

Learning Amidst the COVID-19 Pandemic- A Medical Student's Perspective

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ABSTRACT

The educational process has witnessed unprecedented disruption during the Coronavirus Disease-2019 (COVID-19) pandemic. Educators and learners across the globe are struggling to cope up with the testing times. Medical education, owing to its unique character and challenges, has been hit hard. Medical educational institutes while gearing up for preparedness to tackle the Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) are also grappling with maintaining continuity in the ongoing curriculum. Medical students find themselves in a perplexing situation, forcing them to pursue off-campus online training whilst staying away from labs, clinics, and other on-campus learning modes. However, this unwelcome break introduced newer alleyways of learning online which the tech-savvy newer generation is adept at. However, this medium falls short of replicating the face to face student-teacher, peer to peer, doctor-patient interaction which is vital to achieving competence as a physician. Now, that the situation seems to be slowly limping towards normal, it has left a profound impact on the teaching-learning process.

Keywords: Assessment, Coronavirus disease-2019, Medical education, Online learning

INTRODUCTION

COVID-19 has disrupted normal lives like never before in over half a century. Following the declaration of a pandemic by the World Health Organisation (WHO) on the 11th of March 2020, the world has come to a grinding halt [1].

The COVID Scare

This was the first-time students were experiencing a calamity of this proportion in their lives. The uncertainty, insurmountable fear and the apprehension of what lies ahead gripped the student community at large. Billions of students across the globe were directly affected by the closure of schools and universities. As this event was foreseeable, the WHO already issued guidelines on 10th of March 2020 to outline critical considerations and practical checklists to keep schools and colleges safe [2].

Disruption and Relocation

Medical colleges being tertiary medical care facility were designated as COVID centres, and the workforce was channelised towards COVID preparedness which caused routine outpatient departments and elective surgeries to a grinding halt. Universities across India also shut down abruptly as a pan country total lockdown was declared [3]. The students were asked to vacate hostels at many places to create quarantine centres. Those who stayed in the hostels had to bear the disruption of all regular services, including irregular mess services. The curriculum got stalled, which led to concerns regarding the continuation of academics and rotations in attached hospitals.

CHALLENGES FACED BY MEDICAL STUDENTS

As the initial shock was over, slowly the institutes grappled with the transition from face-to-face teaching and learning to distant, online modes. The theory classes resumed in online mode; however, the adaptation to this mode was challenging. The real disruption was that the clinics, laboratories and dissections had come to a grinding halt. The medical curriculum relies heavily on practical learning to achieve desired competencies. These learning conditions cannot be recreated easily in an online mode. More so, with the ongoing pandemic, the initial reaction was thus to suspend the practical

teaching till the situation improves, which is the cornerstone of medical education in patient care. Students were losing out on direct interaction with patients, peer to peer discussions, hands-on learning of skills and attitudes and these critical patient interactions cannot be fully replaced by readings, lectures, case studies, or online modules [4-6]. Secondly, theory teaching and practical/clinical teaching is closely integrated and goes hand in hand. The absence of one affects the other.

Apart from the dilemma of how the online classes would be conducted, another issue which needed careful and systematic evaluation was the formative and summative assessment of students which were scheduled in the upcoming months [7,8]. Though the university grants commission, an apex educational body having jurisdiction over higher education, issued an advisory for the conduct of examinations, no such advisory was issued by the apex body for medical education, the Board of Governors [9]. Thus, the assessment, especially summative, was put on hold. This certainly had an impact on the rhythm of study by the students. The Board of Governors then issued an advisory for undergraduate examinations, stating that examinations are mandatory and no general promotion can be given to students to progress to the next level [10]. Thus, the journey of online classes and postponed exams which had started in the 4th week of March 2020, span longer than anybody would have expected.

EXPERIENCES ON ONLINE LEARNING

Even though, online teaching was an untrodden path, the relentlessness of educators and students caused it to gather pace after initial hiccoughs varying from PowerPoint presentations without any voiceover to PowerPoint presentations with voiceover to video classroom platforms which could accommodate the professors as well as the students on a common link. So that it could closely resemble and replace the classroom learning experience as the best alternative response. It ranged from zoom classes to google classroom to several newly developed online platforms [11].

Several accounts show that the online platform for learning had positive results which were appreciated and used world-wide [12]. According to Cook DA., advantages of Web-Based Learning (WBL) in medical education encompass overcoming barriers of distance,

time and newer instructional methods, whilst having disadvantages pertaining to social isolation, and technical problems etc., [13]. Studying online provides more flexibility in terms of time and learning environment, career advancement and hobbies are easier to balance. They do not require to travel long distances to attend classes. The learning happens in a relatively free environment devoid of any restrictions in contrast to a normal classroom. Students also feel less inhibited to approach a professor with questions and doubts. A distinct advantage is to be able to revisit the recorded lectures whenever desired.

The success of web-based education is very much dependent upon technology. If when technology fails, the online course can fail with it. This causes frustration and dissatisfaction, particularly to students who are already uncomfortable or unfamiliar with the technology or the online platform in general [14]. Disruptions due to internet connectivity issues, especially in remote locations have been the most significant limitation to online learning.

E-learning also cannot simulate the learning experience of the hospital setting viz., rotations in different departments, patient interaction, history taking and examination, peer to peer discussions, team learning etc. The lack of formative assessment and feedback, especially during learning skills, makes it difficult to track the progress. E-learning causes social isolation as there is a lack of human interaction between peers and lack of healthy competition too, which leads to disinterest and lack of focus amongst students [14-16]. Physical issues like eye strain, backache and headache due to long screen hours compound these further.

Uncertainty Regarding Timely Assessment and Progression

Teaching and learning culminate with summative assessment and progression of students to the next level. Owing to the prevailing uncertainty, universities and academic bodies were in a fix about when and how to conduct examinations [7,9,10]. Online examinations were conducted by some colleges for internal examinations but owing to the specific needs of the medical curriculum, the final examinations were largely on hold across India. In the absence of clear directives regarding the time and mode of examination, students loose focus, motivation and are apprehensive of the upcoming academic events. Though a bit late, a recent directive from the National medical council [17] has now laid down the time-bound path for resuming teaching and examinations have resolved the issue to some extent. But the question of whether or not the students have got sufficient time and exposure to attain the desired competencies remains unanswered.

Clinical Teaching, Current Challenges and opportunities

As per the Millers pyramid of clinical competence, online teaching is able to take care of the basic levels, i.e., knows and knows how [18]. The higher levels of competence, i.e., 'shows how' and 'does' are being severely compromised. Tele-rotations are the glimmers of hope during this pandemic [19,20]. Experiments with tele-rotations as the need of the hour have already been started in many colleges. These experiments range from using dummy patients, student volunteers, video recordings or problem-based scenario of cases followed by subsequent group discussions [21]. These attempts have helped initiate clinical teaching which had come to almost a standstill in the initial phase of the pandemic; however, they also have marked limitations to simulate or replace the normal clinical teaching. The clinically significant signs cannot be elicited/observed in such situations. Also the normal doctor-patient communication cannot be simulated to the extent desired. Live streaming of ward rounds has also been found very useful [22]. In the current situation, this would minimise the hospital exposure while at the same time, be gainful in supervised learning on real patients. National Knowledge Network (NKN), an already existing digitally connected network

of educational institutes across India, has many medical colleges as its members [23]. It is the calling of the hour to strengthen such network and to have all medical colleges under its ambit. A repository of clinical rounds may be prepared, which is accessible to all medical students across India. This would give exposure to a myriad of cases to the medical students, not limited by geography or socio-demography.

With the lifting of all lockdowns, the hope of vaccine arriving soon and implementation of guidelines from Board of Governors for resuming clinical teaching in medical institutes, a contrasting scenario seems to be in place where the educational system seems to be in overdrive to make up for the time lost. Many students are finding the new situation 'too fast to cope.' Hospitals still have lack of representative cases as most of the hospitals have still not regained their full pre-COVID-19 patient loads. Elective cases are still not being admitted, and the normal functioning of hospitals have still not been resumed. Another fallout is that the benchmarks for clearing examinations (especially the final year) may be lowered and that they may be labelled as a compromised batch. Systematic studies need to be conducted to know exactly how the pandemic has impacted the learning of a medical student. There is no doubt that the medical students are under stress and finding it difficult to cope with the loss and disruption. Medical institutes need to provide counselling to students in need.

Lessons and Rewards

Challenging times bring forth unorthodox solutions. This pandemic also utilised the services of final year medical students to join the healthcare workforce as 'Corona Warriors'. This was a golden opportunity to learn hands-on, gain a perspective of the situation at hand, earn significant practical exposure and the sense of fulfilment that every professional aspires for [24]. Besides the US and Italy, this was successfully implemented in some states of India as well [25,26].

CONCLUSION(S)

It is now hoped the situations will slowly revert to normal but has left many lessons for all stakeholder in the educational process. Students have learnt more than ever the importance of clinical rotations, the need for interactions, a disciplined approach and importance of psychomotor and affective domains of learning medicine. The technology has progressed significantly but the medical educators, however, have been slow in adapting to it and making the best possible use of it. The pandemic has forced them to open up to the new vistas of teaching-learning aids, and they now seem more willing to use and experiment technology as a useful aid in teaching. The administrators shall now be more prepared to have a mitigation plan for such disruptions and shall be more aware of the responsibility that they behold, as their decisions have a profound effect on all other stakeholders.

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