

Letter to the Editor



Is the medical education ready for a new pandemic?

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Dear Editor,

The world has faced unpredicted challenges in the past few decades, with epidemics and pandemics posing significant threats to global health security. From SARS to Ebola, and more recently, the COVID-19 pandemic, these events have exposed the vulnerabilities within our healthcare systems, particularly in the preparedness and adaptability of medical education. Until now, the highest level of reported cases of Dengue virus was reported in 2023. Based on WHO's estimate, about 50% of the world's population is at risk of dengue fever with 100–400 million infections occurring each year.¹ The COVID-19 pandemic profoundly impacted medical education, necessitating rapid adaptation to remote learning and digital platforms. This shift revealed both strengths and weaknesses in our educational infrastructure. While digital tools facilitated continued learning, gaps in accessibility, interactivity, and practical training became evident. These lessons are invaluable as we prepare for potential dengue outbreaks. After COVID-19 the focus on distant learning methods downregulated. We aimed to use this period and highlight this disease to show the impact of the need to progress in electronic and distance medical education which may empower the educational system to face probable epidemics.

Medical education has traditionally used in-person learning. While effective in many ways, this approach was severely disrupted during the COVID-19 pandemic, forcing educational institutions to change towards online learning and telemedicine. This shift, although steep, demonstrated the potential of digital tools in maintaining the continuity of medical education. However, as the pandemic declines, there is a noticeable regression toward pre-pandemic norms, with many institutions scaling back on online education and telemedicine initiatives. The reduction in distance medical education is concerning.

Firstly, it ignores the valuable lessons learned during the pandemic about the flexibility and accessibility of online learning. Distance education allows for greater inclusivity, enabling students from various geographical locations and socio-economic backgrounds to access quality education. Additionally, it provides opportunities for interdisciplinary learning and collaboration, which are essential in addressing complex health challenges like epidemics. Likewise, the downregulation of telemedicine is a missed opportunity to maintain healthcare systems' strength against future epidemics. Telemedicine proved invaluable during the COVID-19 pandemic, reducing the burden on healthcare facilities and enabling patients to receive care without the risk of exposure to infectious diseases. However, with the lifting of pandemic-related restrictions, many healthcare providers have reverted to traditional in-person consultations, often citing concerns about the quality of care and the lack of adequate reimbursement for telemedicine services.²

To ensure that medical education is prepared for future epidemics, we need to take some actions. First, we should sustain integrating distance education and telemedicine into medical curricula. This integration should be established as a brief solution during pandemics, which we are prepared for any pandemics, including using online platforms. Online platforms can deliver lectures, facilitate discussions, and make assessments; however, telemedicine can be integrated into clinical training to familiarize students with remote management. In addition, due to upgrading the curriculums, there is a need to focus on emerging infectious diseases with epidemic potential. This shift in curriculums requires a visionary approach in which curriculums must be regularly reviewed and updated to reflect the latest developments in infectious disease epidemiology. Another crucial aspect is interdisciplinary education, which is a way to prepare

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for the epidemic. Due to this, medical education should facilitate interdisciplinary learning, allowing students to collaborate with peers in peer learning from other related fields. Furthermore, there is a need to develop digital literacy among medical students. Previously, in the COVID-19 era, impaired using telemedicine indicated a gap in the digital skills of healthcare providers and patients. To resolve this problem, medical schools should incorporate new digital methods, technologies, data management, and digital communication training in their curriculums which the first way is integration in curriculum. This will ensure that future healthcare providers are well-equipped to use digital tools effectively in daily actions and crises. Finally, policymakers and healthcare institutions for enhancing healthcare stability must determine education before exposure to complex situations. This includes establishing clear guidelines for telemedicine, ensuring acceptable restitution, and addressing concerns about data security and patient privacy.

Medical education must evolve to meet the directions of a rapidly changing world. The question is not just whether we are ready for the next epidemic or not, but whether we are willing to make the necessary changes to ensure that we are. The time to act is now, before the next epidemic

sit-downs.

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