



Guest editorial

From the pandemic's front lines: A social responsibility initiative to develop an international free online emergency medicine course for medical students



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ABSTRACT

The COVID-19 pandemic has disrupted medical education and forced medical schools to shift to remote teaching. However, in many institutions, this shift was complicated by the lack of previous experience and resources as well as the decreased educational time and effort due to increased clinical load. In April 2020, the International Emergency Medicine (iEM) Education Project embarked upon a social responsibility initiative to ease and facilitate this transition for emergency medicine clerkships. A 4-week open online emergency medicine core content course for medical students covering 11 lessons and 37 topics was created. This course contains a total of 25 hours of content, 66 chapters curated from the free iEM Education Project 2018 eBook and Society of Academic Emergency Medicine curriculum website and 131 videos granted freely by the commercial medical education resources provider, Lecturio. In the first 24 hours, the website was visited 3127 times from 57 countries in 6 continents. While online teaching is not a substitute for in-person clinical teaching, such initiatives can provide resources to clinical teachers who are overwhelmed with clinical duties and an opportunity for medical students from low-resource settings to continue their training safely during the pandemic.

African relevance

- The COVID-19 pandemic has disrupted medical education around the world, including Africa.
- This disruption is likely to be more pronounced in institutions with limited experience and online learning resources.
- While online learning is associated with many benefits, it has unique barriers limiting its use in the African context.
- iEM Project's open online emergency medicine core content course can benefit undergraduate training in Africa.

An unprecedented pandemic is affecting our lives dramatically. Medical education is no exception [1]. Medical schools have changed their educational strategies from face-to-face to remote learning methods, particularly online learning, in order to adapt to the current situation and recommendations of national bodies [2–4]. Students in their clinical years are more prone to face disruptions in their learning as their supervisors are overwhelmed by clinical duties. Emergency physicians, who are working in the front lines, are no longer able to provide dedicated time for emergency medicine education to their students. This problem is likely to be more pronounced for students studying at medical schools with limited online learning resources (e.g. no institutional or personal subscriptions to paid online resources due to economic restraints, no previous local online learning management systems).

At the beginning of April 2020, the International Emergency Medicine (iEM) Education Project embarked upon a social responsibility initiative to provide the means to combat the current educational challenges. A 4-week open online emergency medicine core content

course for medical students was created. This course covers 11 lessons with 37 topics and follows the International Federation for Emergency Medicine (IFEM) and Society for Academic Emergency Medicine (SAEM) curricula recommendations [5,6]. The course contains a total of 66 chapters and 131 videos. Chapters were curated from the free iEM Education Project 2018 eBook and SAEM curriculum website [7–9]. Lecturio, a commercial provider of medical education resources, granted free access to its emergency medicine videos [10]. Each lesson concludes with a formative assessment to maximise feedback to students. An optional summative assessment may be taken to obtain a certificate of completion of the course. The total course provides approximately 25 hours of content.

This free course was launched on May 1, 2020, to help students and educators to overcome the educational challenges posed by the pandemic. It was announced by using international societies' e-mail groups and social media platforms as well as the iEM Education Projects' social media accounts. According to anonymous activity data obtained from the website hosting service, WordPress, the website (<https://iem-course.org/courses/emergency-medicine-cc/>) was visited 3127 times from 57 countries within 24 hours. A total of 203 students enrolled in the course. 123 (61%) students from 32 countries started the orientation lesson and completed the volunteer anonymous entry survey of the course. Students who completed the entry survey were from six continents, namely, Asia (60.2%), North America (22.8%), Europe (6.5%), South America (4.1%), Africa (3.3%), and Australia/Oceania (2.4%). Top five countries were Syria (13%), Indonesia (10.6%), Thailand (8.1%), United States (7.3%), and Vietnam (6.5%).

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Online teaching was heralded as a solution to the pandemic-aggravated educational difficulties, such as the shortage of educators and the safety of medical students, in low- and middle-income countries (LMICs) [11,12]. However, in LMICs of Africa, there remain challenges that impede the efficient use of online educational resources, the sub-optimal access to computers and the internet being among the most prominent [13]. Additional limitations include employing instructional designs not compatible with online learning and lacking curriculum-driven online resources in local languages [14,15]. Finally, the scarcity of EM clerkships and limited awareness might be barriers specific to the use of the iEM Education Project in the African context [16,17]. We hope that by increasing awareness and collaboration with local associations, institutions, and educational leaders, the iEM Education Project can further contribute to undergraduate emergency medicine education in Africa.

We learnt several lessons from this initiative. First, the interest from diverse countries and continents indicated that free online emergency medicine resources for medical students are a global need. The pandemic-related sudden disruption of in-person clinical teaching and educators' decreased availability to create and deliver content may have highlighted this need. Second, this initiative was completed in a short period of time by a small group of volunteers and reached trainees from many countries. It implies that if educators devote their time and effort to create high quality free open online courses instead of local courses, they can contribute to the training of medical students globally. Third, the collaboration between non-profit and commercial organisations during humanitarian crises can produce meaningful projects to support medical education in a short time. We believe that all organisations should be open to such collaborations in order to overcome the educational challenges caused by the pandemic we are facing and future pandemics.

We acknowledge that online teaching is not a substitute for in-person clinical teaching. Nevertheless, such initiatives can ease the abrupt transition, from in-person to online teaching, that institutions with limited resources faced with the pandemic. Also, it can give resources to clinical teachers who are too overwhelmed with clinical duties to put time and effort in the creation of similar resources. With this, we can provide an opportunity for medical students from low-resource settings to continue their training safely during these difficult days.

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Authors' contribution

Authors contributed as follow to the conception or design of the work; the acquisition, analysis, or interpretation of data for the work; and drafting the work or revising it critically for important intellectual content: AAC and EDC contributed 35% each; and JK 30%. All authors approved the version to be published and agreed to be accountable for all aspects of the work.

Declaration of competing interest

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