

Impact of COVID-19 Lockdown on Medical Education in India and its Scope on Distance Learning

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The year 2020 was frightened with fight against unprecedented Coronavirus Disease-19 (COVID-19) pandemic situations which impacted extreme changes in everyone's lives. Particularly healthcare system was not ready to tackle public health emergency on immediate declaration of COVID-19 outbreak by World Health Organization (WHO), later the lockdown situations have helped a lot to tackle the situations worldwide. Coming to the medical education in India, there are 272 government medical colleges with teaching hospitals and 260 private medical colleges including deemed universities in India, a good asset to India. Total of 76,928 of Bachelor of Medicine, Bachelor of Surgery (MBBS) students were getting admitted in to the colleges every year with an average intake of 150-250 students per college and per year. The COVID-19 pandemic has strengthened distance & e-Learning worldwide. Distance & e-Learning is defined as application of computer technology to deliver training, including technology-supported learning either online, offline, or both (Shivangi, D. 2020). This technology has also helped a lot to the medical education across the world including India.

Medical Council of India (MCI), which has renamed now as National Medical Council (NMC) has implemented many improvements with new curriculum and new regulations as Competency Based Medical Education (CBME) from 2019, just before the COVID-19 outbreak. CBME made many modifications and improvements in all levels of health care system, faculty training courses, workshops that are being conducted in all the institutes to improve medical education to make Indian medical graduate competent globally by introducing competency based medical education in India.

All these trainings are mandatory as per Basic Course Workshop (BCW) and Revised Basic course workshop (RBCW) guidelines. In addition to these faculties are trained with Attitude, Ethics, and Communication skills (AETCOM) modules that were implemented in MBBS curriculum (Raman, K.S., 2018). Online assignments like education strategies, teaching learning methods, feedback, medical ethics, research methodologies, curriculum design, assessments, and program evaluations were also framed as a part of the curriculum to assess the learning efficiencies (NEP, 2020).

Nationwide, CBME guidelines were implemented for MBBS curriculum starting from year 2019. Admissions were done in September 2019. As per new curriculum, teaching started overriding many hurdles in each institute. It was noticed that delay in official strategy planning to prevent the spread leading to dramatic effect on human lives. Also identified that there was anxiety, fear, dilemma, unpreparedness, economic crisis, food chain supply was tethered, a huge dearth of personal safety masks, aprons made an emotional and mental agony in workplace and families, which has shown a great effect epidemiologically on the families as well as society. Hence, all educational institutions have been closed as well as educational activities including clinical medical education have been suspended on the 25th of March 2020. As a result, distance e-learning has been emerged as a new era of teaching in India to maintain the continuity of medical education during the COVID-19 pandemic, as followed by the other countries in the world (NEP, 2020).

After a long break of lockdown situations, Dr. NTR University of Health Sciences instructed all medical colleges to start online teaching to MBBS students from August 2020. But on the other hand, both the faculty and students are used to have traditional face to face learning in general and the new method of distance/ online/ e-Learning has been initiated during these times to propagate the academic programs. Also there was network, digital library and computer systems to start online teaching. These unprecedented and unprepared situations have mobilized the teaching faculties and medical students to takeover according to their personal, institutional and even national needs.

The sensitizations were explained for the entire faculty about e-Learning platforms and strategies to go ahead. The situations in India have limited to have the services of WhatsApp, Zoom, Google meet which are providing charge-free services. Here, faculty were able to prepare PowerPoint presentations, videos to post in the group according to schedule planned (India Report, 2020). The main hindrance was poor network connections, reliability of the content of topics, attendance of students. Mainly practical lab work is affected totally, only instructions of lab procedures could be given online and this was a big lacuna in practical training of students. Monitoring of students work in active learning and its assessments became another big task to deal (NEP, 2019).

In online sessions the lesson teaching and online attendance were made entered on time and during the session to make students interactive the chance of questionnaire by posing different sets of brief questions to answer in a particular time of interval. An academic study performed this type of follow-up have revealed that the students were able to follow and make use of the questionnaire and discussions and well as demonstrations. In next level the online counselling has been clearly helped to become attentive for the academically poor students. It is also noticed that students were proactive after counseling and improved their learning methodology.

The next important hurdle identified was to conduct assessments, which requires a strict monitoring to prevent malpractices. Conducting online examination without monitoring is not advised. But with limited resources it was identified as a difficult and time consuming task. Students couldn't do better in online exams due to many technical and personal problems (Selvaraj, A. *et al.*, 2021). Another important challenge against distance learning is the reluctance and avoidance of educators to engage in new technologies and applications because of their limited knowledge or lacking proper training in these fields (Arshi, S., *et al.*, 2021).

In overall the pandemic lockdown has taught so many lessons to the students that preparation is mandatory mentally, physically, emotionally, professionally, for facing unprecedented situations. Students always believe that Nature is mightier and more powerful than what mankind poses. A Well-known quote saying "Man proposes, and God disposes" has been proven once again with COVID-19 pandemic (Gupta, S. *et al.*, 2021). Satisfaction of distance learning is strongly linked to students experience previously in distance learning as well as instructor's experiences and interactions. Technical and infrastructural resources reported as a major challenge for implementing distance learning. Understanding technological, financial, institutional, educators, and student barriers are essential for the successful implementation of distance learning in medical education. According to the 2030 Sustainable Development Goals (SDGs) for health including good health well-being and quality of education, effective and affordable educational strategies need to be addressed critically especially in Low and Middle-Income Countries (LMIC) Adopting Distance E-Learning in different fields of knowledge in LMIC can add a great benefit to achieve 2030 SDGs. Hence, the Online/ Distance/ E-Learning concept in medical education in India is identified as a mere successful task that was propagated during the COVID-19 pandemic times and anticipated that will be sure successful in future endeavours.

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