



## CONDUCTING ONLINE EXAMINATIONS – A CHALLENGE FOR MEDICAL PROFESSION

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*“The highest education is that which does not merely give us information but makes our life in harmony with all existence”*

– Sir Rabindranath Tagore

**I****ntroduction:** It has been a year since the spread of Covid-19 pandemic wherein almost all major countries in the world are affected. Although it impacted mostly on the global economy, education system was the another area of dire effect. Sudden shift from onsite education to online education affected the outcomes and quality of teaching learning and assessment. Most of the schools opted for online examination due to social distancing norms where theoretical examinations were possible. However, the health care professional schools were left with no choice and had to use computer based testing for the purpose of even clinical examinations. This posed a major challenge for medical profession as most of the clinical outcomes and competencies are based on directly observed skills performance and kinesthetic movements. As assessment is considered as a performance indicator and a driving force for students learning, it was a challenge to select the pattern of the tools for the assessment due to online mode<sup>1, 2</sup>.

An unanticipated switch to distance online teaching led to face a list of challenges

by students, teachers and stake holders of educational institutions. Although many institutions have adopted on sight e-examination formats through software as assessment tool long back, the main challenge was e-proctoring of the students remotely. Nonetheless other difficulties documented includes the technical issues like internet connection and difficulty in clinical skills assessments and chances of cheating during examination<sup>3</sup>. There are a number of online exam software's available; Think Exam, Microsoft teams, Examsoft, Edbase, Blackboard and QuizCV are some of the popular ones in the list<sup>4</sup>.

The major issues related to remotely conducted online examination were technical glitches, possible server failures, power cuts and lack of motivation among students. Although the grade achievements were at higher side, provision of clinical material and patient data was not up to the standards laid for the medical education. Nonetheless, academic dishonesty, lack of attitude towards understanding of online content and one to one contact were certain concerns during this period<sup>1, 5, 6</sup>.

**Experience with Examsoft for online examination:** Use of Examsoft (ExamSoftWorldwide, Inc) for conducting online examination is a very innovative experience and one can learn a lot. As the institute was closed due to curfew during



pandemic, the decision was made to conduct exams using this software which was already being used since one year. The only difference was the location of exam where proctoring was a major concern. Even though e-proctoring is a feature on examsoft, faculty was also unable to reach campus due to lockdown. As per the directives from the Royal Decree and Ministry of Education, the grading pattern was altered for the examinations that were to be conducted on campus. A total of three examinations were planned as multiple choice questions (MCQ), objective structured clinical/practical examination (OSPE/OSCE) and open book examination.

With most of the faculty was new to use this software, a small online workshop by the administrators was organized for sensitization. It was easy to add questions to question bank in the specified folders assigned to each course. This facilitated to create exam from MCQ and essay bank. Major challenge of creating OSPE/OSCE exam was solved as the images in all formats can be inserted while creating questions. Insertion of images were really helpful to create case scenarios or problem based written questions. When an assessment was created one could select the various parameters like shuffle options and sequence, add time limit to each question and backward navigation. It was recommended to select all of them except backward navigation to prevent students from cheating. Grades were assigned to each question to have them as per the graded distribution recommended by the academic council. Once the assessments were created, they were posted for the students for downloading, wherein the teacher had to create password and assign download and upload times.

As the exam was conducted remotely

and there was no proctoring, a team of administrators was created to address the problems faced by students while downloading or uploading the exams. This team provided passwords to students at the starting of the exam and verified uploads within the specified time. Most important factor of this monitoring was to instruct the student to disable Wi-Fi and blue tooth before start of examination otherwise they would be logged out and they need to download exam again.

Major challenges faced by the faculty included cancellation of exam posting by admins and reposting. This was due to improper selection of timings and dates for downloads and uploads as exams were conducted in the night time, especially midnight time due to observation of Ramadan. It was vital on part of faculty to verify the keys of MCQs and quality of images uploaded. As these could not be altered once the exam is posted for the students. Also, the correction of essay questions was to be done within timeframe so that item analysis report can be generated.

The examsoft platform was very useful for evaluation of the course report as it provides item analysis report, graders report and course learning outcomes category report. Further, it facilitates release of the results that helps students to see their performance in the exam.

**Overview:** Corona virus pandemic has churned out the global education system inasmuch that it will take a long time to come back on track. But the man's instinct will not keep quiet and attempt to roll back to normalcy, but by that time a lot many modalities/systems will be adopted and a new emerging module will be put forth. But the current times are tough and still what





has been achieved is a marvelous, has not deterred us from achieving our goals, especially in professional curriculum. Smooth conduction of online examination or even on site examinations in many institutes was a challenge well accepted<sup>2,7</sup>.

Information technology has revolutionized education by providing advanced computer-based learning and evaluation programs. The present medical education has adopted web-based learning systems like Computer-Mediated Communication (CMC), Web Course Tools (WebCT), Microsoft Teams, examsoft and Blackboard. Few of them also provide remote proctoring during examination<sup>7</sup>.

In these times, medical/dental colleges shifted to a distant learning curriculum with the challenge of developing new methods to impart clinical skills and subsequent examinations. As the professional courses need multiple assessment methods, most online platforms allow to conduct examinations for knowledge testing through MCQs. Most of the schools adopted this format for summative assessment remotely. Further,

the objective OSPE/OSCE and modified essay questions were also conducted in online mode but allowing candidates free access to learning resources during the assessment<sup>1,7</sup>.

Online examinations conducted on remotely basis has some challenges like test anxiety, device/internet failure and academic dishonesty amid students while problems with e-proctoring, quality of the academic outcomes are among few for the institutes. yet, the students in present days are well prepared with technological advances and could cope effectively with the online assessments<sup>3,5</sup>.

**Conclusion:** The pandemic compelled medical institutes to online education and assessments, it was possible to achieve balance between quality of teaching-learning and keep the educational process rolling. Use of online examination mode was effective though some challenges were accepted and sorted. Nonetheless, the pandemic has affected the entire education system, a clinical approach to sort the issues related to achieving the academic excellence is a need of time.

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