinician is that students with a background in medical humanities have a better understanding of the ways in which the humanities and the sciences complement one another; that their background in medical humanities has direct relevance to their clinical experiences; that they are better equipped with reflective practices; that they are more advanced in terms of preparedness for the professional realm; and that medical humanities has helped to shape their understanding of medicine not just as a career but also as a vocational calling.

In an increasingly fragmented and specialized world, medical humanities represent a welcome and much-needed point of convergence. Why does training in medical humanities matter for pre-health professions students? Because the medical humanities provides our university students an earlier foundation for deep engagement with the human side of health upon which further medical training is built. This stands in contrast to the implementation of medical humanities at more advanced levels of training as coursework that is perceived by harried medical students as elective, optional, or appended to an already overwhelming curriculum.

The idea that medical education begins on the first day of medical school is outdated. We desperately need more collaboration between medical and premedical educators. These are not, after all, separate spheres. Those of us who have been through medical training almost always experience these as parts of a whole—as a contiguous curriculum. And so the fact that there is such separation and so little dialogue between medical educators and those of us involved in pre-medical and pre-health education still comes as a surprise. Grant funds designated for supporting collaboration between medical and premedical educators would facilitate these connections, as would the recognition in the realm of academic medicine (in terms of professional organizations and scholarly journals) that some of the pressures in the curriculum at the graduate level might be alleviated by looking to the baccalaureate years as an opportunity for getting a head start on at least some of the aims and goals of professional training.

Collaboration and improved communication between medical schools and universities could mean much more responsive adjustments in curriculum, more efficient transmission of information between our institutions, more opportunities for collaborative research and scholarly endeavors, less waste and repetition in the curriculum, and the opportunity to leverage our medical humanities resources together for even greater impact.

I have attempted in this essay to lay out five separate but related domains in which medical humanities at the baccalaureate level is favorably influencing graduates as they progress in their medical education. I've offered specific examples in the form of student narratives that illustrate the influence of premedical humanities in the categories of context and complementarity, clinical relevance, reflective practice, professional preparedness and vocational calling. Each of these areas of impact has its own significance; but I believe it is their convergence that is bringing about substantial change. A tremendous amount of medical education is happening before students reach medical school and it is happening through the medium of medical humanities. The baccalaureate years are wonderfully rich and ripe, and too long overlooked in terms of their potential to shape the kinds of caregivers we want for patients, for friends, for our families, and for ourselves.

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