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PERCEPTIONS OF E-LEARNING AMONG STUDENTS OF A MEDICAL UNIVERSITY: A QUESTIONNAIRE BASED STUDY

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ABSTRACT

Objective: To assess the perceptions of medical students regarding online education.

Methodology: This cross-sectional research was carried out among medical and dental undergraduate students from Liaquat University of Medical & Health Sciences (LUMHS) Jamshoro. The data was collected using the Google online questionnaire from the students meeting the criteria. Data was analysed in SPSS V. 23.0.

Results: Out of a total of 328 participants, 44% were male and 56% were female. MBBS students were 55% and BDS were 45%.48% of the students selected 40 minutes of duration of each online class. Laptops were the most commonly used (45%) gadget by the students in online methodology. Majority of respondents 65% were unsatisfied of acquiring online teaching. Students have got disturbance of electricity as 50% at their homes, and have faced problem of internet connectivity as 62%.

Conclusion: Majority of students were unsatisfied of acquiring online teaching. They were facing internet issues and electricity problem however online examination was accepted as fine method during pandemic

Key words: Pandemic, face to face learning, perception, virtual learning

Introduction

Every medical school in the country is now required to switch to web-based instruction, or essentially online learning[1]. All higher education institutions were closed worldwide during the COVID-19 pandemic. Because of the severity of the COVID-19 epidemic, governments and institutions have implemented strict policies on continuing education. In order to contain and avoid the COVID-19 pandemic, postponement of instruction was implemented in all universities worldwide[1, 2].

Staff development, assessment techniques, and technology components need to be carefully thought out and standardized for e-learning to be successful. Education is unavoidably one of the professions that have demanded social distance. Due to the decreased social contact among kids, school closures have been found to stop the spread of influenza outbreaks[3, 4].

The infection has an impact on medical education. It was discovered recently that traditional face-to-face classroom instruction for undergraduate and graduate students has been stopped almost everywhere in the world.[4, 5].

Medical and dental practitioners are more likely to contract the virus due to their frequent contact with patients face-to-face and exposure to bodily fluids such as blood and saliva[1, 5-7]. This risk is increased in cases where patients are asymptomatic or just moderately ill. As a result, a large number of academics worldwide quickly embraced virtual modalities. Excellent remote courses have been offered by faculty and staff from their homes. Despite the fact that taking classes online is thought to increase students' safety, attitudes and impressions of these courses may not be as positive as one might think[6–10]. Increased knowledge and awareness of the illness are also necessary to stop the virus from spreading.

Technology was widely used for both teaching and learning during the crisis. During the pandemic period, power point lecture recorders, online education platforms, video meeting software, and other resources were utilized for online classes[7, 11].

This study aims to investigate how dentistry and medical students see the online learning environment that higher education institutions put in place during COVID-19.

Materials and Methods

The research was carried out with undergraduate students at LUMHS Jamshoro. The sample size determination was made through the use of Raosoft sample size calculator. In light of the limited research available on this topic, it was assumed that 50% of students had specific viewpoints on medical education. This led to a final sample size of 328. The method of selection was non – random convenience sampling, focusing on students enrolled in MBBS and BDS programs. Students from Physiotherapy and Pharmacy disciplines were not included in this study.

Following authorization from the Research Ethics Committee, data collection was executed through a Google online survey, targeting students who met the inclusion criteria. Prior to participation,

each student provided written informed consent. For data analysis, SPSS version 23.0 for Windows was utilized. The analysis included calculating frequencies and percentages for categorical variables, and means and standard deviations for continuous variables. To identify any statistical differences between the study variables, the Chi-square test was employed. A p-value of 0.05 or less was considered as statistically significant.

Table-1 Demographic Information of Students

Variable	Frequency	Percentage
Age Groups		
18-20	128	39.02
21-22	152	46.34
23-24	48	14.64
Gender		
Male	145	44.20
Female	183	55.80
Discipline		
MBBS	182	55.48
BDS	146	44.52
Total	328	

Results

Demographic data of the participants is summarized in Table 1. Out of 328 participants, male and female were 44% and 56% respectively, with ages between 18 and 24 years. By discipline, MBBS were 55% and BDS were 45%.

In Table 2 there is a description of the perceptions about E-teaching; 48% of the students selected 40 minutes of duration of each online class. Laptops were the most commonly used (45%) gadget by the students in online methodology. Majority of respondents 65% were unsatisfied of acquiring online teaching. Students have used Zoom method of getting online education, while regarding online examination it was accepted fine method during pandemic. Educators of the university were highly trained (75%) in online learning management system.

Students have got disturbance of electricity as 50% at their homes, and have faced problem of internet connectivity as 62% .while have easy access of internet facility as 71%.

Discussion

The global educational system has been impacted by the current pandemic. This has prompted the educational curriculum to be planned in all the important areas. In Pakistan, foundations have been using accessible workspaces to remain up to date with the curriculum[12]. This paper planned to concentrate on the view of understudies on the electronic teaching growing experience during the COVID-19 lockdown.

In this online study females outnumbered the male which is in agreement with the findings of Ibrahim NK et al[13]. The observed result could be attributed to the tendency of women to excel in communication, engage more actively in social activities, and potentially show a higher level of satisfaction with online classes.

In this study majority of students were using laptops for online lectures which is not in agreement with the study results of Abbasi S et al[14] where they has indicated that majority of participants were using phone accessories and

Table-2 Perceptions about E-Learning

Question	Responses	(%)
What should be time period for each online class?		
30 minutes	80	24.39
40 minutes	157	47.86
50 minutes	42	12.80
60 minutes	49	14.95
Which type of tool you are using during attending online classes?		
Mobile	85	25.91
Laptop	148	45.12
Desktop	83	25.30
Tablet	12	3.67
What is your opinion regarding online examination?		
Acceptable	79	24.08
Not acceptable	145	44.20
Excellent	72	21.95
Good	32	9.77
Are you agreed with teaching skills of your educators during online classes?		
Yes	246	75
No	82	25
Do you feel comfortable with all this technology-based education?		
Agree	135	41.15
Disagree	193	58.85
What is your mode of online learning?		
Google class room	83	25.30
Webinar	66	20.12
Zoom	143	43.59
Mix of all these	36	10.99
Are you agreed with this method of digital education?		
Agree	112	34.14
Disagree	216	65.86
Have you got electricity disturbance at your home?		
Yes	165	50.30
No	67	20.42
Sometimes	96	29.28
Do you have easy access of internet?		
Yes	235	71.64
No	93	28.36

gadgets for the purpose of e-learning. Contrasting with our results, mobile devices have emerged as the preferred choice for e-learning among students, surpassing the popularity of tablets and laptops[15].

In his study when asked for feeling comfortable with technology based learning majority of students responded as disagree however another study conducted in Pakistan responded for satisfied with face to face learning.

The outcomes of this research align with those found by Murphy et al[16] where, in both studies, mobile devices were the secondary preferences for e-learning, following laptops. Zoom platform was preferred by majority of participants for the purpose of e-learning in our which is in agreement with the findings of the Ibrahim NK, et al[13] this could be due to the easiness to use. Concerning the teaching capabilities of educators, the majority of students concurred that proficiency in e-learning skills is a crucial factor for effective learning.

Half of the students responded for electricity and internet problems during online lecture. Such results aligns with the observations made by Jowsey et al[17], who noted that obstacles such as insufficient infrastructure, poor internet connectivity, and limited computer literacy were impeding effective learning; however online examination was accepted as fine method during pandemic this could be due to the fact of time saving and progress of their future career

Conclusion

The current findings lead to the conclusion that students are not fully prepared for e-learning at this time. Students faced a few interrelated boundaries as they attempted to adjust to online learning. They were not comfortable with virtual type of learning.

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