



PERCEIVED SATISFACTION AND CHALLENGES AMONG NURSING STUDENTS REGARDING ONLINE EDUCATION AMID COVID-19 PANDEMIC.

Nursing

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ABSTRACT

Background: COVID-19 has significantly impacted education, particularly in nursing and medicine. Lockdown caused educational institutions to close, creating a gap between students, teachers, and schools. To combat the distance, institutions often propose online teaching. During the pandemic crisis, online schooling was the sole option. A survey was undertaken to analyze student satisfaction and obstacles during lockdown. **Purpose:** The main aim of study is to assess the satisfaction level and challenges among nursing students regarding online teaching-learning activity during COVID-19 pandemic in Pune, Maharashtra. **Methodology:** A quantitative approach and cross sectional survey research design was used to assess the satisfaction and challenges perceived regarding online education during (COVID-19 pandemic) lockdown. Online self-structured questionnaire was used as a tool for data collection. 221 students consented to participate in the survey and purposive sampling technique was used. The tool comprised of three sections in which Section I associated with basic demographic profile of nursing students. Section II to assess the satisfaction regarding online learning activity 15 questions were evaluated on 4 point likert scale was used (4=strongly satisfied, 3= Satisfied, 2= Unsatisfied, 1= Strongly unsatisfied). In Section III Challenges on online teaching learning activity- 12 questions were asked to score on 4 point likert scale (4=Strongly satisfied, 3= Satisfied, 2= Unsatisfied, 1= Strongly unsatisfied). Also one open ended question was asked to list down the problems faced by students while experiencing online teaching learning activity. Descriptive data analysis was done with SPSS. **Results:** Among 221 nursing students 80% students were partially satisfied with online education. There was significant association observed in availability of high speed internet, access of internet connection and availability of privacy with high level of satisfaction as p-value was <0.05 level of significance. The participants faced many challenges, more than 50% (129) agreed that they were not interested to join online class even if they do not have any problem. 43.4% students agreed that online classes were boring and lack self-engagement. More than 60% students feel that they are not able to have good communication with teacher during online class. 45.7% students experienced neck pain and backache due to online class. Also 40.7% students had eye pain and headache after online classes. 67% nursing students feel that online class is like e-reading than e-learning due to lack of motivation. 46% students felt anxious because of disturbance in internet and electricity problem during online class. **Conclusion:** Online education is good opportunity to continue education during pandemic or when classroom learning is not possible. The findings of the study will help to give baseline information and help to solve the problems faced by students while conducting online classes to make the online educational system more effective.

KEYWORDS

satisfaction, challenges, online education, nursing students.

The global spread of the Covid-19 epidemic has forced people to maintain social distance. It has caused significant disruptions to the education sector, which is a key factor in determining a nation's economic destiny. 1. More than 90% of all students worldwide were impacted by it in mid-April 2020, but that number has since declined to around 67% in June 2020, according to UNESCO data. The COVID-19 pandemic has touched over 120 crore kids and young individuals worldwide¹

In order to stop the corona virus from spreading during the pandemic, the World Health Organization advised maintaining social distance. To stop the spread, educational institutions like colleges, universities, and medical science schools required to stay connected. As a result, the lockdown completely ruined every student's timetable. Despite being a unique scenario in educational history, COVID-19 has made it possible to transition from the traditional classroom model of instruction to a new digital era.²

In addition to having an effect on the families, instructors, and students, the institution closures have significant negative social and economic ramifications. UNESCO suggested employing open educational resources, such as software and platforms for distant learning, to help instructors and schools reach students remotely and minimize the disturbance to their education in the event of school closures.³

Many educational institutions were forced to switch to online learning due to the lockdown, canceling courses, exams, internships, and other programs. When the abrupt crisis that forced the suspension of school activities first occurred, both the teachers and students were rather confused and unsure of how to handle the issue. However, everyone later learned that the lockdown had imparted several lessons on how to deal with the onset of pandemics of this kind. As a result, COVID-19 has given educational institutions several possibilities and challenges to improve their infrastructure and technological proficiency¹

Despite the fact that online learning is expanding quickly worldwide, more and more applications of online learning are being utilized to augment conventional instruction in classrooms. There are more

students attending school to participate in regular classroom instruction under conventional education and teaching practices. But it is not feasible to use E-learning as a comfortable supplement to conventional schooling during the COVID-19 epidemic.⁴

Many universities have curtailed in-person academic activity because to the extremely contagious pandemic, since teachers and students might unintentionally spread the virus or themselves infected. As a result, the students lack the opportunity to acquire the clinical skills in real life. They are unable to participate in interactive patient sessions, case presentations, clinical and ward rounds, bedside instruction, health assessments, and hands-on training.⁵

Need Of The Study

Only 25% of Indians have access to the internet, and 66% of them live in rural regions.⁶ Students were staying with their relatives in remote locations with poor network access because of the lockdown. Online learning also requires a lot of data use and computer accessibility on smartphones.⁷ According to the World Economic Forum, students who lacked reliable equipment or internet connectivity found it difficult to engage in digital learning.⁸ Consequently, online learning platforms have lessened the financial burden on students during this COVID-19 pandemic circumstance when they need to complete their education.⁹

Practical training, clinical placements, and patient encounters later in the curriculum are critical components of skill acquisition in professional schools like nursing and medicine. However, given the potential for unintentional exposure to the new corona virus, the current state of affairs does not justify traditional in-person lectures, hands-on learning experiences, or clinical postings for the students.¹⁰

The COVID-19 pandemic's negative effects on higher education were felt in a number of ways, including Exams at various levels have been postponed, and classes have been canceled, hampering educational progress. Students lost over three months of the 2020–21 academic year as a result of the lockdown, which would worsen the situation with regard to educational continuity. Additionally, it demonstrated how unprepared some teachers and students are for online learning—that is, not all of them were ready for the abrupt switch from in-person to

online instruction. Without a specialized online learning platform, teachers simply provided lectures via video platforms like Zoom, Google Meet, etc. This may not constitute true online learning.¹ When educating and coaching at home, both teachers and students have difficulties. E-learning may be hampered in a developing nation like Nepal by socioeconomic, educational, and literacy gaps as well as technological issues.¹¹

E-learning resources are essential in this epidemic; they are designed to assist educators, colleges, and universities in facilitating student learning while institutions and schools are closed. Furthermore, the majority of these services are free, which can support ongoing education during the corona virus pandemic.¹²

Since online instruction was not a popular mode of instruction at colleges and universities before to the epidemic, the majority of professors had little to no experience with it.¹³

Hence the Researcher felt the need of conducting such research so as to identify the satisfaction levels and issues faced by students, so that the nursing educators will be prepared for online education.

Problem Statement

Perceived satisfaction and challenges among nursing students regarding online education amid COVID-19 pandemic.

Objectives:

1. To assess the level of satisfaction regarding online education among nursing students.
2. To find out the challenges regarding online education among nursing students.
3. To associate the level of satisfaction regarding online education of students with demographic variables

MATERIALS AND METHOD

The lockdown established in response to the ongoing COVID-19 epidemic in Pune, Maharashtra, India, resulted in undergraduate and postgraduate nursing students getting online education for their professional courses. This led to the conduct of a cross-sectional, observational research among these students. The purposive sampling strategy was used to administer the survey using online Google forms. 221 students took part in the poll. The study was carried out between October 20, 2020, and October 11, 2020.

The Institutional Ethics Committee granted ethical approval. Every participant gave their Electronic informed consent to take part in the study. Participants were assured for their anonymity and confidentiality.

In order to improve understanding and questionnaire arrangement, the tool's logical consistency, clarity, comprehensibility, and item chronology were evaluated during validation.

The questionnaire comprised of three sections in which Section I consisted of basic demographic details, Section II had the satisfaction with online teaching learning activity and Section III regarding challenges of online teaching learning activity. There were 15 questions in demographic profile, 13 questions associated with satisfaction of online teaching learning activity on 4 point likert scale (4=Strongly satisfied, 3= Satisfied, 2= Unsatisfied, 1= Strongly unsatisfied). In Section III Challenges on online teaching learning activity- 12 questions on 4 point likert scale (4=Strongly satisfied, 3= Satisfied, 2= Unsatisfied, 1= Strongly unsatisfied). Also one open ended question was asked to list down the problems faced by students while experiencing online teaching learning activity. Google forms were posted on whatsapp to the respective college teachers. They further shared the tool on whatsapp group. Later the student's response was noted in Google Excel sheet automatically. The received data was analyzed by using descriptive and inferential statistics by using SPSS version 22.0.

RESULTS

Table 1: Distribution Of Socio-demographic Profile Of Nursing Students (n=221)

Sr.No	Socio-demography	Frequency	Percentage
1	Age (Yrs)		
	<20	104	47.1
	21 – 30	108	48.8

	31 & above	9	4.1
2	Gender		
	Male	26	11.8
	Female	195	88.2
3	Course		
	Undergraduate	202	91.4
	Post graduate	19	8.6
4	Year of course		
	1 st year B Sc (N)	38	17.2
	2 nd year B Sc (N)	64	29.0
	3 rd year B Sc (N)	57	25.8
	4 th year B Sc (N)	46	20.8
	M Sc (N)	16	7.2
5	Place of residence		
	Rural	49	22.2
	Urban	172	77.8

A total of 221 students consented to participate in the study. Majority 108 (48.8%) students were in the age group of 21-30 years. Most 195(88.2%) of them were female participants than male participants 26(11.8%). Maximum students were undergraduates 202(91.4%) than postgraduates 19(8.6%). 172 (77.8%) students were residing in urban area. The other details of socio-demographic profile of nursing students are summarized in the table 1

Table 2: Distribution Of Nursing Students Based On Internet Usage N=221

1	Place of attending online class		
	Friend house	3	1.4
	Hostel	73	33.0
	Own home	143	64.7
	Rented house	2	0.9
2	Online platform used		
	Zoom meeting	130	58.8
	Google meet	128	57.9
	College software	18	8.1
	Microsoft team	22	9.9
	Google duo	5	2.3
	Others*	14	6.3
3	Duration of single class (min)		
	30 – 50	86	38.9
	60	126	57.0
	>60	9	4.1
4	Online classes attended every day (Hrs)		
	1 – 3	61	27.6
	4 – 6	118	53.4
	7 & above	42	19.0
5	Availability of high speed internet		
	Yes	101	45.7
	No	120	54.3
6	Access for internet connection		
	Mobile data	205	92.8
	Wifi + Broadband	16	7.2
7	Electronic gadget used for online class		
	Smart phone	209	94.6
	Tab+ laptop	12	5.4
8	Availability of privacy		
9	Yes	142	64.3
	No	79	35.7
	Are you trained in attending online classes		
	Yes	121	54.8
	No	100	45.2
10	I purchased smart phone only for online classes due to COVID-19 pandemic situation		
	Yes	32	14.5
	No	18	8.1
	I already had smart phone	171	77.4

* Others: Ciscowebex, Skype, Sandeepgyan, Moodle

Although, majority of the students were from urban area, 120 (54.3%) were not having availability of high speed internet. Among the study population majority 130 (58.8%) were using Zoom meeting online platform for online teaching-learning activity. 209 (94.6%) students

used smart phone for attending online classes and maximum students 205(92.8%) had internet access through mobile data.

Table 3: Distribution Of Satisfaction Level Of Nursing Students Regarding Online Education N=221

Satisfaction Level	Frequency	Percentage
12 – 24 (Unsatisfied)	19	8.6
25 – 36 (Partially satisfied)	188	85.1
37 – 48 (Fully satisfied)	14	6.3

More than 80% (188) of the students were partially satisfied with online education during COVID-19 pandemic.

Table 4: Association Of Satisfaction Level With Selected Socio-demographic Profile Of Nursing Students n=221

Socio-demographic profile	n	Satisfaction score		M W Test Z value	P value
		Mean	SD		
Gender					
Male	26	30.31	5.144	1.61	0.20
Female	195	30.92	4.659		
Course					
Undergraduate	202	30.72	4.708	0.24	0.81
Post graduate	19	32.16	4.658		
Place of residence					
Rural	49	31.16	4.520	0.99	0.32
Urban	172	30.76	4.772		
Availability of high speed internet					
Yes	101	31.61	4.461	2.02	0.043
No	120	30.20	4.834		
Access for internet connection					
Mobile data	205	30.65	4.594	1.69	0.091
Wifi + Broadband	16	33.38	5.572		
Availability of privacy					
Yes	142	31.37	4.351	1.67	0.096
No	79	29.91	5.194		
Trained in attending online class					
Yes	121	31.68	4.635	2.97	0.003
No	100	29.84	4.625		

There was significant association observed in availability of high speed internet, access of internet connection and availability of privacy with high level of satisfaction as p-value was <0.05 level of significance. The other socio-demographic variables such as gender, course and place of residence, students age, year of B.Sc Nursing course and place of attending online class has no significant association with level of satisfaction.

Table 5: Distribution Of Challenges Among Nursing Students Regarding Online Education

Questions	Challenges (%)			
	Strongly agree	Agree	disagree	Strongly disagree
Q1 I am able to handle online platform effectively	13 (5.9)	109 (49.3)	91 (41.2)	8 (3.6)
Q2 I cannot concentrate well on online class due to internet interruptions	3 (1.4)	38 (17.2)	124 (56.1)	56 (25.3)
Q3 Receiving assignment evaluation and feedback on time	4 (1.8)	48 (21.7)	155 (70.1)	14 (6.3)
Q4 Online classes feel like e-reading than e-learning due to lack of motivation	2 (0.9)	59 (26.7)	148 (67)	12 (5.4)
Q5 I am not interested to join online class even if I do not have any problem	19 (8.6)	129 (58.4)	59 (26.7)	14 (6.3)

Q6 I feel online classes are boring and lack self-engagement	12 (5.4)	96 (43.4)	90 (40.7)	23 (10.4)
Q7 I get notes/lecture materials from teachers even when I am not able to join online class	9 (4.1)	36 (16.3)	147 (66.5)	29 (13.1)
Q8 I am able to have good communication with teacher during online class	8 (3.6)	59 (26.7)	134 (60.6)	20 (9)
Q9 I feel like I am suffering from eye problem/ headache because of online class	7 (3.2)	51 (23.1)	90 (40.7)	73 (33)
Q10 I feel like I am suffering with minor ailments (neck pain, back pain, hand pain) due to online class	6 (2.7)	101 (45.7)	57 (25.8)	57 (25.8)
Q11 I feel I am not getting full attention of my teacher during online class	7 (3.2)	93 (42.1)	97 (43.9)	24 (10.9)
Q12 I am anxious because of internet/ electricity problem during online class	2 (0.9)	51 (23.1)	102 (46.3)	66 (29.9)

More than 50% (129) agreed that they were not interested to join online class even if they do not have any problem. 43.4% students (agreed) that they online classes were boring and lack self-engagement. Among 221 nursing students 129 i.e 58.4% students agreed that they were not interested to join online class even if they do not have any problem. More than 60% students disagreed that they get notes/lecture materials from teachers even when they were not able to join online class. More than 60% students feel that they are not able to have good communication with teacher during online class. More than 40% of students agree that they were suffering with minor ailments like neckpain, backpain and handpain due to online class.

DISCUSSION

The present study was done to assess the satisfaction and challenges among nursing students during COVID-19 pandemic. Majority 48.8% (108) students were in the age group of 21-30 years, which had graduate and postgraduate students whereas a similar study conducted by Simarjeet Kaur and Anjali Sharma in Himachal Pradesh observed 61.9% (172) of respondents were belonging to 17-20 years of age group and also 246(88.5%) of subjects were undergraduate and 32 (11.5%) were post graduate nursing students. In this study 202 (91.4%) undergraduate and 19 (8.6%) were post graduate nursing students participated in this study.

Among 221 participants 94.6% (209) used Smartphone for online class followed by 5.4% (12) tab and laptop. Whereas, a study conducted by Dutta et al on satisfaction level among medical and nursing students regarding preclinical online teaching also had similar findings 82% used mobile phones followed by 5% used tablet and 11.8% used laptop for online class.

More than 80% students were partially satisfied and only 6.3% of students were completely satisfied with online education during COVID-19 pandemic. A similar study done by Simarjeet kaur and Anjali Sharma 68.7% nursing students were partially satisfied and 24.10% were fully satisfied.

In a present study significant association is observed in availability of high speed internet, access of internet connection and availability of privacy with high level of satisfaction as p-value was <0.05 level of significance.

The challenges faced by nursing students are as follows More than 50% (129) agreed that they were not interested to join online class even if they do not have any problem. A similar finding was observed in a study conducted by Nayaju S.et al in Nepal on impact of E-learning during COVID-19 pandemic among nursing students and Teachers found that 15.7% (159) felt that they were not interested to join online class even if they did not have any problem.

More than 60% students disagreed that they get notes/lecture materials

from teachers even when they were not able to join online class, where a study conducted by Subedi. Etal in Nepal also reported similar findings that 65.6% students reported the same.

More than 60% students feel that they are not able to have good communication with teacher during online class. Whereas the study conducted by Subedi et al found that 28% of nursing students reported the same.

More than 40% of students agree that they were suffering with minor ailments like neck pain, back pain and hand pain due to online class. Whereas the study conducted by Subedi found that 50.5% of nursing students had suffered from headache and eye problem.

CONCLUSION:

Present study shows that 85% students were partially satisfied with online education and maximum students used zoom platform through mobile phone. There was significant association observed in availability of high speed internet, access of internet connection and availability of privacy with high level of satisfaction. Although the students and teachers were following conventional mode of education prior to COVID-19 pandemic the students were satisfied with online education. Even though the nursing students were partially satisfied with online mode of teaching the educational institutes need to empower the educators for online teaching and preparing for online content, so that higher satisfaction levels can be achieved.

Limitation

The present study was limited to nursing students only. The survey was conducted in all the nursing colleges of Pune city. Furthermore, the entire information was collected by participants through self-reported method. Therefore, results of this study to be generalized cautiously.

Conflict Of Interest:

There is no conflict of interest.

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