Pros and Cons of Online Medical Education

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Editorial

The exponentially rising rate of people embracing modern methods of learning, such as online education, represents the information and communication technology revolution at the dawn of the 21st century. As a result of the COVID-19 pandemic, many people are looking to introduce online learning so that anyone can continue their education while discontinuing the virus's chain of transmission. In light of current circumstances, universities and colleges have started rapidly redrafting their curriculum to accommodate online-based framework protocols. Scholars and educationists are adapting to this modern pedagogical approach, and some are entirely embracing the opportunities the virtual world provides, but there are still other people who cannot recognize and embrace this new way of teaching and learning. Medical science is an area where new developments and advances occur from time to time, contributing to the potential of advancement in healthcare information and technology. It is clear from these facts that the medical colleges must reconsider their preparation and teaching methods because regardless of specialization, all medical students will have to deal with an increased amount of biomedical and clinical records. While technological advancements have changed the manner of knowledge, do existing digital resources possess sufficiently advanced tools to meet medical education and learning demands. Online learning can be described as "learning that takes place partially or entirely over the Internet." A new educational model known as e-learning, or web-based learning, has evolved in the last decade. This model has resulted in a radically different way of learning in which medical students have access to more instructional resources, including lesson plans and practice questions, when they are needed anywhere and at any time. Students don't have to cart around heavy sets of books. Instead, they may use smartphones, tablets, or computers to view and update e-books or e-notes. In this way, reducing the pressure of students and helping them keep the costs of

textbooks under control is possible. Students who use online learning benefit from the ability to view lectures other than those which take place in the classroom, such as lectures on an entirely different topic. Also, with this forum, academic medical experts have an opportunity to connect and learn directly from the experts in their respective fields by taking advantage of the online video lectures, applications, courses, webinars, conferences, and so on, that are accessible from all over the world.

The Internet has made it possible to obtain an extraordinary amount of material, which is still being fully reworked and revised according to current medical practices and standards. This also helps all learners have a similar authentic source of knowledge, which guarantees the universality of information is accessible for all, even in situations where only a handful of people suffer from or have a disease from a distant area. Enabling students to use various teaching aids and multimedia resources such as demonstrations, case discussions, simulated patients, tutorials, animations, and projects increases the usefulness of online courses by increasing the range of subjects that can be discussed. E-notes, which are readily accessible, allow students to pay full attention to understanding the topic taught in class, making it easier for them to concentrate on the learning, and then to later add new knowledge and collect notes for later use. Additionally, this approach is intended to promote students' active engagement and discussion on various subjects and case studies discussed in class. Both medical college students and faculty acknowledge that online learning resources' adoption has helped promote student-centeredness and self-directed learning during this lockdown situation. Online courses alleviate the burden on medical personnel by freeing them up to do double duty as teachers while still helping compensate for the lack of staff, such as teachers, instructors, and lab technicians. Students

see online classes as being particularly useful because they are both affordable and time-saving, and this helps make up for problems that might arise, such as being sick or not being able to attend in person. Besides encouraging students to learn from the comfort of their own homes, online learning has also led to social distancing. This is especially important in curbing the spread of infectious diseases like COVID-19.

There are two sides of the 'positive' and 'creative' online learning approaches, one of which is not entirely altruistic or beneficial. Students are at a disadvantage when it comes to learning appropriate and up-to-date functional and clinical skills needed to become a professional clinician. Students have to go through clinical discussion to gain knowledge of surgical and clinical methods of treating patients. When it is difficult for teachers to communicate with their students, classroom engagement decreases due to poor internet access. Meanwhile, poor internet connection makes it hard for students to concentrate in class. Ease of inquiry is critical for learners interested in a medical profession, as most questions and concerns must be cleared before they can adequately grasp any idea. Online lectures help a bit in this regard, but many students simply forget their questions, while others find it difficult to answer them via phone or email. Being tied down to classes from the early morning till the late evening is restricting how much interaction teachers have with their students and irritating to the students, who are eager to communicate with their teachers. While in the traditional or offline medical classrooms, there is a lot of direct contact, emotional attachment, social interaction, and cooperation, all of which help to create a good student-teacher relationship, and the student is often under the intense scrutiny of the teacher, which leads to the student behaving more honestly and paying closer attention. Additionally, faculty members mentioned that due to the lack of immediate feedback, teachers have trouble gauging the students' comprehension level during online lectures, and students on the other hand find their attention span and resource-intensive nature of online learning make it difficult for them to avoid spending time on social media sites such as Whats App, Facebook, and Instagram. An introvert learning style will adversely impact introverted students' overall growth, as they would have fewer opportunities for interaction and could easily hide behind their cameras. Some teachers have reported that students have misbehaved during online classes and attempted to access online resources during evaluations. As medical institutions are expected to maintain high-quality medical education standards, it becomes difficult for them to obtain honest and immediate reviews and feedback from students due to the lack of a proper surveillance system. The faculty and students must be given sufficient training and guidance when it comes to using various technological tools and devices because the personalization of online learning and the ability to utilize the technology entirely depends on each individual's ability to put the technological device to its maximum use.

A holistic approach to learning in medical education, using combined teaching and learning, is the best way to get around the pedagogical disadvantages of both learning types. With respect to the base knowledge and skills that are crucial to be given in conventional classrooms, there is a communication-based, engaging and insightful way in which the learner gains this knowledge and skills, while on the other hand, there is a way in which the learner self-paced and versatile learning method where there are no constraints placed on time and place. The online approach will help students stay on top of the latest trends in the healthcare system while at the same time teaching them essential practical and clinical skills. It is also an effective teaching tool, since it empowers scholars by offering novel techniques, which can be realized by online learning, making it an effective method of instruction. However, this method's inherent shortcomings prohibit it from being used as the sole teaching technique in medical education. The integrated teaching–learning methodology accommodates all students' differing capacities; it empowers students to understand the maximum usefulness of both methods.

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