

Editorial

Post-Covid Medical Education

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The Covid-19 pandemic has disrupted medical education and healthcare systems worldwide. Unlike other areas of education, medical education has to be continued to produce future doctors to fight the pandemic itself. So there has been a significant challenge for both medical educators and students. There has been a transformation in medical education in this unprecedented time, which is likely to persist post-Covid.¹ The pandemic has highlighted a need to critically reflect and make appropriate decisions about the future of medical education, dwelling upon how, what, and when to teach. In addition, the pandemic has stressed an opportunity for global academic collaboration.

How do we teach?

The pandemic has posed practical and logistical challenges and concerns for the safety of patients and treating doctors. In addition, physical distancing, the essential preventative measure, does not permit students from gathering. As a result, innovative technologies like artificial intelligence for adaptive learning and virtual reality have been used to maintain teaching and learning. Medical institutions shifted basic sciences, health systems sciences, and behavioural sciences teaching to online formats. The use of remote learning has brought both challenges and opportunities.¹

The online learning systems improve flexibility, student engagement, geographical accessibility, and synchronous/asynchronous learning and assessment. There is a global opportunity for the collaboration of medical educators to create, share, and curate learning content freely. The use of emergent technology for education will be essential components of the transformative change and the future of medical education.²

Challenges of online teaching are inadequate infrastructure and resources, poor computer skills of faculty and students, the psychological impact of the transition from on-campus medical school settings to home environments, and the limited mentoring relationship between faculty and students. Another challenge is that an unsupervised online

assessment may encourage students towards academic misconduct or dishonesty, i.e., plagiarism and cheating.²

Clinical teaching distinguishes medical education from other scientific fields. A significant challenge for online teaching is providing authentic patient experiences, a critical component of medical education, to our students. Replicating the understanding of clinical encounters for medical students under these circumstances is essential.

The interaction with the patient teaches clinical reasoning; the patient could be real, simulated or virtual. It is time to adopt realistic virtual patient encounters to improve clinical decision-making abilities. Virtual healthcare simulation testing and educational program will prepare medical students for the realities of hands-on patient care, which could be followed by the hands-on experience provided in a safe environment reducing the contact time. England's health education systems and Oxford University Hospitals use virtual simulation-based undergraduate and postgraduate medical education tools.³ There has been positive feedback from students about online learning during Covid-19. A Chinese medical school implemented online problem-based learning techniques to complete the curricula; these methods proved incredibly popular to the extent that they were applied in subsequent years.⁴

It is time to assess the usability of online learning methods and determine their feasibility and adequacy for medical students. There are some cautions. Online learning requires resources and careful planning. Moreover, it requires a considerable change in the mindset of the students and faculty to play new roles in the educational process. Online learning requires lots of motivation and attention. *You have to learn to talk in a void.*

Covid-19 is going to change forever the way we train our doctors. Hopefully, the online training and virtual clinical experience will provide reasonable solutions. Overall, an integrated approach that combines technology elements and face-to-face teaching and learning experiences is likely to characterise the future scenario.

What do we teach?

The pandemic has exposed the weaknesses in the medical education curriculum. The curriculum needs to incorporate determinants of health (behavioural, social, and environmental factors) adequately besides the "bioscientific model of health". It should also include "surveillance for disease, investment in disease and injury prevention, and disaster planning" as core components. The pandemic has highlighted that the medical curriculum should have fundamental changes to prepare our doctors for the next emergency. There is a need to emphasise public health and preventative medicine and the social determinants of health.⁵

When do we teach?

During pandemics or disasters, shortage of healthcare workers is possible. The clinically prepared medical students may serve as a potential and rapidly deployable reserve to augment them. During Covid-19 pandemic, medical students have contributed in many ways to care for patients and communities. Being a volunteer, educator to peers, patients, and communities, or to support the healthcare staff under supervision, our students must be better prepared to assume a meaningful and supportive role.

Therefore, from the start of their training, medical students should learn basic medical practices like approaching common emergencies, communication, and counselling skills. Then, when needed, our medical students will be ready to provide respite and aid to overwhelmed medical workforce.⁵

The effect of the current pandemic has an enduring transformation in medical education and is likely to have long-lasting repercussions on student learning. In addition, the new practices, technology-oriented innovations, curricular innovation, and change learnt during the pandemic will positively impact medical educators and students worldwide.

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