

## **Study of perceptions of students and teachers towards e-learning and its effectiveness**

<sup>1</sup>Lahiri Somsubhra, <sup>2</sup>Narmadha E

<sup>1,2</sup>Assistant Professor, Department of Microbiology, Anna Medical College, Mauritius

**Corresponding Author:**

Narmadha E

### **Abstract**

The field of medical education is one of the industries that will be badly harmed by a COVID-19 pandemic. When the medical students were sent home as a result of instructions issued by the government during a lockdown, it was quite difficult to think that this would result in a change to the method of instruction, particularly in this field. After successfully adjusting to this new circumstance, the question of the hour is how many kids and teachers did adjust to this new environment. What were their thoughts on the matter? And what, in general, do you think the results of this exercise were? In this study, an honest effort has been made to find the same thing.

**Key words:** Cross-sectional, perception, effectiveness, online, teaching

### **Introduction**

The world is currently being engulfed by the Corona pandemic, which is now scientifically referred to as the covid 19 pandemics by the WHO. The tentacles are continuing to spread. It's possible that the recent epidemic has provided us with the perfect opportunity to wrack our wits and consider what's going on in the Medical School. Traditional classroom lectures were the primary mode of instruction for the teaching component of medical education, particularly the theoretical component <sup>[1, 2]</sup>. It is possible to provide instruction to a significant number of individuals all at once. This is a great blessing, especially in our country, which does not have an abundance of medical schools and facilities. However, because we have become accustomed to this method for such a long time, even the idea of making a modification causes us discomfort <sup>[1, 3]</sup>.

Taking drastic measures is the only option left when conditions are as dire as they now are. The old adage that "necessity is the mother of all inventions" rings true in this case. When it was declared a month ago that the country would be placed under lockdown, all types of academic activity were immediately ceased.

This condition was never anticipated, and it's possible that the teaching community has never been exposed to conditions like this before. But there was no time for preparation because everything happened in a flash, and there was no time. The entire academic community worked together to brainstorm potential solutions to the problem and find strategies to address it. And despite all odds, the faculty was able to come up with the idea of online teaching through an interface known as a ZOOM cloud conference. They put their thinking caps on. Now that the institution is using this method of instruction, it is necessary to investigate the students' perspectives on the curriculum and determine whether or not it is actually successful. In order to provide the faculty with information that will be useful in the future, this study aims to discover both the student's perceptions of the programme and its impact on the learning of students.

The major purpose of this study is to investigate the attitudes held by both students and instructors in regard to online education.

**Materials and Methods**

This research was carried out at Anna Medical College the research was carried out in two stages. After obtaining their written approval, the researchers asked for the participation of 60 students in this study.

During the first phase of the study, both the students and the professors' opinions were gathered using a Likert scale while the online sessions were in progress.

The questionnaire served as the basis for the construction of the Likert's scale, which was then validated by distributing copies of the questions to three heads of department in the pre-clinical departments. The same questionnaire was used to collect information from the students' perspectives regarding traditional classroom instruction in the form of lectures.

The second phase consisted of the administration of an online proctored based examination and the evaluation of the students' overall performance.

**Results**

**Table 1:** Perception of students and teachers towards online course

Median score (Students)	36.28 ± 2.39
Median score ( Teachers)	34.74 ± 1.28

**Table 2:** Perception of students and teachers towards live classes

Median score (Students)	42.26 ± 1.38
Median score ( Teachers)	48.53 ± 0.27

**Discussion**

The term "e-learning," which describes the use of technology or an electronic media as a platform to provide students with content, help them grasp the material being studied and contribute to the students' overall assessment is what is referred to as electronic learning <sup>[4]</sup>. E-Learning has a lot of promise due to the fact that it is simple to use, that it provides a broad understanding and that it enables students to seek out information whenever it is convenient for them <sup>[5]</sup>. On the other hand, as was mentioned previously, the traditional lectures are so deeply embedded in the system that it is extremely challenging to dislodge them. However, due to recent events, things are different now. These medical students are expected to hit the ground running now that medical education is being provided on the basis of competencies rather than traditional academic subjects <sup>[6]</sup>. The ability to comprehend, analyse, and put into practise the new information picked up through the use of digital technology is the essence of e-learning <sup>[7]</sup>. This outbreak has provided medical students and faculty with an excellent opportunity to effect positive change in the healthcare system. There are a lot of different things that can affect how well the programme goes. These can be geared towards the teachers or the students, depending on the context <sup>[8,9]</sup>. The faculties were unable to adapt for a significant amount of time to the pressure that was being put on them to make this adjustment. They exhibited even some reluctance <sup>[9, 10]</sup>. However, in this particular instance with the epidemic, there was no other choice. To a very small extent, efforts were made to get an understanding of the challenges and potential solutions associated with the implementation of e-learning <sup>[11-12]</sup>. Consequently, the purpose of this study was to make a genuine attempt to discover the perspectives of both the students and the teachers regarding the process of bringing about change <sup>[13]</sup>. In addition to this, the study intends to investigate the efficiency of the aforementioned workout. In this particular investigation, it was discovered that the students' perception ratings improved when they were questioned about the live lectures that took place in a classroom setting as opposed to when they were questioned about the online session. When we first began this activity, we ran into a few problems right from the bat. But when we compared the scores that students received on the proctored online examination to

the scores that students received after attending the live lectures, we did not find a significant difference between the two sets of results. This demonstrates quite clearly that they were able to adjust to the new way things were being done within the system.

The perspectives of the teaching staff provided us with a distinct picture of how they experienced the transition. They were excited about the adjustment and expressed their gratitude for it. This is a direct result of the efforts put out by the Medical Council of India to develop redesigned basic course workshops, an advanced course in Medical Education, and several other faculty training programmes. Because they have received training, the faculty were able to rapidly adjust to the problems that were thrown at them.

### **Conclusion**

This study sheds some light on the perceptions of the teachers and the students regarding the online classes in medical teaching.

### **References**

1. Pettersson F, Olofsson A. Implementing distance teaching at a large scale in medical education: a struggle between dominant and non-dominant teaching activities. *Educ Doc Info*. 2015;20:359-80.
2. Albarrak A. Education in a technological world: communicating current and emerging research and technological efforts [Internet]. 1st ed. Formatex Research Center, 2011.
3. Shachar M, Neumann Y. Differences between traditional and distance education academic performances: a meta-analytic approach. *Int. Rev Res Open Distributed Learning*, 2003, 4(2).
4. Howlett D, Vincent T, Gainsborough N, Fairclough J, Taylor N, Vincent R. Integration of a case-based online module into an undergraduate curriculum: what is involved and what is effective? *e-Learning*. 2009;6(4):372-84.
5. Mooney G, Bligh J. Information technology in medical education: current and future applications. *Postgrad Med J*. 1997;73(865):701-4.
6. Costello E, Corcoran M, Barnett J, Birkmeier M, Cohn R, Ekmekci O, *et al*. Information and communication technology to facilitate learning for students in the health professions: current uses, gaps and future directions. *Online Learn*. 2014;18(4):1-18.
7. Digital and Media Literacy for Today's Learners [Internet]. US Digital Literacy, 2015. [Cited 8 Aug 2020]. Available from: <http://digitalliteracy.us/>
8. Bedding G, Stoll B, Geissbuhler A, Klohn A, Stuckelberger A, Nko'o S, *et al*. Computer literacy and e-learning perception in Cameroon: the case of Yaounde Faculty of Medicine and Biomedical Sciences. *BMC Med Edu*. 2013;13(57):1-8.
9. Greenhalgh T. Computer-assisted learning in undergraduate medical education. *BMJ (Clin Res Ed)*. 2001;322(7277):40-4.
10. Ozuah P. Undergraduate medical education: thoughts on future challenges. *BMC Med Edu*. 2002;2(8):1-3.
11. Muilenburg L, Berge Z. Student barriers to online learning: a factor analytic study. *Dist. Edu*. 2005;26(1):29-48.
12. Gormley G, Collins K, Boohan M, Bichle I, Stevenson M. Is there a place for e-learning in clinical skills? A survey of undergraduate students' experiences and attitudes. *Med Teach*. 2006;31(1):e6-e12.
13. Cook D, Dupras D. A practical guide to developing effective web-based learning. *J Gen Intern Med*. 2004;19(6):698-707.