"Perception of Undergraduate Nursing Students regarding Online Learning In Nursing Education During COVID-19 Pandemic Studying In Nursing College Of Bhopal."

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ABSTRACT

Background: In India on 24th March 2020, due to COVID-19 an infectious disease pandemic the Indian Government have ordered nationwide lockdown to mitigate the impact of COVID19 and almost all State governments ordered suspension of all its educational institutions to ensure social distancing which necessitated nursing educators and students to adopt online learning and continue the curriculum activities.

Aim of the study: To assess the perception regarding online learning among undergraduate nursing students.

Methods: A Quantitative approach and descriptive research design was used to assess perception of online learning among undergraduate nursing students of selected nursing colleges of Bhopal. The responses were collected by self structured online questionnaire. Data was analyzed through Statistical Package for Social Sciences (SPSS) The Cronbach's Alpha value was 0.88. Data analysis done by frequency, percentage distribution and chi square test.

Results:. The result shows no significance association found between age, residence, type of college, religion and regarding personal perceptions. Only there was significant association found with classes of study and perception of online learning.

Conclusion: The present study concluded that under graduate nursing students had a positive perception regarding online learning. Their perceptions are responsible for their learning interest and attentiveness to continue their online classes on time and to maintain balance between their learning activities and personal and social life. The stakeholders, educator should ensure adequate and sufficient availability of digital resources.

KEYWORDS: perception, undergraduate nursing students, online Learning.

INTRODUCTION

In India on 24th March 2020, due to COVID-19 an infectious disease, the Indian Government have ordered nationwide lockdown to mitigate the impact of COVID19 pandemic. Following this, many State governments ordered suspension of all its educational institutions to ensure social distancing.[1-2] All the undergraduate medical and nursing students were sent to the safe confinement of their homes until the completion of lockdown. Initially for a period of 21 days, than lockdown was repeatedly extended, which added anxiety and impacted nursing students education .[3-4]

Online learning is defined as learning and teaching by the use of internet and electronic devices. During this period continuing nursing education was a challenge for administrators, institutions, academicians, parents and the students. In this time most of the institutions adopt the e- learning to continue the medical education.

As per the record of MHRD, Indian government around 963 universities, 39931 colleges and 10725 institutes closed and around 32 crores students suffered due to lockdown since march 2020 (Jena, 2020).[5]

The technical learning approach didn't give any chance to students and teachers for making a proper plan for lesson delivery, assessments, technical arrangements or providing any support. In this context, it is deemed to be important to assess the perception of student teachers towards online learning.[6]

NEED OF THE STUDY

The Pandemic declaration and lockdown by the Indian government announced closure of all the educational institutions for an uncertain period and shifted educational activities via online learning to protect students and continue their curriculum activities.

Nursing students in covid-19 pandemic situation come in direct contact with patients during their clinical posting that may increase the risk of transmitting SARS-COV-2 among students and patients. E-learning is the only valuable option left for the continuation of nursing education. Students learning is life-long learning as it go on anywhere and all time and, thereby developing new skills. The UGC also recognized the importance and recommended to shift from offline to online mode of learning in this changing world.
During the lockdown, online classes were conducted by using e platforms such as zoom, Google meet, Microsoft Web, videos on YouTube, and PowerPoint presentations on Slide Share and what's App to facilitate better student teacher interaction. Institutes stakeholders administrators, policy experts and academicians should give preference to student's perception and interest towards e learning as they belong to various socio-economic backgrounds.

In India today many regions, large segment of population do not have adequate access of internet and electronic devices. Even the peoples with access to internet they experience some infrastructural discrepancy like no access to high internet speeds , interrupted internet service, and is expensive too.

   Although In India and Madhya Pradesh, the practice of online classes is new for the majority of students and teachers of nursing colleges. They are unaware of digital learning technology and are unable to bear the cost of efficient electronic gadgets, internets, accessories and facilities to study at home. Also there is no good access to electricity and internet service in most parts of the country and state. And our concern is about whether online teaching–learning methods can provide quality education. Hence this present study was undertaken to assess the perception of online learning in nursing education among undergraduate nursing students, Bhopal.

AIM

The overall aim of this study is to assess the perception of undergraduate nursing students regarding online learning in nursing education during covid-19 pandemic studying in nursing college of Bhopal

REVIEW OF LITERATURE

Syed S, Rastogi A, et al. (2021) has conducted a study on future of e-learning in medical education - perception, readiness and challenges in a Developing Country. A survey questionnaire was used to collect data from 3,004 healthcare professionals by snow-ball sampling technique. The data analyzed by descriptive analysis, Univariate analysis and odd ratios (OR) using SPSS version 22. The findings of the study revealed that 61% were young adults (<30 years), 65.41% used e-learning for knowledge and skills, 71.1% stated cyber security concerns. Majority participants mentioned reduced travel time and maintaining social distancing (68.21%) without compromising learning.[7]

Olum R. et al. (2020) has conducted a cross-sectional study to assess the awareness, attitudes, preferences, and challenges to e-learning among Bachelor of Medicine and Bachelor of Surgery and Bachelor of Nursing students at Maker ere University, Uganda. A web-based questionnaire was used to collect data from 221 students. The findings revealed that 195 (92.1%) were Ugandans, 123 (57.5% male). Majority 57 (26.6%) had access to high or very high quality internet access, 206 (96.3%) Awareness and 177 (82.7%) self-reported usage of e-learning (MUELE) among students were high. among 206 and 50% lacked skills in using the Maker ere University e-learning (MUELE) platform. About half (n = 104, 49%) of the students believed that e-learning reduces the quality of knowledge attained and is not an efficient method of teaching. There was significant association between Monthly income (P = .006), internet connectivity quality (P < .001), computer ownership (P = .015) and frequency of usage of academic websites or applications (P = .006) with attitudes towards e-learning. [8]

Suryawanshi DM et al. (2020) this study has conducted to Understand perceptions and preferences of medical students and their barriers. The data collection was done by semi-structured questionnaire after consent from 296 students of second year selected by non probability sampling method. The data analysis done using SPSS version 21. The Result showed were that the majority of the participants 179 (62.5%) were female. Only 18 (6.2%) had advanced computer and internet usage skills. 138 (48.2%) students showed preference for blended mode of teaching. 203 (71.0%) of students showed preferences for non-interactive learning methods like slide share and YouTube videos. 180 (62.9%) cited that lack of personal interaction with the teacher followed by access to internet 67 (23.4%). [9]

Khan, M.A. et al (2020) has conducted a study to examine students Perception towards E-Learning during COVID-19 Pandemic in university, India. The study has used by quantitative approach by respondent of 184 university students of National Capital Territory (NCT) of Delhi, India from Delhi University, Jamia Millia Islamia (Central University) and Guru Gobind Singh Indraprastha University are collected by online questionnaire during June–August 2020. The questionnaire have two section .The findings of the study reveal students' positive perception towards e-learning and thus acceptance of this new learning system. It has demonstrated the significance of e-learning in the time of COVID-19 crisis. [10]

Mohalik R, Sahoo SS. (2019) has conducted study to assess the student teachers' e-readiness and perception towards online learning, India. A self developed questionnaire was used to collect data from 318 student teachers. Purposive sampling technique was used. The result revealed that this study that student teachers have e-readiness with digital devices (99%) and financial support (80%), but are lacking in good Internet connectivity, adequate electricity supply and personal space at home. Only 35% teachers are proficient in digital skills and most of the feels that online classes are lacking of teacher –students and student-student interaction. The significantly percentage of student teachers feel stressed isolated and poor confidence in online learning and are not agree that curriculum can be transacted effectively through online mode. Major part of the teachers and students have accept online learning as a better choice and best alternate mode to traditional approach of learning like face to face learning. More than 50% of trainees do not know learning management system, virtual worlds, podcasts and web design applications and majority of trainees use group

email and whatsapp for academic work and only 20% of trainees using digital devices by using PPT in class and create digital learning materials and provide feedback to students.[11]

Dost S, Hossain A, et al.2020. has conducted a Cross-sectional survey was conducted to assess the Perceptions of medical students towards online teaching during the COVID-19 pandemic among 2721 UK medical students from 39 medical schools with the aims to assess the uses, experiences, perceived benefits and barriers of online teaching. The result showed that there was significant difference found between time spent for online platforms by 7.35% students before and during COVID-19, spending >15 hours per week (p<0.05) by 23.56% students. The benefits of online teaching platforms include flexibility. Also majority family distraction and poor internet connection (21.53%).[12]

OBJECTIVES

1) To assess the perceptions of nursing students towards online leaning.
2) To find out the association between perception regarding online learning in nursing education among undergraduate nursing students with their selected socio demographic variables.

HYPOTHESIS

Ho- there will be no association between perception of online learning and sociodemographical variables of undergraduate nursing students.

H$_1$- There will be significant association between perception of online learning and their selected socio demographic variables of undergraduate nursing students.

METHODOLOGY

A descriptive research design was used to assess the perception of online learning among undergraduate nursing students and their selected socio demographic variables. 50 undergraduate nursing students were selected using random sampling technique from selected nursing colleges of Bhopal affiliated to LNCT University Bhopal

A self structured online questionnaire via Google form is used for data collection. The questionnaire was divided into three parts : Socio- demographic data , leaning resources , learning schedule and five point likert scale on perception of online education was used. The google form link was sent by e-mails to the nursing students. electronic consent was also taken to be filled up by the students.. Before administering the tool electronic informed consent was taken from all participants Reliability was calculated by Cronbach's Alpha . Content validity was evaluated by 7 experts and the Cronbach's Alpha value was 0.88. . Data was analyzed by descriptive (frequency and percentage) and inferential statistics (chi square) through Statistical Package for Social Sciences (SPSS 20)

RESULTS

The data was analyzed and interpreted according to objectives by using descriptive and inferential statistics.

Distribution of B.Sc. nursing students according to Socio- Demographic data.

SECTION-A   SOCIO DEMOGRAPHIC DATA

Table No. – 1 Distribution of B.Sc. Nursing students according to Socio- Demographic data

N=50

S.no	Variables	Frequency	Percentage
1.	Gender		
1.1	Male	23	46%
1.2	Female	27	54%
2.	Age		
2.1	Below 20	15	30%
2.2	21-25	20	40%

2.3	26-30	10	20%
2.4	Above 30	5	10%
3.	**Residence**		
3.1	Village	29	58%
3.2	Town	6	12%
3.3	City	15	30%
4.	**Year of Bsc Nursing**		
4.1	First year B.Sc. Nursing.	25	50%
4.2	Final year B.Sc. Nursing.	25	50%
5.	**Religion**		
5.1	Hindu	35	70%
5.2	Muslim	5	10%
5.3	Sikh	5	10%
5.4	Others	5	10%
6	**Digital devices**		
6.1	Smart phone	49	98%
6.2	laptop	1	2%
7.	**No. of Online classes per day**		
7.1	Less than 2	5	10%
7.2	2-4	26	52%
7.3	4-6	16	32%
7.4	More than 6	3	6%
8	**Duration of each class**		
8.2	Less than 40 minutes	28	56%
8.2	41-60 minutes	19	38%
8.3	More than 60 minutes	3	6%
9.	**Duration of breaks**		
9.1	No break	13	26%
9.2	Less than 10	10	20%
9.3	11-20 minutes	15	30%
9.4	21-30	9	18%
9.5	More than 30 minutes	3	6%

SECTION B :

Frequency and percentage distribution of perception of online nursing education among undergraduate nursing students.

Table No. - 2 Frequency and percentage distribution of undergraduate nursing students according to perception of online nursing education.

1.	Perception of online nursing education	SA(5)	A(4)	U(3)	DA(2)	SDA(1)
1.1	Online -Learning should only be used for the distribution of notes over the internet.	3(6.0%)	5(10%)	7(14%)	14(28%)	21(42%)
1.2	Online classes are not interesting.	2(4.0%)	5(10%)	11(22%)	17(34%)	15(30%)
1.3	Online learning makes me lazy and will have impact on my performance when it continues.	2(4%)	4(8%)	4(8%)	23(46%)	17(34%)
1.4	I miss classroom lessons.	3(6%)	1(2%)	8(16%)	16(32%)	22(44%)
1.5	Online learning makes isolated me from social life.	3(6%)	5(10%)	13(26%)	15(30%)	9(18%)
1.6	Online learning classes makes me lost of interaction with my classmates.	2(4%)	7(14%)	11(22%)	16(32%)	14(28%)
1.7	Online classes lack timely feedback from instructor.	1(2%)	6(12%)	14(28%)	20(40%)	9(18%)

1.8	I am satisfied with how fast I have adjusted to e-learning.	11(22%)	6(12%)	7(14%)	18(36%)	8(16%)
1.9	Online learning makes me isolated from my family.	2(4%)	5(10%)	15(30%)	19(38%)	9(18%)
1.10	I feel asking questions and clarifying doubts is easier in online classes.	3(6%)	4(8%)	12(24%)	26(52%)	5(10%)
1.11	Online -learning cannot compensate for practical education and seminars.	12(24%)	20(40%)	6(12%)	4(8%)	8(16%)
1.12	Online -learning is a complete waste of time for health sciences students..	3(6%)	11(22%)	17(34%)	12(24%)	7(14%)
1.13	I feel deprived because of the lack of practical education.	4(8%)	23(46%)	12(24%)	4(8%)	7(14%)

DISCUSSION

Present study has explored the perception of undergraduate nursing student's regarding online learning in selected nursing colleges of Bhopal Madhya Pradesh.

Regarding socio demographic data

The present study result showed that majority 54% nursing students were females, 40% participants belongs to age group 21-25 years, 58% students reside in village areas, 50% students study in first year and second year respectively and 70% nursing students belongs to Hindu religion. Majority 98 % of students had their own android phone and 2% had laptop for attending online classes, 51 % student had two to four online classes in a day , 57% having less than 40 minutes and 32% students had 41-60 minutes duration of each class, 26 % had no breaks and 19 % less than 10 minutes and 49% stated that they had sometimes and 30% rarely interacted with teacher during online classes.

The research study findings were supported by Singh H et al. (2021) majority (62%) nursing students were females, (59.6 %) students reside in village areas, duration of each class was significantly higher in medical students compared to nursing students, breaks between classes were infrequent 40% of the students reported that they had no breaks between classes and 66% students had no adequate time to interact with teachers.[13]

The presents findings regarding perception of online classes among nursing students were that Majority (64%) students stated that online classes are interesting and (70%) not only meant for distribution of notes, whereas majority 80%, opined that they do not feel lazy, 56% isolated from their family, 48% isolated from social life and 60% had adequate of interaction with peers some had less interaction, 48%.majority students perceived that online classes isolated them from social life. only 14 % opined that they lack timely feedback from instructor, majority 52% students had good communication with teachers, 52% they feel satisfied and adjusted to online classes, 79% do not miss class room lectures , 54% students worried about lack of practical education, 14 % felt easier while 62 % had difficulty to clarify questions and doubts than regular classes, 30% had opinion that online classes were effective whereas 38% opined complete waste of time. Overall, majority nursing students had a positive perception regarding online learning

These findings are supported by Mohalik R, Sahoo SS et al (2019) conducted study to assess the student teachers e-readiness and perception towards online learning, India. The result revealed that student have e-readiness with digital, online classes were lacking teacher –students and student-student interaction, majority student feel stressed, isolated due to online learning and was not agree that curriculum can be transacted effectively through online mode.[11]

Similar findings were also supported by Ahmed Alsoufi A , to assess the Attitudes through questions on the applicability and usability of e-learning in medical schools. The results showed that (64.7%) disagreed that e-learning applied easily, while 54.1% agreed that interactive discussions are achievable by means of e-

learning, only21.1% agreed that e-learning can be used for clinical learning, whereas 54.8% disagreed with this.[14]

In the present study there was no significant association found between perception of nursing students regarding online classes with gender, age, residence, class of the study, and religion.

The findings are supported by Pujalik L et.al incorporating e-learning as a tool for medical education in India: Investigating student. The results showed that perceived usefulness, intention to adapt, distant use of e-learning, ease of learning and technical support were 3.1, 3.1, 3.8, 2.9, and 2.9 respectively. Overall, 58.9% had a favorable attitude regarding e-learning.. There was no significant association of attitude regarding e-learning with selected socio-demographic variables.[15]

LIMITATIONS

The study was limited to 50 undergraduate nursing due to time bound. However the present study suggested that the perception factors are important   and should be studied to enhance the nursing student's perception regarding online learning.

RECOMMENDATIONS

1. A similar study can be conducted on a large sample size in other states for the generalization of findings.
2. A study may be conducted on other factors which affecting online learning of undergraduate nursing students

CONCLUSION

This study concluded that under graduate nursing students had a positive perception regarding online learning. Ensure adequate and sufficient availability of digital resources such as e-books, e-notes, you tube. The stakeholders, educator should consider, ICT infrastructure, instruction, motivation, communication, content and holistic health while imparting online education. There should be guidelines (number of lasses/day, length of each class, break between classes, curriculum, etc) to improve the retention of students and reduce health problems. Continuous feedback from teachers and students will be required to make e-learning effective.

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