Satisfaction of E-Learning Methods Among The Students Studying In The Nursing Stream During The Covid-19 Pandemic In Selected Nursing Colleges

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Abstract-
INTRODUCTION: Technology is a boon to the world. Similarly, technology is a boon to our nation in every aspect whether it may be in home or in the workplace. In the field of Education too isthe rise of technology found in the present era with the emergence of various new technology which includes innovative techniques within the classroom as well as the outside the classroom to educate the children for better tomorrow. As a nation when we were trying to adapt to the new flow of technological advancement Covid -19 pandemic had played a crucial role in every stage of life right from the tiny tots to the elderly. Especially COVID-19 being one big reason for the school and colleges to shutdown during the pandemic, it caused decline of physical face to face teaching methodology in classrooms, which directly or indirectly led to the variety of new online platform for educating students which became mandatory throughout the schools and colleges countrywide.

AIM: The aim of the study is to assess the satisfaction of nursing students regarding the E-learning during the global pandemic.

METHOD: Quantitative research approach with descriptive survey design was used for the study. The study was conducted in selected Nursing colleges around the state of Gujarat, with the sample size of 486 students who met the sampling criteria. The students were selected with the help of purposive sampling technique. The data was collected using self-designed tool on learner's satisfaction regarding e-learning during global pandemic. Google forms were prepared and link were circulated to the students matching the inclusion criteria. The data was analyzed using Statistical Package for Social Services (SPSS 23) and STATA.

RESULTS: The data obtained were analyzed using inferential and descriptive statistics. As per the study findings, the majority of students participated in the study were in the age group between 17-20 years (67.9%) and maximum participants were females(83.1%). The urban population were more in the study,240 (49.4%) in which 63.4% students were identified to be acquiring their graduation degree (B. Sc.Nursing). The family income of majority samples i. e. 174 (35.4%)were found to be below Rs.10, 000. The assessment of satisfaction regarding e-learning among the nursing students of selected institutions showed that majority of the students were poorly satisfied with various components of e-learning.

CONCLUSION: The findings indicate that the nursing students had poor satisfaction regarding e-Learning during the Covid-19 pandemic.

Keywords- e-Learning, pandemic, covid-19, students, satisfaction, nursing.

I. INTRODUCTION

E-learning during the Covid 19 global pandemic has taken a hike in every stream of Education and as well as in various profession. E-learning became the only option for the industrial and educational sectors where people were left with no choice but to have this as an only option to opt for. It became a mandatory choice for every age group to opt for e-learning in their specific field.[1-2]

The pandemic of Covid 19 shook the entire world and every sector in generally all the aspects. It was unfortunate to witness the students being requested to stay home and were asked to discontinue to attend classes physically in the classroom. The students were vacated from the schools and colleges during the mid-term of the academic year from their respective learning place to their home/native for their safety and given a choice of e-learning as an only option for studying from home. Some found e learning to be conducive for

learning while others were not satisfied as they preferred face to face learning to be conducive and comfortable for learning.[3-4]

NEED OF THE STUDY

The need of this study was to assess the learner's satisfaction towards e-learning during the pandemic among the nursing students. The method of E-Learning was the priority for all the sectors be it government or autonomous universities, the colleges functioning underneath those universities and the schools, as they were forced to switch to this online mode of education.

Globally, over 1.2 billion children were out of the classroom across 186 countries. The students were learning distantly. With a population of over 1.3 billion and the availability of high-speed internet and smartphones, India has a substantial base of technologically innovation has driven consumers as the educational landscape shifts in response to the COVID-19 pandemic.[4]

Nearly 46 percent of India's population falls within the ages 15-40 years. This fledgling population is a seamless target-market for online education as online formats are generally more acceptable to this age range than the older age groups and the lower cost of livelihood is appealing to a price-sensitive market.[5]

Between 2015 and 2018, the number of students pursuing online education increased six-fold. Over 70 percent of these students turned to online education for the purpose of learning a new skill or expanding their employment opportunities. Online models are an attractive option for current employees, as they provide the flexibility to obtain these skills without interrupting work schedules.[6-7]

RESEARCH METHODOLOGY

Quantitative descriptive research approach design was used in this study. The tool was designed by the researchers to assess the satisfaction of learner with e-Learning method during the Covid 19 pandemic, the estimated sample size was 486 who were selected using non probability purposive sampling technique. The data was analysed using Statistical Package for Social Services (SPSS 23) and STATA.

II. RESULTS

The data was analyzed using inferential and descriptive statistics. Frequency and percentage are used to describe the sample characteristics. The association between

the learner and the satisfaction from e-Learning was done using Pearson's chi square.

The findings have been organized into following sections

PART 1: Description of demographic data of nursing students
PART 2: Satisfaction of e-Learning among the nursing students

PART 1: DESCRIPTION OF DEMOGRAPHIC DATA OF NURSING STUDENTS

Table 1. Frequency and percentagewise distribution of nursing students according to their demographic datan=486

S.No.	Demographic data	Frequency (f)	Percentage (%)
1.	Age		
	17-20 21-23 24-27 28 and Above	330 113 34 9	67.9 23.3 7.0 1.9
2.	Gender		
	Female	404	83.1
	Male	82	16.9
3.	Place of stay		
	Semi urban	54	11.1
	Rural	192	39.5
	Urban	240	49.4
4.	**Domain of nursing**		
	B.Sc. Nursing	308	63.4
	GNM	160	32.9
	M.Sc. Nursing	18	3.7
5.	**Monthly Income of family (In Rs.)**		
	< 10,000	174	35.8
	10,001–30,000	162	33.3
	30,001 -50,000	102	21.0
	≥ 50,000	48	9.9

Table 1 depicts that the majority of the nursing students were in the age group of 17-20 years (67.9%) with the maximum of them (83.1%) being females. Almost 50% of the students were residing in the urban areas. Out of the total sample of 486 students, the majority were enrolled in B.Sc.

nursing course i.e.,63.4% where as 32.9% were in GNM course and 3.7% in M.Sc. nursing course. Around 35.8% of the sample had a monthly family income of less than 10,000 rupees where as 9.9% had a monthly family income greater than Rs.50,000.

PART 2: SATISFACTION OF E-LEARNING AMONG THE NURSING STUDENTS

n=486

Sl.no.	Satisfaction statements	Frequency (f)	Percentage (%)
1.	**Teacher and student's interaction during e-learning**		
	Completely satisfied	71	14.6
	Moderately satisfied	180	37.0
	Poorly satisfied	235	48.35
2.	**The teaching methodology used in e-learning were helpful and effective**		
	Completely satisfied	60	12.3
	Moderately satisfied	171	35.2
	Poorly satisfied	255	52.46
3.	**The e-learning provided me with a variety of learning material and activities**		
	Completely satisfied	69	14.2
	Moderately satisfied	166	34.2
	Poorly satisfied	251	51.64
4.	**The teaching materials used in e-learning were motivating**		
	Completely satisfied	71	14.6
	Moderately satisfied	159	32.7
	Poorly satisfied	256	52.67
5.	**The teaching methodology used in e-learning helped me to learn fast than the traditional method**		
	Completely satisfied	66	13.6
	Moderately satisfied	165	34.0
	Poorly satisfied	255	52.46
6.	**E-learning provides enough information for me for learning**		
	Completely satisfied	67	13.8
	Moderately satisfied	178	36.6
	Poorly satisfied	241	49.58
7.	**I have found advanced opportunities to discuss ideas and concepts with my teacher and classmates, during the lecture**		
	Completely satisfied	92	18.9
	Moderately satisfied	145	29.8
	Poorly satisfied	249	51.23
8.	**E- learning makes it possible for the teacher to respond to the individual needs of the learners**		
	Completely satisfied	70	14.4
	Moderately satisfied	179	36.8
	Poorly satisfied	237	48.76
9.	**Through E-Learning activities my learning time was more productive**		
	Completely satisfied	67	13.8
	Moderately satisfied	165	34.0
	Poorly satisfied	254	52.26
10.	**My classroom/group participation opportunities during e learning**		
	Completely satisfied	93	19.1
	Moderately satisfied	139	28.6
	Poorly satisfied	254	52.26
11.	**Support from my teachers during the e-learning**		
	Completely satisfied	152	31.3
	Moderately satisfied	114	23.5
	Poorly satisfied	220	45.26
12.	**The resources used by my teachers during e- learning**		
	Completely satisfied	96	19.8
	Moderately satisfied	130	26.7
	Poorly satisfied	260	53.49
13.	**Internet connectivity during the e-learning**		
	Completely satisfied	69	14.2
	Moderately satisfied	134	27.6

	Unsatisfied	283	58.23
14.	**The time schedule fixed by the teachers for online classes**		
	Completely satisfied	131	27.0
	Moderately satisfied	135	27.8
	Poorly satisfied	220	45.26
15.	**Availability of materialistic resources like laptop ,smart phone and internet facility**		
	Completely satisfied	92	18.9
	Moderately satisfied	148	30.5
	Poorly satisfied	246	50.61

Table no.2 reveals that in terms of the teacher and student interaction during e-learning, 48.35% were unsatisfied whereas 37% were moderately satisfied and only 14.6% of the students reported that they were completely satisfied with e-learning. With regard to the teaching methodology used in e-learning the majority of the students ie,52.46% were unsatisfied and 35.2% were moderately satisfied. The results of the study show that the e-learning has failed to provide variety in the learning material and activities as 51.64% were unsatisfied with this. Around 14.6% of the students responded that the teaching materials used in the e-learning were motivating for them.Approximately 13.6% of the students claimed that the teaching methodology used in e-learning helped them to learn faster than in the traditional method whereas 52.46% were unsatisfied regarding this. When asked about the information related to e-learning, only 13.8% of the students reported complete satisfaction. Approximately 29.8% of the nursing students reported that they were moderately satisfied related to finding advanced opportunities to discuss ideas and concepts with their teachers and classmates, during the e-lecture. For the question that if E- learning makes it possible for the teacher to respond to the individual needs of the learners, around 36.8 % moderately agreed. Around 58.23% of the students reported unsatisfied with the internet connectivity during e-learning.

III. DISCUSSION

The present study aimed to evaluate the satisfaction of eLearning methods among 486 nursing students. The study was conducted by usinga descriptive survey approach research design. The findings indicate that the nursing students had on average poor satisfaction (50.97%)overall regarding e-Learning methods during the pandemic. The dissatisfaction reported was greatest related to the internet connectivity issues during e-learningi.e.,58.23%.

In a similar study conducted to investigate the determinants of students' satisfaction with their online learning experience at Sri Lankan universities during the COVID-19 pandemic, showed that a large number of students were not satisfied with how lecturers manage technology during an online lesson. Relatively higher percentages were reported for dimensions such as the opportunities for lecturer-student interaction during sessions (43%), lecturer's provision of student feedback (42%) and how continuous assessments are conducted (42%). Also, student satisfaction was low with the aspects such as the way summative assessment is conducted (39%), promotes peer interaction (39%) and the method of sharing learning materials (38%)[8].

Another systematic review on the learners' satisfaction and commitment towards online learning during COVID-19 revealed that the factors such as academic issues, accessibility issues, technological skills of the learners, mental well-being of the learners and lecturers' commitment have a significant impact on learners' satisfaction and commitment towards online learning during the COVID-19 pandemic[9].

In a study done to find out the barriers and facilitators to online medical and nursing education during the COVID-19 pandemic it was found that 36.5% of students and 61.1% of teachers were satisfied with the online education. Further the teachers' professional title, students' year of study, continent of origin and location of current residence significantly influenced the online education satisfaction. The most influential barrier for students was the severity of the COVID-19 situation and for teachers it was the sense of distance[10].

IV. CONCLUSION

The present research study was carried out to evaluate the satisfaction of the nursing students of selected institutions in Gujarat with regarding to e-learning during the pandemic situation. The study found that majority of the students had a poor self-reported satisfaction towards the e-learning. Further, it is recommended that more researches are required in this area to generalize the findings related to e-learning and factors affecting the e-learning process.

CONSENT AND ETHICAL APPROVAL

The required ethical clearance were obtained for the conduction of the study from the concerned authorities of the institution and also individual informed consent was obtained from the student nurses.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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