Challenges and Solutions to Continuing Medical Education amid Novel Coronavirus Disease (COVID-19) Pandemic and National Lockdown in India

Priyanka Prakash Waghmare[1], Abhaykumar Gupta[2]

Corresponding author: Dr Abhaykumar Gupta dr.abhaymgupta@gmail.com
Institution: 1. Prakash Diabetes Care Centre, Mumbai, 2. Tata Memorial Centre, Mumbai
Categories: Educational Strategies, Teaching and Learning, Technology, Simulation and Virtual Reality

Received: 13/06/2020
Published: 07/10/2020

Abstract

Amid COVID-19 and national lockdown, a large gathering of people was prohibited and all the medical conferences, workshops, etc. got postponed or canceled. The electronic education (E-education) platforms such as digital conferences, webinars, medical blogs, social media, etc., had helped in continuing medical education in the lockdown phase. E-education has its advantages and disadvantages. The most efficient way to adjust to this 'new normal' would be blending the electronic and traditional learning for the amelioration of the medical fraternity. The traditional medicine learning may never be replaced by the E-education, but the medical fraternity may have to adjust to the 'new normal' after the COVID-19 crisis.

Keywords: Coronavirus; COVID-19; E-education; Lockdown; Medical education; Webinar.

Introduction

The novel coronavirus disease (COVID-19) is caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). On March 11, 2020, the COVID-19 had been declared as the pandemic by the World Health Organization (WHO, 2020). To limit the spread of the disease, many countries in the world, including India, had enforced a 'lockdown'. The Indian government had declared an overall national lockdown from March 25, 2020, to May 31, 2020, with restriction to extend even further (Government of India, 2020). With lockdown in place, a large gathering of people was prohibited and the general public was only allowed to avail the grocery and medical services.

Challenges faced for medical education amid COVID-19 pandemic and lockdown:
The public gatherings were outlawed and all the medical conferences, workshops, etc. got postponed or canceled. With continuous media reporting on 24x7 news channels and sometimes fake news on social media, the general population including the medical fraternity became apprehensive regarding the risk of contracting the COVID-19 infection and started hesitating to go to the conferences and educational meets, even before the enforcement of lockdown. Even the hospital academic meets and intra-departmental educational activities in the hospital premises were also halted to prevent overcrowding. All classes of the medical students were also canceled. Many standalone healthcare facilities like dispensaries, clinics, and laboratories were closed or the number of patients was reduced significantly, leaving ample free time to all the healthcare professionals. To utilize this free time, many electronic forms of medical education (E-education) were started to cement the gap between healthcare professionals and medical education.

The answer to the abrupt halt of medical education activities during the COVID-19 pandemic

As medicine is a continuously evolving subject, medical service is a field that requires continuous up-gradation of knowledge for providing optimal health care to the patients. We all were living in what was potentially one of the greatest threats of our lifetime, a gigantic medical education crisis due to the COVID-19 pandemic. This pandemic called for a rapid transition to E-education for many health care professionals. Students had been removed from direct patient care activities and lectures. We needed to accept our new reality or "new normal" of learning was moving online to create the best experience possible to keep the medical fraternity on track for progression. E-education platforms such as digital conferences, webinars, etc. gave us unique opportunities to engage with both peers and mentors. These opportunities also helped in offsetting the impact of physical and social distancing.

Various methods of medical E-education in times of lockdown were as follows:

1. **Webinars**: According to the Oxford dictionary, a webinar is a presentation or seminar that is conducted over the Internet. Medical webinars became one of the common and most used modes of medical education in the lockdown phase. Various smartphone applications such as Zoom, Google’s hangout, Skype, etc. were also used for the webinars. Webinars lasted from 30 minutes to a couple of hours.

2. **Online/digital conferences**: These were like virtual conferences and included everything from lectures, seminars to panel discussions, and much more. These digital conferences lasted for multiple days like a routine conference.

3. **Changes in the professional medical societies**: The young professional forum of the Indian Society of Transfusion Medicine started a series of webinars in the field of Transfusion Medicine. Similarly, many other medical societies in India started promoting the E-education in the times of lockdown.

4. **Medical blogs**: These were written since before the pandemic, but their usefulness had increased in the COVID-19 pandemic.

5. **Online discussion forums**: These helped in the continuing medical education and resolution of the difficult patient scenarios and other related queries.

6. **YouTube live**: It was one of the most common and cheapest methods for mass education. It was normally used when a medical society or personnel wants to educate the general population or a large group of health professionals. These lectures may be recorded and viewed later also.

7. **Television**: Television lectures were one of the oldest and cheapest methods of the E-education, and had the widest scope of audience. It’s commonly used to educate or impart specific knowledge to the general population rather than the medical professionals.
8. **Social media platforms**: Social media platforms like Facebook, Instagram, WhatsApp, etc. became the common source for data sharing for medical education.

9. **Uptodate**: Recently the ‘uptodate.com’, a company providing evidence-based clinical resource materials had made its services free of cost in the COVID-19 crisis.

10. **The online community of doctors** like Docplexus which enabled peer-to-peer interaction & knowledge-sharing for better clinical decisions had helped in the spread of knowledge.

11. **Pubmed**: The traffic to the Pubmed and similar websites increased during the lockdown and many publishers also made their articles free to view in the COVID-19 crisis.

**Advantages of E-learning in medicine:**

1. *Ease of accessibility*: All the above platforms may be achieved either via smartphone, laptop, or home computer at the viewer's own time and comfort of the location.

2. *Reduced cost of education*: As brick and mortar conferences are very expensive to organize as compared to the E-conferences.

3. More productive during lockdown/ curfew period to enrich the medical updates and knowledge.

4. Facilitate government rules of social distancing in the lockdown conditions.

5. All physicians may attend this even in their duty hours or during travel.

6. Videos may be recorded for later review.

7. Avoids wastage of time while traveling to the conference venue.

8. Quick and reliable updates available.

9. The renowned international faculty was easily available which may not be possible in local or national conferences.

10. Introvert physicians who hesitated to interact during physical conferences may interact and ask questions easily.

**Disadvantages and obstacles of the E-education in medicine:**

1. It's very difficult for the E-education or virtual education to replace the traditional brick and mortar method of medical education.

2. Too much of anything is bad. With the start of webinars, the social and digital media was flooded with webinars, and the audience became confused regarding which webinars to attend; and keeping track of all the webinars also became difficult. There was a saying on social media that "corona is pandemic and webinars are epidemic."

3. Many of these platforms had a paid version to achieve its full potential and many times small educational meets suffered due to the cost issues.

4. "*Hands-on workshops*" experience may never be replicated in the electronic format.
5. *Security concerns:* Many national and international organizations have warned regarding the privacy and the security concerns of the few of the applications such as the Zoom.

6. *Social networking* is important to the medical fraternity and this was difficult in the E-education platforms.

7. The technological and logistic issues were ubiquitous and the medical fraternity may not be so well versed with the technological advances.

8. The attention span for the E-education may be limited and it's difficult to keep the learner engaged in the digital lectures for a longer time.

9. The robust and efficient network and data services were the most important for the uninterrupted use of the services which may be difficult at few locations.

10. Network data may have its charges and it may be costly to the students or resident doctors.

**The ‘new normal’ after the COVID-19 pandemic:**

**The way ahead:** The world after COVID-19 may never be the same and the methods of medical education are also going to change. The physical conferences were very costly for both the participants and the organizers. On the other hand, virtual or E-conferences were very cheap for the organizers and not associated with significant additional costs for the participants. The most efficient way to adjust to this "new normal" would be blending the electronic and traditional learning for the amelioration of the medical fraternity.

**Conclusions**

Medical education may never remain the same after the COVID-19 crisis. E-education has its advantages and disadvantages, but more and more webinars, E-lectures, and E-conferences would be organized. The traditional medicine learning may never be replaced by the E-education, but the medical fraternity may have to adjust with ‘the new normal' after the COVID-19 crisis.

**Take Home Messages**

The traditional medicine learning may never be replaced by the E-education, but the medical fraternity may have to adjust with ‘the new normal’ of electronic education after the COVID-19 crisis.

**Notes On Contributors**

**Priyanka Prakash Waghmare** (MBBS, CPS) is a consulting diabetologist at the Prakash Diabetes Centre, Mumbai. She specialises in emergency diabetes care and diabetic foot management. She conducts community diabetes camps for awareness in the general population.

**Abhaykumar Malind Gupta** (MD) is a Transfusion Medicine resident at the Tata Memorial Centre, Mumbai. His core interests are towards the immunohematology and the therapeutic apheresis. He enjoys teaching budding Transfusion Medicine students. ORCID number: https://orcid.org/0000-0001-7555-4858
Acknowledgements

None.

Bibliography/References

Government of India. (2020) Ministry of Home Affairs Official press release. Available at: https://www.mha.gov.in/sites/default/files/MHAOrderextension_1752020.pdf (Accessed: 12/06/2020).

WHO. (2020) Director General’s opening remarks at the media briefing on COVID-19 -11 March. Available at: https://www.who.int/emergencies/diseases/novel-coronavirus-2019/events-as-they-happen (Accessed: 12/06/2020).

Appendices

None.

Declarations

The author has declared that there are no conflicts of interest.

This has been published under Creative Commons "CC BY 4.0" (https://creativecommons.org/licenses/by-sa/4.0/)

Ethics Statement

Ethics committee approval was not needed as no human or animal investigation, intervention, or data was involved.

External Funding

This article has not had any External Funding

MedEdPublish: rapid, post-publication, peer-reviewed articles on healthcare professions’ education. For more information please visit www.mededpublish.org or contact mededpublish@dundee.ac.uk.