

EDITORIAL**Impact of Online Teaching during COVID-19 Pandemic on Outcome of Medical students in Pakistan***Anila Jaleel**Department of Biochemistry, Shalamar Medical and Dental College, Lahore, Pakistan.**<https://doi.org/10.36283/PJMD10-3/001>*

COVID-19 has hit hard to the educational system in Pakistan in addition to business, economics and others since February 26, 2020 when first case of COVID-19 was identified in Pakistan. The faculty and students had to switch to online teaching within few weeks without prior training¹. However, there are pros and cons of online teaching discussed in the studies in Pakistan and worldwide, which particularly focuses on faculty training and internet connectivity issues in addition to valid assessments and focus of students to lectures from home². The faculty has also worked hard to use synchronous and asynchronous mode of teaching, gamifications to make teaching interesting and introduced various modes of assessments both formative and summative like open book and quizzes on Kahoot³⁻⁵.

The medical training comprises not only cognitive element but most important component is psychomotor skills. Although cognitive element is covered by the online lectures, tutorials and small group sessions like problem-based learning (PBL), case-based learning (CBL) but competencies like attitudes and clinical skills are the areas of concern. Although few medical colleges switched to online teaching within a week (who had already management systems in place and strong information technology (IT) departments) and tried to show live demonstrations of patient interaction like history taking and examinations through zoom links and video recordings but it may not be sufficient to certify the students as doctors. Moreover, it is not practiced in every medical college especially those who lacks the facilities. The particular concern is for fourth and final year students passing in COVID-19 era. As doctors must deal with the live and death situation of the patients, clinical skills deficiencies cannot be overlooked. Similarly, leadership qualities are also compromised due to inability to conduct co-curricular activities. The question arises then what is the solution?

There could be few suggestions that may be implemented to improve the outcome:

1. The medical students should be vaccinated and should be called on campus for clinical training.
2. Effective use of skill labs should be ensured to practice and assess competencies throughout the year until they reach the satisfactory level.
3. When the medical colleges are allowed for on campus training, the students should be posted in wards full time for clinical training rather than delivering lectures to them (lectures should be completed during online duration).
4. The students should be given some additional time to practice their skills and should be assessed by frequently conducting Objective Structured Clinical Examinations (OSCEs) using checklists for assessment, which include the attitude and ethics of the doctor towards patient in addition to clinical skills.
5. Pakistan Medical Commission (PMC) has taken the initiative of conducting National Licensing Examination (NLE) from all medical graduates. The NLE should not be only multiple-choice questions (MCQs) based but it should also include clinical skills component to be assessed, which is far more important for doctors to be licensed.
6. Intra and inter provincial / cities online competitions must be encouraged to be conducted like debate, Naat, Qirat, and research competitions to polish their inbuilt qualities.

7. The medical students should be encouraged to participate in the social welfare activities of the patients and communities for which incentives should be given to them.

The COVID-19 has taught problem-solving skills to all including health care workers especially. Cumulative efforts by the medical faculty will result in better outcomes.

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