

Medical Education in Times of Covid-19 Pandemic

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ABSTRACT

The COVID-19 pandemic has required medical educators across the world to deal with the huge responsibility of rethinking how they can continue to deliver high quality medical education at a time when medical schools are closing face to face teaching due to social isolation strategies and educators have to cope with their enormous clinical responsibilities. In response to the COVID-19 pandemic, most medical schools across the world have started to rapidly transfer their curricula from face to face to online teaching. Thus there is a need to discuss how the changes after the pandemic can have an impact on both educators and students across the world.

KEYWORDS: medical education; technology, COVID-19, online teaching and learning

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INTRODUCTION

Medical education across the world has experienced a major disruptive change as a consequence of the COVID-19 pandemic and technology has been rapidly and innovatively used to maintain teaching and learning. The future of medical education is uncertain after the pandemic resolves but several potential future scenarios are discussed to inform current decision-making about the future provision of teaching and learning. The use of emergent technology for education, such as artificial intelligence for adaptive learning and virtual reality, are highly likely to be essential components of the transformative change and the future of medical education. The benefits and challenges of the use of technology in medical education co-exist and need to be well-understood.

The ongoing COVID-19 pandemic has caused disruption of medical education and professional training in medical schools worldwide.¹ The chief reasons of this are redeployment of medical educators to clinical care units and the implementation of quarantine and social distancing measures leading to closure of medical schools and working from home for both teachers and students. Local and international travel, and attendance at training programs has been halted. Moreover, physical attendance at workshops and symposia, conferences, clinical attachments and visiting fellowships have stopped.¹

As a response to this situation, medical schools and other medical education providers, have shifted to providing

educational content and training online, as well as faculty development in the use of technology, especially by online courses.² Large group classroom lectures have been replaced by streamed online lectures, using technologies for screen capture and online dissemination. Small group sessions and tutorials have been replaced with interactive Webinars using web conferencing platforms. All of these learning resources can be easily accessed from mobile devices.³

The increasing trends of competency based medical education (CBME) and continuous assessment require regular assessments of student achievement and performance. Formative and summative assessments for core knowledge have started to use a variety of online tools and platforms to assess the students. The options available for assessment include different websites, discussions forums, online discussion spaces, real-time online chat and communication apps.

However, these technologies are mainly for pre and paraclinical subjects and a major challenge for clinical medical teachers at the present time has been to replicate the experience of clinical encounters including clinic and ward rounds, interactive patient sessions, training in interpersonal and inter professional communication and clinical skills.⁴ Currently available technology, such as videos, podcasts, simple virtual reality, computer simulations and serious games, are beginning to be used to assist educators and facilitate student learning and training in these areas.

Simple online platforms, such as websites and blogs, can provide basic information but also offer opportunities to host videos for demonstrating essential skills, such as procedural clinical skills and communication⁵. Medical educators can remotely coach students with real time mobile video tools and apps. Moreover, there is requirement of both faculty development and student skills development to enhance their teaching and learning with the use of technology. Thus it is required to both creating online content, such as podcasts, but also identifying and sharing online content, such as video guides on practical. However there are certain challenges for the success of this endeavour including the number and availability of educators, economic constraints and the need to rapidly expand the clinical workforce

Therefore, it is proposed that it is highly unlikely that there will be a return to the previous approach to the provision of medical education as existed before the pandemic, especially with respect to contribution of technology for enhancing teaching and learning. This change is therefore transformative mainly due to the uncertainty of the complex interaction between many factors that are difficult and almost impossible to predict. The chief factor is mainly related to the length of time that the pandemic is disruptive, since a long disruption is likely to revolutionize the future way that educators and their institutions will provide medical education.

CONCLUSIONS:

The COVID-19 pandemic has caused a major disruption of traditional face to face teaching and learning. A huge effort

has made to move all face to face activities to online. The current use of technology for medical education in low and middle income countries (LMIC) during the COVID-19 pandemic is not yet reaching its potential. The lack of faculty development and development of students' skills may avoid achieving the full potential of online teaching and learning. Thus it is the need of the hour to consider the context and challenges in order to maintain a high quality online teaching and learning.

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