

Art-Based Learning: Can Art Improve Learning of Medical Students?

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The arts and humanities have been used more frequently in medical education over the last 30 years as a teaching modality [1]. Arts-based teaching approaches have a significant impact on medical education [2]. Today, the art and medical sciences have complimentary interactions with each other, as medical schools incorporate arts-based activities into their curricula [3]. These techniques have a wide range of educational goals, from more practical applications like improving theoretical bases to encouraging contemplation on the nature of medicine and the experience of illness. However, there are many different methods to use art, from studying artworks in museums to having students create their own art [4].

The roles that the humanities may play in the education of health professionals are replicated in the functions of art in medical education, which promotes an investigation of the existential, experiential, and profoundly human aspects of medicine while forming a moral perspective on the field and its practices. These remarks are based on the idea that people form their own professional and personal identities through their interactions with other people and the outside world. As a result, knowing how creative art and the humanities affect medical students may add to the expanding body of research on how physicians develop their professional identities [4]. Additionally, participating in artistic subjects is suggested as a useful means for medical students to learn about those facets of medicine that cannot be reduced to objective processes and scientific phenomena, which some authors have referred to as representing the “art of medicine” [2].

There seem to be two basic theoretical mechanisms by which the arts can support medical students’ promotion as physicians, and these mechanisms underpin the use of the arts in medical education. First, studying the arts can offer students a direct “simulation” of the broader life experience required for responsible engagement with other people, an opportunity that they might not otherwise

get. Second, being actively involved in the artistic process can assist students in exploring their feelings, challenging them, and developing new ways of thinking [5]. Since art involvement has been associated with resilience and positive outcomes for mental health, developing medical students’ art practices has the potential to prevent mental disorders, which are a major risk for physicians and young medical students [3].

As a depiction of reality, art can work as a “mirror” for the observer, allowing them to comprehend emotions, gain insight into various activities, and derive meaning from their own experiences. The arts, which are inherently subjective and metaphorical, serve as a medium through which educators can discuss difficult and ambiguous subjects. They also encourage medical students to integrate the combination of physical features, emotions, and history that shape human perception. Art, as experience, has frequently guided pedagogical studies to be used as a tool to develop creative educational methods [6, 7]. Due to these special characteristics, art can help medical students grow personally. Additionally, when medical students create original artwork, they can share emotions, thoughts, and experiences that they have acquired from working with families who have chronic conditions [4]. An artwork can serve as a useful tool for comprehending the complexities of human nature. Particularly, it has been demonstrated that medical students benefit from classes that focus on the observation of art in terms of their ability to communicate meaning and become more aware of emotions and their role in medicine [7].

The art of observation is one of the art methods that was created with multiple goals in mind. The first was imparting to the students pertinent clinical skills, such as the ability to observe, interpret, and communicate visual information. The second goal was to promote self-reflection and a humanistic perspective on medicine. The ultimate goal was to provide students chances to collaborate in groups and experience a range of viewpoints [6]. Due to multiple intelligences useful for cognitive growth, namely the visual-spatial

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one, close study of a piece of art activates, almost instinctively, multiple reasoning capable of attaining logical and analytical solutions in medical education [7].

On the other hand, using art in medical education has many advantages, including: Reducing the risk of burnout and stress [7], Communicating more effectively, improving self confidence, improving clinical competencies, increasing group work [2], and more detailed observation [1]. Given the qualities and advantages of art in medical education, it would appear that this approach can support the high standards of medical science teaching and learning. What are the restrictions and challenges surrounding the use of art in the medical education system, though, is the main question. The first obstacle in applying art in medical education is that most medical school courses have not been subjected to pre- and post-test evaluation; so, we cannot limit students' learning to the use of art [8]. Further obstacles to the implementation of arts-based humanities programs in medicine could include cost, time, level of interest or access to the arts [9]. Despite this aspect, applying art in medical education seems valuable and increases the accuracy, empathy and development of skills relevant to students' clinical practice. However some authors are worried that physicians who are more empathic run a higher risk of burnout since they tend to adopt professional detachment as a self-preservation strategy [2].

Finally, it can be concluded that although the benefits of art in medical education encourage us to apply it in our medical educational system, its constraints, and challenges in the medical education system make it difficult to use this method. Therefore, it is strongly recommended to incline the studies toward the increase of the knowledge of the learner about art in medical education, train them and eliminate obstacles and limitations to apply art in medical education in the medical educational system, as soon as possible (Figure 1).

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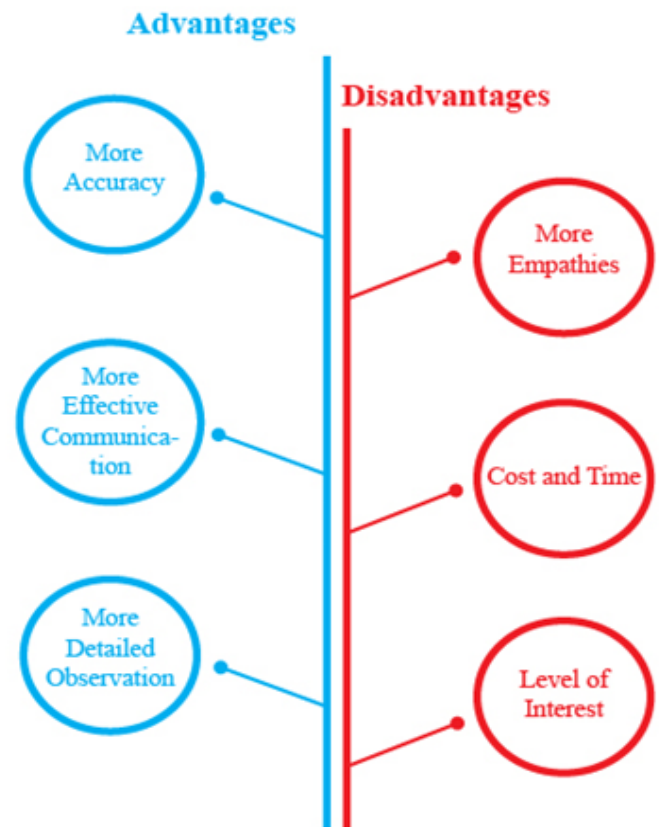


Figure 1. Advantages and disadvantages of art-based learning in medical education