**Short Communication**

# Even if the pandemic is over!
# Lessons learnt from the challenges of online education in Pakistan

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## Abstract

The year 2020 marked the beginning of an era that affected lives entirely worldwide. As a result of mandated measures (such as complete lockdowns, social distancing, and working from home), apart from the economy, the most suffered areas in Pakistan are Health and Education. Medical institutions during the COVID-19 pandemic were pushed to use technology as a pedagogical means to ensure the continuity of medical education; the most significant challenges were ensuring the quality of delivery of the content and ensuring that the students can extract maximum out of it. The technical support department provides the operational platform while faculty and students are central online teaching and learning users. Vast differences exist between developing and developed countries as far as the end-users' infrastructure, resources, and mindsets are concerned. This short communication points out some challenges and recommends specific steps to ensure continuous good quality online teaching even if the situation stays for long or if it happens again.

## Background

In the simplest term, Online education is learning that is embraced through an electronic medium supported by the internet for facilitator/ learner interaction[1]. These days, there are many ways to teach outside the conventional classrooms and outside college campuses. And these include video animations, virtual environments, and chats with the most learned professors available. It is the richest flexible learning opportunity to convert any accessible environment into a classroom[1].

However, whatever the state of online education opportunities in Pakistan was acclaimed to be, the reality check came with the onset of the COVID 19 pandemic. Officially the lockdown in Pakistan began on Mar 14, 2020, and all the educational activities were halted in the hope of reopening soon. But the matter was not of days, so the medical institutes opted for online education. Although few of the medical institutes in Pakistan were already in sync with Learning Management System/ Moodle[2], most of the institutes were lost in their quest to hire IT teams, purchase the software, and arrange the training sessions for faculty.

The result was chaos for many, as online teaching is not a norm in most medical colleges in Pakistan. While a piece of cake for some, many institutions had to do a lot of homework. This short communication aims to discuss the different challenges faced by medical institutions of a developing country like Pakistan and the probable solutions that should be implemented in the long run as policy.

## Challenges

Apart from health, the highest toll that this pandemic has imparted is the disturbance in the medical teaching[3] that occurred due to the closure of medical schools to guarantee social distancing. As a desperate measure, the medical institutes resorted to online teaching but faced several challenges.

The first and foremost challenge for medical institutions is the financial constraints in the wake of COVID 19, where the worst economic recession is being experienced by the world[4]. The hiring of IT teams, arranging faculty training[5], and purchasing online soft wares all required massive investments, too, in the middle of an already going fiscal year. In addition to these constraints, there were no government-supported platforms available. Lack of technical infrastructure leads to problems with the delivery of effective online classes.

The second challenge faced by the institutions is their faculty training, who might not have the necessary knowledge or experience required to teach online on different available paid or unpaid platforms[6]. Also, since the primary medium of instruction has always been face-to-face teaching; therefore, most of the senior faculty members were not tech-savvy, depending entirely on the junior tech-friendly faculty to help them out[7]. The workload and pressure faced by the clinicians, who also have an educational role in the growth of future doctors, is another challenge8. Although recognized by many, this change management requires time and the time capacity for this change is unreal.

The biggest challenge is to overcome the fact that most of the content delivered is just a repository of knowledge and not aligned with the proper tools of assessment[7]. The use of virtual environments or simulations to replicate the experience of clinical skills is again expensive and requires technical support9. Last but not the least is the availability of high-speed internet to both the learner and faculty members[7], which is a developing country like Pakistan, becomes a rare commodity where even the availability of uninterrupted electricity is questionable.

## Suggestions

To overcome these challenges, a few changes must be made permanently to support technology-enhanced learning10 in our current scenario. A compulsory content in the medical curriculum must be chalked out that should be delivered online even when the pandemic is over. Online formative assessments should be a norm during face-to-face classes so that the faculty are trained

adequately. The students should also be encouraged to take online formative assessments to stay in touch with e-learning.

The national accreditation standards should also include the standards for readiness for online teaching sessions as a policy matter. All colleges should consist of basic IT knowledge as a criterion in their hiring policy. Faculty inducted should undergo IT training after the appointment as part of the faculty development program. As Prof. Ronald Harden[11] stated, "There is no such thing as curriculum development, only staff development.

## Conclusion

In the coming years, technology-enhanced learning will serve as a mainstay in the delivery of medical education. However, Technology Enhanced Learning is not something new, and it has to be embraced in its full essence. The technological infrastructure, faculty training, and the time capacity needed for this change management are the pillars of the building, along with patience and perseverance. Collaboration between technical staff, academic staff, clinicians, and teaching faculty has to play their part as innovation is not dependent on one. It is high time we understand its importance and take the necessary steps in the right direction to keep us abreast with the changes.

## Acknowledgement

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