

Did We Deliver Quality Education in Online Sessions During Covid 19 Lock Down? Learner's Perspective from a Developing Country

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ABSTRACT

Objective: COVID-19 pandemic pushed unprepared educational institutes towards online sessions. Though equivalence of online sessions proved already in many studies before pandemic, unplanned sessions and inexperienced teachers with networking issues and novice software for online sessions could not meet the standard of teaching that was expected or experienced during these sessions. We planned this study to know perspective of learners to measure quality of online sessions and to find out factors which could improve these sessions in future.

Design: Prospective questionnaire based study

Place & duration of study: Hitec IMS Dental College, from 10th Feb 2022 to 10th March 2022

Methodology: Questionnaire was distributed to 150 students of BDS who has attended online session during COVID-19 pandemic.

Results: 85% of the responders appreciated online sessions happening during pandemic to avoid wastage of time but as high as 50% students were of the opinion that teachers could not maintain standard of teaching as in on campus session. Factors for this dis-satisfaction of students included issues like connectivity issues, gadgets of students as well as teachers, novelty to softwares to attend online class, and psychological issues like depression. So at the end 83% of students preferred on-campus sessions on on-line sessions.

Conclusion: On the basis of findings of this study, it is recommended that we should continue activity of online teaching with improvement in resources and train our staff and students even in the absence of such emergency.

Keywords: E-learning, Online learning, COVID pandemic, Learner's perspective, Developing country, Medical education, Educational preparedness, satisfaction of learner,

INTRODUCTION

COVID 19 pandemic hit the world in December 2019 in Wuhan province of china and started spreading across the globe rapidly in early 2020(Adao and Guzik 2020 ; Baloch, Baloch et al. 2020). Uncertainty of its lethality, fear of airborne spread to larger masses and unavailability of any specific treatment lead to forced closure of all kind of social activities in the countries including educational institutions(Harsha and Bai 2020; Mishra, Gupta et al. 2020; Onyeaka, Anumudu et al. 2021). Government of Pakistan imposed complete lock down on 15th march 2020. Schools and colleges were also closed due to fear of transmission of disease among peers. Due to unexpected future in this uncertain condition, many schools and colleges gradually started online teaching sessions to avoid wastage of student's academic year. These sessions were new for most of students, parents as well as teachers. They were experiencing it without any prior experience in an unavoidable situation. It lead to many issues which were never faced before including shortage of gadgets for every children at home, absence of high speed internet specially in smaller cities of the country, unacquaintance with video conferencing softwares both for teachers and learners. Teachers being not trained to deliver effective lectures on line also added to the difficulty. Most of these difficulties were due to lack of preparedness for such an activity.

Medical colleges also faced similar difficulties when the online studies were resumed after lockdown. The time wasted during getting familiar with softwares and gadgets costed medical students in terms of their academic time. The difficulties were never measured and adjusted into grades of students. Before the crisis, it has been suggested in a systematic review that online learning is equivalent to traditional teaching in terms of knowledge, skills gained and student satisfaction(Sinclair, Kable et al. 2016). But during crisis, student's feedback was different from this. So we designed a cross sectional study to see perception of learners on evaluating online teaching quality and to highlight areas which can be improved upon on the end of teachers, teaching material and mode of learning.

MATERIAL AND METHODS

It was a cross sectional study conducted at HITEC-IMS dental college. Permission was taken from ethical review committee before conduction of study. Questionnaire was sent electronically to the undergraduate students of BDS of the college through Google Forms who had attended online classes during the COVID 19 lock down on 10th February 2022. Responses received within 1 month of distribution of survey (upto 10th march 2022) were recorded and included in the study. Data was managed using Microsoft Excel. Categorical data was described with frequencies and percentages wherever required.

HITEC-IMS dental college is a private dental college established in year 2019 with permission to admit 50 BDS students each year. It is located in city of Taxila, District Rawalpindi, Punjab Pakistan. After COVID-19 pandemic lockdown in the country amid to first wave, the college was closed in the start of April 2020 and after 2 weeks online classes were started in 3rd week of April 2020 till 2nd week of July 2020. During this period of 3 months lectures were taken online by the faculty with possibility of live chat and/or communication with the participants. Subsequently during every wave of COVID-19 as per recommendations of government, whenever the on campus sessions were put to hold, lectures were switched to online mode.

RESULTS

Out of 150 students who received questionnaire, 102 responses were received (response rate 68%). 52% responders were from 3rd year BDS and 40% were from 4th year BDS. 76% students never had any experience of online classes before this. 85% of students thought that it was a good idea in the time of lock down to start online sessions to avoid wastage of academic time. 60% responders said that their attendance was high in online sessions than in on campus sessions.

44% responders thought that interaction with teacher was easier in online class than in a face to face session. 55.5% students thought that online sessions were not as interactive as classroom sessions. Every other student (50%) thought that

teachers were unable to maintain the quality of lecture as they would have in on campus sessions.

In order to figure out the factors affecting quality of teaching during online classes, 96% of students had appropriate electronic gadgets required for the sessions. 60% students faced connectivity issues or issues related to speed of internet. The problems in audio/ video of teacher were also a source of distraction during online lecture according to 30% of the responders. Though 80% of students thought that their time and money was saved due to no need of transportation during online sessions but 69% students described home environment as a source of distraction for them during lectures. And 67.3% responders had sense of isolation during the online sessions. 100% of responders believed that it was a good idea to record the online session for review by students later on. 80% of responders said that quality of these lectures can be improved by sharing link of prerecorded lectures to the students rather than having online sessions for most of the topics. 73% responders also believed that training is needed both for faculty as well as students to get maximum output from online sessions. 90% of responders said that they would like a remedial on campus session for the topics covered in online sessions if possible. 83% of responders preferred on campus sessions over online classes but 66% of students were of the opinion that online sessions must be a permanent part of educational strategies in medical education.

DISCUSSION

The purpose of this study was to highlight the difficulties faced by the students in online sessions and to document areas of improvement in these sessions. Though most of the responders appreciated timely conversion of educational activity to online sessions during pandemic crisis, but they were not happy with the overall quality of education during these lectures. This finding was consistent with the study previously done by SH Li et al (Li, Sandler et al. 2017). The students thought that sharing link of prerecorded lectures could have been equally good if not better option than the online lectures. This finding was also noted by and recommended by M Islam et al. and Le K et al. (Islam, Kim et al. 2020; Le 2022). They also wanted remedial classes to revise these topics for better understanding. Virtual class room had more sources of distraction probably because of environment of home, problems in audiovisual equipment of teacher/learners, connectivity issues, connectivity issues and absence of teacher in front of the learner. Most of the teachers who were used to in classroom teaching had significant issues in online teaching and needed training to maintain quality of lecture delivered but it lacked at the time of pandemic in 2020. Hence the quality of online lectures can now be improved by training teachers to deliver online lectures and continuing these sessions even after pandemic (Mahmood 2021). Video resource library can have permanent addition of the pre recorded lectures on basic topics especially when we are focusing more onto the integrated curriculum with more attention towards clinical aspect of the subjects (Verma, Verma et al. 2020). It is the job of internet service providers to improve internet speed and resolve connectivity

issues in rural areas in order to smoothen online learning during the next waves of any pandemic like this.

The limitations of the study were single institution based study with less number of respondents. Institutional biases could have affected results because of only single type of exposure which can affect generalizability of study. This limitation can be overcome by doing a multi institutional study and then comparing results of different institutions and then finding out the approach which best suited the learners. In next studies, the learning experience should also be correlated with the area of learner where he received lectures as well as internet service speed in that area.

CONCLUSION

To conclude the results of our study, we did not deliver best possible teaching during the COVID pandemic due to not being prepared for it. Now it is the job of educationists to train teachers for future so that these compromises are not repeated again. Also we have discovered a great way of teaching which can be used as a routine teaching method in student based integrated teaching style. More studies are needed to find out the areas which need improvements.

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