

Perceptions of Students Regarding Web Based/E-Learning during COVID-19 at Nursing College Lahore, Pakistan

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Abstract

Background: In numerous aspects of our lives today, including education, the implementation of information technology is proliferating. A fundamental part of today's education is e-learning. The term used to describe all learning that has an electronic dimension to it is e-learning or electronic learning. E-learning is an innovative approach to the delivery of a well-designed, learner-centered, interactive and facilitated learning environment, as nursing educators are becoming well aware of the fact these days.

Objectives: The objective of this study was to determine the perceptions of students regarding web based/e-learning during COVID-19 at nursing college Lahore, Pakistan

Methods: A cross sectional study survey was conducted at Shalamar Nursing College. Purposive sampling Technique was used. The survey was conducted during the month of June 2020 to September 2020. All Nursing students both (GBSN and Post RN) who taken online classes at Shalamar Nursing College Lahore were included in this study. An online survey Method was used to gather data. Questionnaire was grouped into 7 categories such as Demographical Information, Perceived Usefulness, Intention to Adopt, Ease of Learning, Technical Support, E Learning Stressor, and Pressure to Use. Pilot test was also run on 10 participants to check validity and reliability. Data was analyzed through SPSS 20.0. Frequency distribution and graphs was made.

Results: A total of 262 GBSN and Post RN students participated in the study of which 241 students were females (92%) and 21 were males (8%). Mostly students 234(89.3%) had used mobile phone for Web/E-learning. Students which were 129(49.2%) agree that E-learning should be adopted to allow married students to balance family and Study demands. On the other hand 92(31.5%) had agree that E-learning will never replace other form of teaching and learning. Meanwhile 148(56.5%) strongly agree that slow internet during E-Learning caused stress.

Conclusion: This study shows that the students are recognize importance and uses of E-Learning in Nursing Education but still are not ready to adopt E-learning due to social isolation. Majority of the students support e-learning is less time consuming, easy to use and cost friendly. However they consider the slow internet during E-Learning caused stress and E-learning will never replace other form of teaching and learning. Although online

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learning is proving beneficial for students' and faculty's health amid COVID-19 pandemic, however, it is not always as effective as conventional/traditional learning.

Keywords:

E-learning; Web based learning; Distance learning; ICT; Perception; HEC; COVID-19; SARS-CoV; Nursing students

Introduction

In various facets of our lives today, including education, the introduction of information technology is proliferating. E-learning is a fundamental aspect of education today. The world of work is being profoundly influenced by the COVID-19 pandemic worldwide. It is not just the wellbeing of millions of people at risk; their long-term livelihoods and stability are also at stake. The Coronavirus (COVID-19) pandemic has introduced major difficulties to various forms and stages of learning over the past weeks. In response to COVID-19, on 13 March 2020, the Pakistani authorities closed all educational and learning institutions across the region. The Higher Education Commission (HEC) provided mandates to higher education institutions to start planning for Distance Learning (DL) modes, reschedule the ongoing examinations and regularly assist their students online until the COVID19 crisis remains unchanged, as per the orders issued by the National Legislature of Pakistan.

The word used to represent all learning that has an electronic component to it is e-learning or electronic learning. The concept for learning methods by ICT is E-Learning or Electronic Learning. E-learning is a mixture of learning, ICT, and the internet [1]. E-learning is a complex and mutual experience. E-Learning links different students, experts, skilled colleagues, peers both inside and outside the company. E-learning is detailed e-learning that enables the e-learner to choose a learning technique.

Despite the wide-ranging adoption of e-learning worldwide, most institutions never considered it as part of formal education in Pakistan until the recent spread of COVID-19.

E-Learning is highly appreciated by learners, so it is promoted as a teaching tool by various universities around the world. There are different purposes behind its acceptability; few of them are especially important for learners, such as accessibility and better environmental control and convenience for usage. Despite its myriad benefits, however there are relatively few e-learning constraints, such as communication problems, social isolation and lack of student teacher interaction etc.

When traditional education operations were suspended, this was not the first time. SARS coronavirus (SARS-CoV) has also adversely affected a significant number of countries around the world's conventional education activities and not only SARS-CoV but H1N1 flu outbreaks have also adversely affected educational activities in 2009. In the same way, COVID-19 constrained academic professionals to reconsider

the traditional way of learning and began to make distance learning allowances as a viable alternative way to fill the vacuum of the classroom for a span of three to four months, thus reducing the risk of infection for students before conventional and normal educational activities are resumed.

Despite the fact that conventional lectures have often been carried out in nursing education, with the benefit of providing a large number of nurses with various kinds of knowledge. E-learning is a creative approach to the delivery of a well-designed, learner-centered, engaging and facilitated learning environment, as nursing educators are now becoming well aware of the fact that nursing educators. The value of continuing professional growth and lifelong learning within the nursing profession is justified by the evolving role of nurses and the requirements of the registration bodies [2]. For both students and instructors, the exponential growth and advancement of online courses around the world has changed the learning landscape. In their learning practices, teachers, faculty, employees and administrators use technology extensively. The objective of this study was to determine the perceptions of students regarding web based/e-learning during COVID-19 at nursing college Lahore, Pakistan.

Materials and Methods

Study Design

An observational descriptive cross sectional study was conducted at Nursing College.

Study area

The study area for this study was Lahore. A study was carried out in a Shalamar Nursing College affiliated with University of Health Sciences, Lahore.

Study duration

This study was conducted during the month of June 2020 to September 2020.

Target population

All Nursing students who had taken online classes at Shalamar Nursing College Lahore.

Sample size

The Purposive sampling technique was adopted and 291 students were selected.

Inclusion criteria

All Nursing students both (GBSN and Post RN) who taken online classes at Shalamar Nursing College Lahore were included in this study.

Exclusion criteria

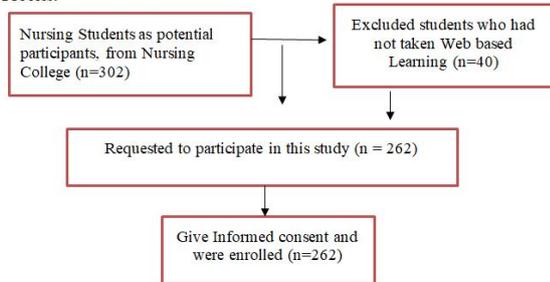
Students with any physical disabilities such as deafness and dumbness with a history of ongoing mental illness / retardation were excluded from the study.

Similarly the Students who refused / not willing to participate were also excluded.

Approval of ethical committee

Prior to the study approval was sought from the competent authority of the College. Informed consent was taken from all study participants in written form. All ethical rights and safety of patients was taken care of.

Sampling Process:



Data collection

An online survey method was used to gather data about the perceptions of students regarding web based/e-learning during COVID-19 at nursing college Lahore, Pakistan. A self-administered questionnaire was developed through literature search. It had 37 items all together. The scale was based on 5-point Likert scale: 1- strongly disagree, 2- disagree, 3- Somewhat agree 4-agree, 5- strongly agree. For further understanding of the data, 37 items of the questionnaire were grouped into 7 categories such as Demographical Information, Perceived Usefulness, and Intention to Adopt, Ease of Learning, Technical Support, E Learning Stressor, and Pressure to Use. Pilot test was also run on 10 participants to check validity and reliability.

Statistical design

Data was analyzed through SPSS 20.0. Frequency distribution and graphs were made by using Excel Software.

Results

A total of 262 GBSN and Post RN students participated in the study. The demographics of the participants along with the choice of gadgets used for their e-learning as shown in (Tables 1 and 2, Figures 2-5).

Table 1: Demographics and choice of gadgets used for e-Learning.

	Frequency	Percentage%
Gender		
Male	21	0.08
Female	241	0.92
Education Level		
GBSN 1st Year	71	0.271
GBSN 2nd Year	59	0.225
GBSN 3rd Year	50	0.191
GBSN 4th Year	36	0.137
Post RN 1st Year	34	0.13
Post RN 2nd Year	12	0.046
Study of online education in a week		
20 Hrs. /week	111	0.424
25 Hrs./week	151	0.576
Gadget/Device used for Web based/E-learning		
Mobile	234	0.893
Laptop	24	0.092

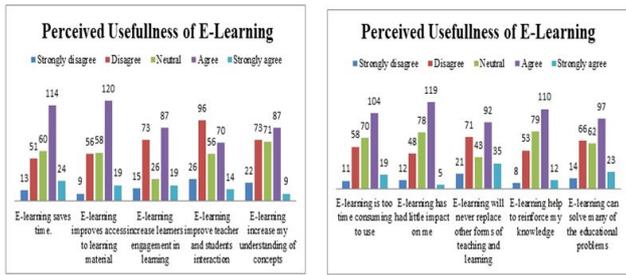


Figure 2: Perceived Usefulness of E-Learning.

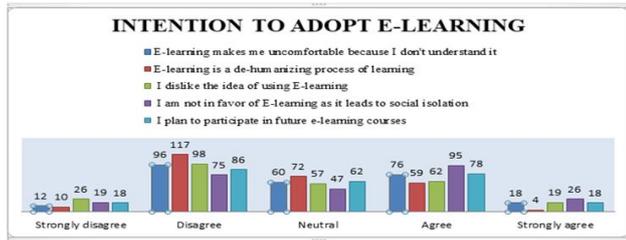


Figure 3: Intention to adopt E-Learning.

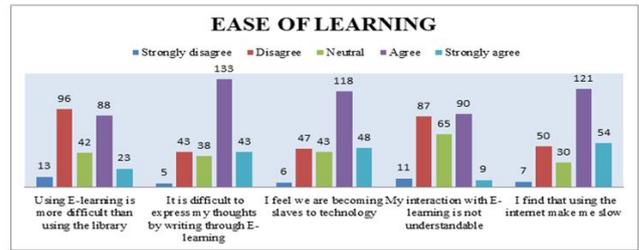


Figure 4: Ease of Learning.

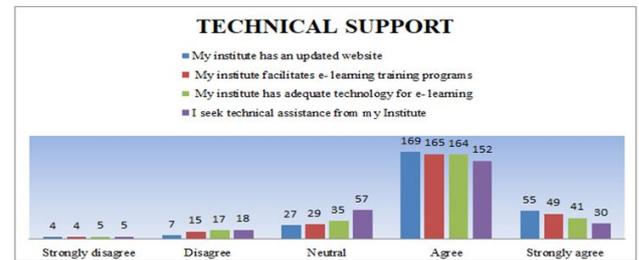


Figure 5: Technical Support.

Table 2: E-Learning Stressors.

I feel anxious about my ability to use e learning effectively	4(1.5%)	70(26.7%)	66(25.2%)	109(41.6%)	13(5%)
Slow internet connections	3(1.1%)	6(2.3%)	16(6.1%)	89(34%)	148(56.5%)
stress me					
I feel pressured by my teachers to use E-learning for learning activities	11(4.2%)	92(35.1%)	75(28.6%)	69(26.3%)	15(5.7%)
I feel pressured by my peers to use E-learning	8(3.1%)	101(38.5%)	76(29%)	61(23.3%)	16(6.1%)
Category-07: E-Distant Use of E- Learning					
E-learning should be offered fully online to reach students living in remote areas	4(1.5%)	31(11.8%)	54(20.6%)	134(51.1%)	39(14.9%)
E-learning should be used to reduce travel related stress	0(0.0%)	26(9.9%)	45(17.2%)	128(48.9%)	62(23.7%)
E-learning should be adopted to allow married students to balance family and Study demands	2(0.8%)	16(6.1%)	45(17.2%)	129(49.2%)	70(26.7%)
E-learning should be adopted to allow working students to study from home	6(2.3%)	12(4.6%)	34(13%)	140(53.4%)	70(26.7%)

Discussion

E-learning is one of the learning methodologies that have increased strong prominence among the nursing educationist [3]. Our study measures the attitudes of the Nursing students about E-learning on a five point Likert scale, addressing six main factors i.e. Perceived usefulness, intention to adopt, ease of learning, technical support, e-learning stressor and pressure to use e-learning

The strength of our study is that this is the first study conducted in the state with focus on e-learning in nursing education. From this study, it is remarkable evidence that the nursing students consider e-learning to be very worthwhile in some aspects.

For e-learning, mobile has become one of the most popular devices among students compared to laptops. In one of the studies on university students, it was found that 66 percent use e-learning mobile devices, which is very close to our research that shows that 89.3 percent of students have mobile devices of choice [4]. A study conducted in Pakistan by medical students reported that 75.7% used mobile phones for e-learning. A study conducted in Spain found that students preferred mobile for their learning because it was much simpler for student-teacher interaction through mobile compared to other devices.

In our study, 97(37%) of the nursing students agree that e-learning can solve many problems of nursing education, Which is similar to a study conducted in two nursing institutes of North Batinah region Oman where 95% of the nursing students agree that they perceive e-learning as very useful.

Eighty six (62.8%) disagree to plan and attend future e-learning courses. A study from Oman shows that majority of the students had ready for using e-learning. This is in contradictory to our study. In our study majority of the nursing students have no difficulty in learning, gaining information and writing through technology? This may be due to the fact that overall population is technology friendly and used to using smartphones, computers and internet. Our study results are similar with a study conducted among nursing students of oman.

Distant learning can be used in situation arising from stress of living in remote areas with long distance from home to the learning institute 129 (49.2%) of the nursing students agree that online education should be offered so that students can learn from home avoiding travel related stress and can continue studies after marriage. Our study results are similar with a study conducted among nursing students of oman. Students have positive perceptions about using e-learning technologies but they never prefer E-learning in future as a substitute of traditional learning [5].

Limitations

One of the limitations of the study is that sample population has been drawn from a single nursing college. Therefore, results of the study cannot be generalized.

As the results are only based on students' perspectives, the addition, faculty opinions in future studies might help in understating the issues faced by faculty regarding online education.

Recommendations

The recommendation of the study is to further discover factors prompting student's perceptions towards e-learning.

For effective and fruitful results from online program, students must not only know how to cope up with the fast-paced online classes but they also need to have a sound computer and technological skills to learn from online lectures.

It is also recommended to explore the perceptions of Faculties regarding their experience towards e-teaching during COVID-19.

Conclusion

This study shows that the students are recognize significance and uses of E-Learning in Nursing education but still are not ready to adopt E-learning due to social isolation. Students have also the outcome of the study shows that students support e-learning is less time consuming, easy to use and cost friendly. Although online learning is proving helpful in safeguarding students' and faculty's health amid COVID-19 pandemic, however, it is not as effective as conventional/traditional learning.

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