



Journal Homepage: -www.journalijar.com

INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR)

Article DOI:10.21474/IJAR01/11248
DOI URL: <http://dx.doi.org/10.21474/IJAR01/11248>



RESEARCH ARTICLE

COMPETENCY BASED MEDICAL EDUCATION (CBME) - CURRICULUM DELIVERY IN THE TIMES OF COVID 19 PANDEMIC: AN EXPERIENCE

Dr. Sonika Choudhary, Dr. Rupa Sharma, Dr. Meghshyam Sharma and Dr. Urmila Choudhary

Manuscript Info

Manuscript History

Received: 25 April 2020
Final Accepted: 30 May 2020
Published: June 2020

Key words:-

Competency Based Medical Education,
CBME, Curriculum Delivery

Abstract

Competency Based Undergraduate Curriculum is implemented from August 2019, i.e. from MBBS batch admitted in 2019 and studying currently in first year MBBS, shall continue with existing Curriculum. The novel coronavirus (SAR-CoV2) pandemic has resulted in the interruption of on-campus education activities like teaching-learning and assessments. With this sudden change in curriculum and COVID 19 pandemic, in order to continue medical education curriculum an online teaching strategies was designed and implemented to meet the challenges. This paper aims to share the early initial experience of Novel ways of online teaching in the setting of a global emergency (COVID-19) for medical students. This article will serve as a model for other institutes looking for continuing medical education in situations like COVID 19 that disrupt traditional teaching.

Copy Right, IJAR, 2020,. All rights reserved.

Introduction:-

Background:

After two decades of following the conventional curriculum and teaching methodologies, the medical council of India (MCI) has proposed a competency based curriculum (CBME) in India implemented from August 2019, i.e. from MBBS batch admitted in 2019 and studying currently in first year MBBS.

The undergraduate medical education program is designed with a goal to create an “Indian Medical Graduate” (IMG) possessing requisite knowledge, skills, attitudes, values and responsiveness, so that they may function appropriately and effectively as a physician of first contact of the community while being globally relevant to cater health needs of the society. This is further related to national, institutional and learner based goals. The national goals are in concordance to the national health policies and in addition aim to develop a scientific temper and augment educational experience for proficiency in the medical profession. The concept of holistic medicine and the promotive, preventive, curative and rehabilitative aspect of a health care system with the introduction of medical ethics depict a long term, positive, far-sighted approach. The institution has to provide a platform which enables the medical student to achieve individual goals and those in the nation’s interests and at the same time cater to the student’s needs to become a compassionate leader, a communicator, a member of the health care team, a lifelong learner and a professional ⁽¹⁾.

The coronavirus disease (COVID-19) pandemic has had a worldwide impact on the population, global economy and health care systems. The spread of the virus has resulted in far-reaching consequences, the closure of schools and universities has led to innovative methods of delivering education, ensuring that students continue to receive

teaching, albeit different methods of modality ⁽²⁾. Most of the medical schools have quickly adapted to the online classes with shifting of live clinical exposure with the virtual one. Some schools also echoed concerns over clinical clerkships and assessment during these times. The COVID-19 pandemic represents a transformation in medicine with the advancement of telehealth, adaptive research protocols, and clinical trials with flexible approaches to achieve solutions ^[3-5].

The coronavirus pandemic has seen the introduction of novel methods of delivering education to medical students. The sudden transition from on-campus learning to exclusively distance learning is challenging for both faculty and students and has required a lot of preparation and other efforts in a short time ⁽⁶⁾ in order to meet time line for the curriculum delivery.

Online Curriculum delivery:

While online education is growing continuously in popularity and accessibility, it can be still grouped broadly into two categories: the synchronous, asynchronous.

The synchronous mode:

allows students to engage in discussion with teachers and classmates at the same time using the LMS (learning management System) or LMS-equivalent application; i.e. Teachers and student interact in a specific virtual place, through a specific online medium, at a specific time. Methods of synchronous online learning include video conferencing, teleconferencing, live chatting, and live-streaming lectures allowing real-time instant interaction and feedback.

The Asynchronous mode:

Allows students to carry out discussions over the internet at different times by using tools without real-time interaction. It allows for more control of pace and timing. Asynchronous classes are the opposite because students will have an assigned deadline to complete tests, lectures and assignments. These students are allowed to decide when they study, contribute and access content.

CBME Curriculum Delivery – An Experience during COVID 19 pandemic:

CBME time table was started for the first time by MCI in 2019. The batch is in first phase of MBBS. With this sudden change in curriculum and COVID 19 pandemic, in order to continue medical education an online teaching strategies was adopted to meet the challenges.

For Curriculum delivery a hybrid learning model including a blend of both asynchronous and synchronous online learning was employed.

For the successful implementation of the transition to online/distant learning approach our institute has followed a systematic approach including :

1. Establishing a sense of urgency,
2. Establishing working teams,
3. Conducting needs assessments,
4. Developing implementation plans,
5. Communicating the curriculum content
6. Capacity building of faculty
7. Managing students' stress, engagement and motivation
8. Student assessment
9. Anticipating challenges and planning for how to overcome them
10. Monitoring and evaluation of curriculum implementation and continuous improvement.

In order to overcome the challenges of online live teaching and related technical difficulties first we adopted Google classroom App (asynchronous mode). A schedule was made and messages were sent to students by email and WhatsApp to join Google Classroom app after providing a class code. Even this time we are managing teaching and learning with Google classroom, easy-to-use, and a free tool that helps us to manage coursework.

With Classroom, we are sharing PPT classes, e books, recorded video and reading material that has been shown very beneficial during this sudden shift to online teaching, providing time for self-directed learning, and also minimizing student stress.

We are distributing assignments to the student, after grading, sending feedback to the students. This way Google Classroom helps us to organize assignments, boost collaboration, and foster better communication with students making teaching more productive, collaborative, and meaningful.

Simultaneously we started online live lectures using Cisco Webex App. A schedule was made and messages were sent to students by email and on Google classroom app to join their respective classes after providing meeting no. and password.

For Capacity building an orientation program was conducted to familiarize the faculty to this platform. A team of trained faculty members was deputed at the lecture venues to assist and troubleshoot technical issues. Training PPTs / videos were shared with faculty members. Additionally, online meeting was also scheduled with Cisco executive in order to clear all doubts and queries of faculty.

In order to minimize excessive data usage by students and preventing high screen time, a two-hour teaching schedule, ensuring a judicious mix of lectures and practical demonstrations/case discussions were employed with a break of 25-30 minutes between sessions. The lectures were aligned among all the three Departments of I st MBBS and integration was done by nesting.

To promote student engagement, and to closely replicate laboratory and clinical environment, short videos on lab procedure and case based clinical examination were prepared and shared on the virtual classroom. To make the session interactive, students were encouraged to use chat-box and switch on their microphones, wherever feasible. To monitor and evaluate the implementation of online teaching approach a feedback from student was also taken.

Feedback from the students:

A questionnaire was prepared and administered via Google Classroom to the students belonging to Ist MBBS course. The questionnaire was reviewed and validated by the faculty members. Participation was voluntary and complete anonymity was ensured. Feedback from the students was collected. All students appreciated the online platform (Qualitative feedback) and found reading material, PPTs and recorded videos beneficial.

Student feedback revealed some interesting paradox. While appreciative of the platform, most of the students still believed that physical classroom was better than e-classes and they found screen recorded lectures even better than online live lectures. The reasons for this perception could not be assessed. The feedback was based on a small group of students who have anonymously volunteered to provide feedback. Secondly, internet connectivity (network issues) at students' locations and a lack of skills among some faculty members or instructors regarding the use of specific online teaching technologies is also considerable. Screen recorded lectures provide them flexibility to revise at anywhere, anytime, allows for more control of pace and timing.

We believe our early experience can serve as a model for educational institutes looking for continuing medical education in situations like COVID 19 that disrupt traditional teaching.

Acknowledgement:-

We would like to thank our Principal Sir for his valuable and constructive suggestions during the planning and development of this curriculum implementation plan during COVID 19. His willingness to give his time so generously has been very much appreciated.

We would like also to extend thanks to all faculty members involved in the delivery of the curriculum in the RNT medical colleges. Special thanks to our students for their continuous feedback and reflection from which we learned a lot and improved our implementation plan.

References:-

1. Medical Council of India, Competency based Undergraduate curriculum for the Indian Medical Graduate 2018; Vol. 1: 1-263.
2. Available at <https://www.mciindia.org/CMS/information-desk/for-colleges/ug-curriculum>
3. Sandhu P & Wolf MD. The impact of COVID-19 on the undergraduate medical curriculum. *Medical Education Online* 2020; 25:1, 1764740, DOI:10.1080/10872981.2020.1764740
4. Rose S. Medical student education in the time of COVID-19. *JAMA*. 2020 Mar 31. Available from: <https://jamanetwork.com/journals/jama/fullarticle/2764138>. Accessed April 14, 2020.
5. Liang ZC, Ooi SBS, Wang W. Pandemics and their impact on medical training: Lessons from Singapore. *Acad Med*. 2020 Apr 17. Available from https://journals.lww.com/academicmedicine/Abstract/9000/Pandemics_and_Their_Impact_on_Medical_Training.97208.aspx. Accessed April 23, 2020.
6. Li L, Xu Q, Yan J. COVID-19: The need for continuous medical education and training. *Lancet Respir Med*. 2020; 8:e23.
7. Taha M, Abdalla M, Wadi M, Khalafalla H. Curriculum delivery in Medical Education during an emergency: A guide based on the responses to the COVID-19 pandemic *MedEdPublish* 2020; 1-12 <https://doi.org/10.15694/mep.2020.000069.1>.