

ONLINE CLASSES IN DIFFERENT INSTITUTES OF PAKISTAN DURING CORONAVIRUS PANDEMIC; MERITS AND DEMERITS

QASIM MEHMOOD¹, USMAN JAVED SAHI¹, RANA RAKHSHAN AFTAB², RANA KHURRAM AFTAB³, FARHAT IJAZ⁴, AVAIS AHMAD⁵

¹King Edward Medical University, ²Rashid Latif Medical College, ³Punjab Institute of Cardiology, Lahore, ⁴CMH Lahore Medical College & Institute of Dentistry (NUMS), Lahore, ⁵Continental Medical College, Lahore

ABSTRACT

Background: Responding to the challenges of corona pandemic, e-learning is increasingly being used in different institutes of Pakistan so that the students can have access to education from their homes. Despite all the efforts, students and teachers are still in the process of getting used to the new technology. So, there is a need to address this issue faced by students and faculty to cope with the online system of education.

Objective: To assess the effectiveness of online classes in Pakistani students.

Methods: Cross sectional research design was followed and a self-reported survey method for data collection was employed. Students all over the Pakistan were included in the survey. Data were presented in frequencies and percentages.

Results: Total 205 students participated in the online survey and recorded their response. 70% students were from urban setup, 61% students were attending proper online lectures, 65% were facing connectivity issues and 64% students weren't satisfied with e-learning.

Conclusion: The study shows that although modern technology in education has brought revolutionary changes, yet it has to accomplish more achievements to fully replace the conventional method of learning.

Keywords: COVID-19, E-learning, Merits and demerits, Distant learning.

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Correspondence to: Farhat Ijaz, MPhil.
Department of Physiology, CMH Lahore Medical College & Institute of Dentistry, Lahore, Pakistan.

Email: farhat_khurram_rana@cmhlahore.edu.pk

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INTRODUCTION

Severe Acute Respiratory Syndrome Corona Virus 2 (SARS-CoV-2) is the cause of Coronavirus Disease of 2019 (COVID-19) outbreak that originated in Hubei, a province of China in December 2019 and now entire world is suffering from this pandemic.¹ COVID-19 pandemic has brought numerous challenges for both Federal and Provincial Governments to prevent the outbreak from snowballing further and to lessen its adverse effects on various social and economic sectors.

One major challenge is to maintain continuity of educational process at various institutions all across the country.²

Responding to this challenge of corona pandemic and other growing challenges, e-learning is increasingly being used for broad range of professional trainings and educational initiatives in healthcare and other fields both at undergraduate and postgraduate levels. So that the students can have access to education through their homes in lockdown.³⁻⁵ This whole exercise of induction of e-learning has tested the preparedness of colleges and universities all across Pakistan to deal with a crisis that requires help of advanced technology. Many institutions have shown interest in acquiring and designing the best online platform to deliver education in the best possible way to their students. Microsoft teams, Google meet, Google classroom, Zoom, Edmodo and Moodle etc. are currently used as learning management systems (LMS) in Pakistan.^{3,6-8}

Many higher educational institutes all across the country are adopting e-learning during this lockdown as an extension of previously designed and introduced project of transforming learning procedures from conventional to a modern one with maximum student exposure, reduced faculty and better learning environment.⁹ The paradigm shift from face to face interactive environment to virtual learning is not merely a straight transition but also involves use of various advanced technologies. There is also a need to train faculty regarding online education to induce this new system at institution level.¹⁰

There are demerits associated with the use of e-learning also; and still both teachers and students are in the process of getting used to the new technology. That's why it is essential to find out what students think about this system and how Information and Communication Technology (ICT) has influenced their learning abilities.¹¹⁻¹² There is a need to address the issues faced by students and faculty to cope with falling education standards that may be one of the consequences. So, it is necessary to assess the effectiveness of ICT induction in our education system regarding teaching and learning outcomes and therefore to devise ways to eliminate errors in this system¹³. So the objective of current study was to assess the effectiveness of online classes in Pakistani students.

METHODS

Cross-sectional research design was followed and a self-reported survey method for data collection was employed. Non-probability convenient sampling was done. Sample size was calculated to be 205 with a confidence interval of 95% and an error margin of 5%. Keeping in view the present research objectives, an online survey questionnaire was developed. The questionnaire consisted of questions related to their online classes, connectivity problems faced by the students and their satisfaction status towards online education. With basic information regarding the objectives of the survey, the questionnaire was sent through email and it was also shared with the targeted population on WhatsApp and Messenger. Two hundred and five students (148 males and 57 females) participated in an online survey and recorded their responses from different regions of Pakistan. Data were presented in frequencies and percentages.

RESULTS

This descriptive study was conducted on students of different educational institutes of Pakistan. Table I summarizes the results of this survey. Information regarding demography, online classes and attitude of

students regarding it is recorded and summarized in the form of frequency and percentages.

Table I: Summary of the results of cross-sectional survey on online learning (Pakistan)

Item	Frequency (Percentage)
Gender	
Male	148 (72.2%)
Female	57 (27.8%)
Age	
18-20 years	67 (32%)
20-22 years	90 (43%)
Above 22 years	14 (6.8%)
Residence	
Urban	144 (70.24%)
Rural	61 (29.76%)
Study Discipline	
Medical Students	109 (53.17%)
Engineering Students	30 (14.63%)
Pharm-D Students	18 (8.78%)
DVM Students	6 (2.93%)
Intermediate Students	26 (12.68%)
Others	16 (7.8%)
Online Classes Status	
Attending	189 (92.2%)
Not attending	16 (7.8%)
Format of the Online Classes	
Online Lecture (Zoom, MS Team etc.)	126 (61%)
Recorded video Lectures	49 (24%)
MS PowerPoint Slides	30 (15%)
Connectivity Issue	133 (64.88%)
Present	72 (35.12%)
Not present	
Online assignments	182 (88.88%)
Given	23 (11.22%)
Not Given	
Student's Satisfaction	57 (27.8%)
Satisfied	132 (64%)
Not satisfied	16 (7.8%)
Partially satisfied	

DISCUSSION

COVID-19 has affected every sector of the society especially the education sector. The study is based on exploring the perception of students across various institutions of Pakistan regarding impact of online education on their learning abilities and its merits and demerits.

Two hundred and five girls and boys (148 boys and 57 girls) participated in this online survey and recorded their responses from different regions of

Pakistan. Many of them were medical students, some were engineering students and some were Pharm D students. DVM and intermediate students also recorded their response. Remaining students were from miscellaneous disciplines. Almost 70% students were from urban setup. Most of the students were in the age range of 20 to 22 years. Almost 65% students were facing connectivity issues during their online class and most of the students were not satisfied with the current system of online education.

Opinions of students were also recorded regarding online education. Some were satisfied with this online system of education. Some considered it totally useless. Some requested the authorities to give them a break till this pandemic ends and resume classes after that. Some said educational institutes should be re-opened. Students only having slides uploaded, demanded video lectures. Other students were not interested in giving an opinion about this current system of education.

Based upon the results of this survey, we deduce following merits and demerits of online learning system in Pakistan.

MERITS OF ONLINE EDUCATION

Online Education has revolutionized the method of learning and education particularly during corona lockdown. This mode of learning has many bright sides

- Online system of education has ensured the process of learning to be continued even during the hardest times of lockdown and curfew. Students from their homes can have access to basic stuff concerning their primary, secondary, higher secondary and even professional education both at bachelor's and master's level.
- The faculty load is reduced in online education as a single teacher can deliver lecture to many students at the same time. As recording facility is available, he has not to deliver lecture again and again thus saving time.
- Online education is way more economical; as students don't have to use transport facility daily and rents of school buildings, electricity bills and security dues are reduced. Thus, total tuition fee is reduced for students.
- E-learning also provides an increased student-instructor time which cannot be possible in a physical setting of classroom. A student can leave a question whenever it is raised in his mind and the teacher can respond to it whenever he finds time.
- In online education, entire lecture can be rewound and watched if missed hence making this format a more productive one.

- Online learning is way more flexible as classes can be held at most feasible times. Students can join the class when it is feasible for them. Also, assignments can be submitted in a well elaborated manner on this platform.

DEMERITS OF ONLINE EDUCATION

Despite its numerous benefits, induction of online education also poses serious issues

- Connectivity problem is the major issue faced by students in various cities of Pakistan particularly the distant districts of Baluchistan, Sothern Punjab and tribal areas of FATA.
- Online education lacks a direct communication between students and instructor, thus making the process of learning a difficult one.
- Practical work is not possible in online system of education and lack of practical work results in falling professional skills at college and university level. Engineering students who lack workshops and undergraduate medical students lacking clinical rotations are most badly affected.
- Assessment of students online is also very difficult as students have multiple ways to cheat and there is no way of supervision.
- Online teaching is limited only to certain disciplines. The fields which are more of a practical nature rather than being theoretical or computer based cannot be studied and learned in the best way through e-learning.
- Just like connectivity issues, another impediment to access e-learning is lack of gadgets. Students belonging to lower class or lower middle class don't have the facility of having their own laptops, computers, tablets or smartphones. So, they are unable to acquire knowledge online.
- Online education cannot be judged and assessed and there is no quality assurance system as there is no such credible way to assess an instructor delivering online lecture.
- Strain on the eyes and poor health is also an important issue related to e-learning as students have to keep their eyes focused for a long time on LCD, LED or Monitor screens of gadgets. Eyes get strained and there is increased incidence of eye related health issues making e-learning not a good way of teaching.

CONCLUSION

The study conducted to assess the perception of online education among students mainly involved students between 18 to 22 years age group belonging to different

institutes of Pakistan. The data showed connectivity issue to be the major problem faced by students and majority of them were dissatisfied with the online system of education. The study has clearly shown us that although modern technology in the area of education has brought revolutionary changes, yet it has to accomplish more achievements to fully replace the conventional method of learning involving face to face interactions and physical presence. The massive dissatisfaction among students also showed that online education couldn't achieve the requirements of professional education and hence couldn't replace conventional method of teaching. Hence there is a dire need to bring innovations in e-learning and to mold it according to the needs of the students. During current scenario, this online system of education should be shrunk and when in future lockdown will be over, students should be compensated for educational loss by conducting make-up classes and substitute sessions. And for future induction, the system of online education needs further technological advancements and modifications taking students, teachers and other stakeholders into consideration. Moreover, connectivity issue also needs special consideration. Government should invest in this field, so that far-off places of Pakistan can have access to this basic right of internet facility.

ETHICAL APPROVAL:

The study was approved by the Ethical Review Committee of CMH Lahore Medical & Institute of Dentistry, Lahore, Pakistan. Vide IRB Reference No. 53 /ERC/CMHLMC Dated: May 21, 2020.

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AUTHORS' CONTRIBUTION:

QM, UJS, RRA: Literature search, study design concept, questionnaire design, data collection, data analysis,

RKA: Data analysis, data interpretation, drafting

FI: Drafting, revision, final approval

AA: Drafting, revision