#### ROLE OF ARTS AND HUMANITIES IN MEDICAL EDUCATION

Ankita Agrawal, Krishna Kumar Agrawaal

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## **ABSTRACT**

The integration of arts and humanities in medical education fosters emotional intelligence, critical thinking, and a patient-centered approach, essential for modern healthcare. Historically, medical training emphasized scientific rigor, leading to a detachment from humanistic aspects. The medical humanities movement, led by figures like Dr. Edmund Pellegrino, sought to reinstate compassion and ethical reflection in medicine. Today, medical schools incorporate humanities disciplines such as philosophy, literature, and visual arts to enhance observation skills, empathy, and communication. Studies demonstrate that humanities exposure improves diagnostic accuracy, physician-patient relationships, and clinical reasoning. However, challenges include curriculum overload, skepticism regarding relevance, and assessment difficulties. Future directions call for embedding humanities within core curricula, developing standardized evaluation tools, and fostering interdisciplinary collaboration. Strengthening humanities in medical education will cultivate well-rounded physicians capable of addressing the complex emotional and ethical dimensions of healthcare, ultimately improving patient outcomes and professional well-being.

## **KEYWORDS**

Arts, Humanities, Medical education

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#### INTRODUCTION

Art is defined "as the expression or application of human creative skill and imagination through various forms' whereas Humanities is an academic discipline that deals human culture, experience, and expression, encompassing fields such as literature, philosophy, history, art, music, and languages, with a focus on critical thinking, interpretation, and understanding the human condition.1 In the last decade, medical science has witnessed significant transformation in health care delivery, marked health disparities, civil war, unprecedented rates of physician burnout and suicide, and unforeseen public health crises in the form of covid pandemic. Physicians must be adaptive lifelong learners who can effectively respond to these challenges. Now more than ever, physicians must learn to interweave their developing scientific knowledge with emotional intelligence, critical thinking skills, and an understanding of social context. In this era of increasingly narrow specialization, higher education must intentionally develop models that integrate the arts and humanities with the sciences to meet the challenges and opportunities of the 21st century. Integration of the arts and humanities into medicine and medical education may be essential to educating a physician workforce that can effectively contribute to optimal health care outcomes for patients and communities.<sup>2</sup> The art of medicine includes attending to feelings, extending our cognitive models of the way people think and behave, and incorporating patient preferences. It sometimes involves the difficult moral choice to detach from or engage with suffering. The principle of distributive justice requires the fair allocation of not only physical but emotional resources, in order to provide 'the greatest good for the greatest number'. The most difficult task for the physician is how much to harden their hearts to achieve the best outcome for each patient and all the patients that follow. To continue to serve humanity, physicians must be detached enough to 'do what has to be done' while still demonstrating the unconditional positive regard patients need to endure their suffering. This means choosing to provide quality, person centered care, no matter what you feel at the time.<sup>3</sup>

#### **Evolution of humanities in medical training**

Medical humanities have been practiced long ago. A famous saying "Wherever the art of medicine is loved, there is also a love of humanity" by Hippocrates, father of medicine, is almost found in every textbook of medicine.<sup>2</sup> Hippocratic oath originally was to dedicated to Apollo, the Greek god, who is the god of healing and diseases, music and poetry, truth and prophecy. The current framework of medical education was laid by influential Abraham Flexner. In his famous Flexner report in 1910, which was supported by the American Medical Association in conjunction with the Carnegie and Rockefeller Foundation. In developing his agenda, Flexner sought to emulate the German system of medical education that had seen reform in latter part of the nineteenth century and that had given rise to research laboratories and the notion of the physician as experimentalist. This view was opposed by Sir William Osler, the father of modern medicine. Drawing on this, in his 1919 address to the classical association on the old humanities and the new science just prior to his death, he woefully lamented the "unhappy divorce" between science and the humanities, which had caused "young men ... applying themselves early to research ... [to] get into backwaters far from the mainstream". 4,5 However, Flexner

report served to be the base of American Medical education. Physician paternalism ran rampant, and the doctor became regarded by the public as largely "robot" and forgetting that people they treat are human beings". This ultimately gave rise to the development of patient rights advocacy, representing a response to ethical missteps among doctors, both in the United States and abroad. By 1960s, mistrust was developed among public on physicians and doctor's trials of world war II became public. Discussions centered on reinfusing humanism into the medical profession during this time period. At the helm of what came to be known as the medical humanities movement was Dr. Edmund Pellegrino who recognized the importance of re-instilling into the medical world what Osler had feared all too well would be lost with the implementation of the Flexner report at the turn of the twentieth century.<sup>4</sup> It is important to note that the first definitive textbook in the medical humanities, which provides one possible framework through which to examine medical history, philosophy, and the like, was only published in 2014.6-8

## Current integration of humanities in medical education

Medical schools throughout the world have integrated the study of the humanities in their undergraduate curricula through disciplines such as philosophy, ethics, literature, theater, and the arts. Concurrently, there is a strong tendency in medical education to insist that any learning activity should contribute to the students' development of concrete and measurable competencies, whether skills, knowledge, or attitudes. This tendency in medical education is in line with the general focus on outcomes-based education that has been advanced in medical education in the United States, Canada, and Europe. 9 There are existing novel models that measure impact in the realm of the arts, most notably that of the coursework offered through a collaboration between Brigham and Women's Hospital and the Museum of Fine Arts, Boston, in which the observation skills of resident physicians in the exam room were shown to markedly improve pre- and post-exposure to a program on the study of Renaissance portraits, but there is a paucity of literature overall on such interventions.4 Arts and humanities as a teaching modality ranges from using visual art to teach observation skills to using literature to promote perspective taking. A diverse scholarly community has formed around this effort, and a national initiative is underway in the United States to support consistent, effective uptake of arts and humanities-based approaches along the continuum of medical education however evidence is lacking to support the use of these disciplines in medical training.<sup>10</sup>

## Impact on medical professionals through integration of medical humanities

Studies have demonstrated that exposure humanities-based curricula fosters a more patient-centered approach, improving both clinical decision-making and physician-patient interactions. Empathy is a crucial attribute for medical practitioners, as it enables them to understand patients' emotions and experiences. Research has shown that engagement with literature and visual arts helps medical emotional students develop better insight perspective-taking. A study by Charon et al in 2001 on narrative medicine demonstrated that reflective writing exercises led to improved empathetic responses among students, fostering deeper patient connections. 11 Effective communication is fundamental to patient care, reducing medical errors and improving health outcomes. Role-playing

and arts-based training have been linked to better verbal and non-verbal communication. Rider and Keefer emphasized that structured communication training through the humanities significantly enhances medical students' ability to engage with patients and colleagues, improving trust and rapport. The study of arts and humanities encourages analytical thinking and cognitive flexibility, both essential for clinical reasoning. Exposure to visual arts has been shown to improve observational skills and diagnostic accuracy. Dolev et al. found that training in fine art interpretation significantly enhanced pattern recognition and critical analysis in medical students, leading to better clinical judgment. 13

# Challenges and criticisms: Limitations or barriers to integration of medical humanities in medical education

The integration of medical humanities into medical education faces several challenges, including curriculum overload, skepticism, and assessment difficulties. Given the already demanding nature of medical training, students and faculty often struggle to accommodate humanities courses. Additionally, the subjective nature of humanities-based learning complicates the development of standardized assessment tools, making it difficult to measure its impact on medical competence. Skepticism regarding the clinical relevance of humanities further hinders its adoption. Many educators and students prioritize evidence-based medicine and technical skills, perceiving humanities as secondary to medical training. Limited faculty expertise and institutional resources also present barriers to effective implementation. Overcoming these challenges requires institutional commitment, interdisciplinary collaboration, and innovative assessment strategies.1

## **Future directions**

To strengthen the integration of medical humanities in medical education, institutions should embed humanities within the core curriculum rather than offering them as electives. This would ensure consistent exposure and reinforce their importance in shaping well-rounded Developing structured, evidence-based assessment tools can help measure the impact of humanities education on clinical practice and professional development. Additionally, fostering interdisciplinary collaboration between medical and humanities faculty will enhance the quality and depth of instruction. Institutions should also allocate dedicated resources and funding to sustain humanities programs and encourage faculty training in this area. Lastly, integrating humanities-based reflective practices into clinical training can help bridge the gap between theory and practice, ensuring that students develop essential skills such as empathy, communication, and critical thinking.15

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