RESEARCH ARTICLE

ONLINE CLASSES OF NURSING STUDENT'S DURING LOCKDOWN (COVID PANDEMIC): PERCEPTION AND ISSUES

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Manuscript Info

Abstract

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Background: During 20th Century, Online study is the most significant aspect of learning. The importance of online learning over traditional method of classroom teaching includes paperless, distant and instruction based learning. During COVID-19 pandemic, online study emerged as an excellent solution for education of students.Aim: To assess the perception and issues regarding online study during lockdown among nursing students studying in selected college.

Methodology:A quantitative approach and cross sectional survey research design was used to assess the perception and issues regarding online study during lockdown among 278 students selected through total enumeration sampling technique studying in selected nursing college of block Pachhad, district Sirmaur, Himachal Pradesh. Online self-structured questionnaire was used as a tool for data collection. Descriptive data analysis was done with SPSS (version 23).

Results & Conclusion: As per perception, majority (77.7%) of participants responded that classroom teaching is the best teaching learning method. 38.1% of them responded that online learning is less interactive and difficult to operate. Most (43.9%) of subjects were agreed that online learning provides opportunity to create student's own learning environment. More than half (68.7%) of subjects were partially satisfied with online study lockdown (COVID Pandemic). Regarding issues of online study, majority subjects were not able to maintain proper time schedule, faced network issues, less student & teacher interaction and inadequate access to learning material etc.Hence adequate resources, proper schedule, technical support etc. are required to make online study more effective.

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Introduction:-

Online learning is the latest method of learning which encompasses the use of information technology in order to enhance the knowledge and academic performance of an individual. COVID-19 has impacted all aspects of human life such as physical, mental, economic, social, cultural and educational. Students study was also affected with COVID-19 as they have to stay at home and needs to focus on self-paced online learning material.[1]The Ministry of Human Resources Development (MHRD) is regularly emphasizing on e-learning with the tagline as "Let COVID-19 not Stop your Learning. Continue with SWAYAM".[2]

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The concepts of online classes are not new as it has been a part of many academic courses since a long time. Evidences indicate that worldwide many universities are offering online courses for the learners.[3,4] The perceived barriers related to online teaching and learning are the key reasons for less use of online in certain part of our country. This includes skill deficit, time, cost, infrastructure, poor communication, collaboration, attitude and culture[5].Studies suggest that by developing strategies that ensure continuous engagement of students throughout the online study helps more to enhance performance of students[6.]

Electronic learning is categorised as synchronized and Non- synchronized e-learning. Synchronized Learning is a teaching learning activity in which both the student and teacher will be online at same time and hence it is more social and avoids frustration by asking and answering questions in real time. Non-synchronized Learning is an offline learning, which does not require active involvement of student and teacher at real time[7].

Online learning nowadays considered as the potential method of learning especially in undergraduate medical & nursing teaching. There is no strong evidence that classroom teaching is better method of learning as compare to the online learning. This pandemic has left no options in front of institutions other than temporarily shut the doors or shift to online classes. Though online classes are adopted as an alternative for traditional classes but they must be the part of futuristic education so that students must be acquainted with technological skills. Online classes have shown an aspect of continuing the academic education. It has been shown in researches that students retain 25-60% more, when they learn online in comparison of 8-18% in traditional classroom teaching and 40-60% less time to learn than in classroom settings[8,9].

Whats App, zoom and Google meet are some of the apps used for conducting online classes. Some institutions have also developed their own software for online classes. It is almost a new notion for the nursing students to take online classes on regular basis so they were never being evaluated for their attitude towards online classes in this context. Current study is a novice idea on online classes in India rather than e-learning which is more popular for pursuing different short term courses by the learners**.** At the same time, learners' attitude and acceptance towards information technology and mentors efforts to ensure that students would stay involved are the critical factors for the successful online teaching learning programme[10].

Classroom teaching is the traditional method and it is not easy approach to replace the traditional method in short interval of time, especially when classroom teaching is the only method used by the students for academic learning. The present study was planned to assess the perceptions and issues regarding online study among nursing students during lockdown (COVID-19 pandemic).

Methods and Material:-
This was a cross sectional online survey planned to find-out the perception & issues of nursing students towards online classes as a routine mode of their curriculum during lockdown period. Original data were collected by a self-structured, online Google form, during the month of April, 2020. Study population included both graduate & undergraduate nursing students studying at selected nursing college of block Pachhad, district Sirmaur, Himachal Pradesh. We enrolled all the (278) students as per their willingness for participation through consecutive sampling technique.

Ethical clearance from Institutional Review Board of concerned institution was taken. Informed Electronic consent was taken from all the participants to participate in the study. Participants were assured for their anonymity and confidentiality.

A self-structured questionnaire (Online Google form) was used for the data collection procedure. Final tool included three sections i.e. Section A: Self-structured socio-demographic characteristics which comprised age, area of residence, year of study, students previous year score, IT skills and IT source of online classes. Section B: It has included questions related to perception regarding online classes. Section C: This was consisted of questions related to common issues of online classes. The overall content validity of the tool was assessed before administering in the survey, by sending the tool for seven experts and found valid and for internal consistency Cronbach's coefficient of the questionnaire was 0.92, which was considered highly reliable.

As participants were instructed to fill the form completely so there were no missing data and we received complete data sheet. Received data were analyzed by using descriptive and inferential statistics with Statistical product and

service solutions (SPSS version 23) as per our study objective stated earlier. Categorical variables were depicted in frequencies and percentage, with bivariate analysis was applied using chi-square test and independent t-test. These tests were applied to find-out the association between level of satisfaction and selected scociodemographic variables. Statistical significance (p value) was set at 0.05 for the tests involved.

Results:-
Section A: Description of Socio-demographic characteristics of the Participants
Table 1:- Demographic Variables of Participants   **N=278.**

S.NO.	DEMOGRAPHIC VARIABLES	FREQUENCY (n)	PERCENTAGE (%)
1.	**Age (in years)**		
	a) 17-20	172	61.9
	b) 21-24	92	33.1
	c) 25-28	14	5.0
2.	**Area of residence**		
	a) Urban	107	38.5
	b) Rural	171	61.5
3.	**Year of course**		
	a) Undergraduate	246	88.5
	b) Post-graduate	32	11.5
4.	**Student's previous years scores (%)**		
	a) <60%	36	12.9
	b) 61%-70%	103	37.1
	c) 71%-80%	124	44.6
	d) >81%	15	5.4
5.	**Information Technology Skills**		
	a) Excellent	27	9.7
	b) Good	138	49.6
	c) Average	104	37.4
	d) Below average	9	3.3
6.	**IT source of online learning**		
	a) Mobile phone	226	81.3
	b) Laptop	6	2.15
	c) Both A & B	46	16.5

Majority 172(61.9%) of respondents were belonging to 17-20 years of age group. Most 171(61.5%) of them were from rural areas. 246(88.5%) of subjects were undergraduate. 124(44.6%) had previous year scores were between 71-80%. 138(49.6%) of students had good computer skills. More than half 226(81.3%) of respondents were having mobile phone as information technology source for online study **(Table No.1).**

Section B: Perception of Participants regarding online classes
Table 2:-Frequency & Percentage distribution of Perception of Participants regarding online classes   N=278

S.NO.	QUESTIONS	FREQUENCY (n)	PERCENTAGE (%)
1.	**Best teaching learning method is**		
	a) Classroom teaching	216	77.7
	b) Online teaching	6	2.15
	c) Both a & b	56	20.1
2.	**Online learning is**		
	a) Interesting & useful	96	34.5
	b) More interactive & easy to use	31	11.2
	c) Less interactive & difficult to operate	106	38.1
	d) Time consuming & monotonous	45	16.2
3.	**'Online learning provides an opportunity to create student's own learning environment.' Give rating to**		

	above statement as per your experience.		
	a) Strongly agree	63	22.7
	b) Agree	122	43.9
	c) Neutral	74	26.5
	d) Disagree	18	6.5
	e) Strongly disagree	1	0.4
4.	**'By giving assignment or some specific task active learning can be enhanced during online classes.'Give rating to above statement.**		
	a) Strongly agree	62	22.3
	b) Agree	132	47.5
	c) Neutral	71	25.5
	d) Disagree	13	4.7
	e) Strongly disagree	00	00
5.	**According to you, how frequently feedback should be taken from students?**		
	a) Daily	129	46.4
	b) Weekly	136	48.9
	c) Once a month	9	3.3
	d) Anytime (surprise test)	4	1.4
6.	**According to you, which of the following is the best way to evaluate students?**		
	a) Synchronous oral test	159	57.2
	b) Synchronous written test	39	14.0
	c) Asynchronous written test	70	25.2
	d) Asynchronous oral test	10	3.6

As per perception of online study, 216(77.7%) of participants stated that classroom teaching is the best teaching learning method. 106(38.1%) of them responded that online teaching is less interactive and difficult to operate. Majority 122(43.9%) of subjects were agreed that online learning provides opportunity to create student's own leanring environment. Most 132(47.5%) of participants agreed that giving assignment or some specific task can enhance active learning during online study. Greater number136 (48.9%) of them has replied that feedback should be taken weekly.159 (57.2%) of participants has considered synchronous oral test as the best way of evaluation for students **(Table No.2).**

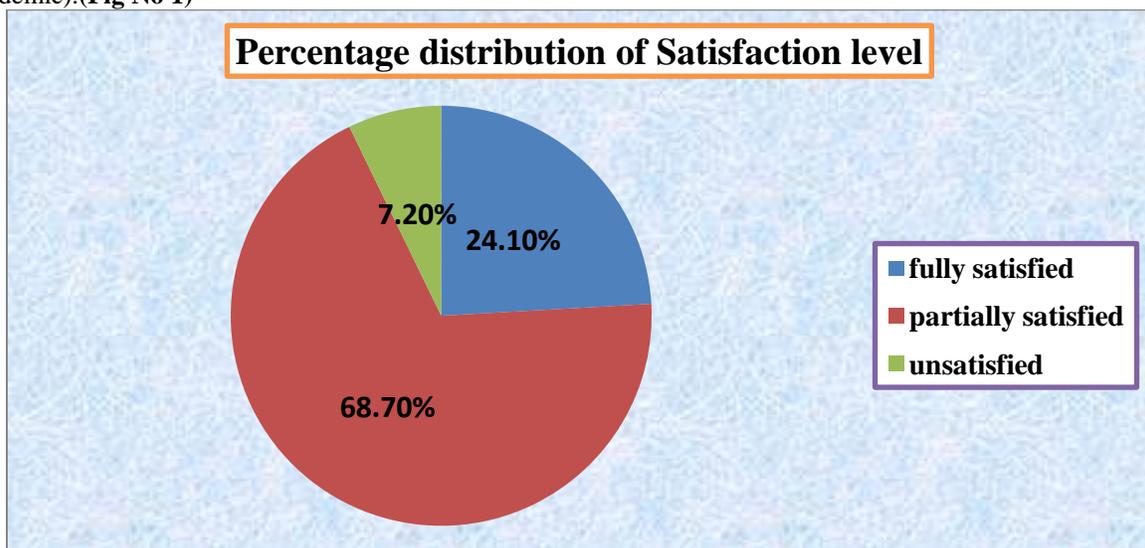More than half 191(68.7%) of subjects were partially satisfied with online study during lockdown (COVID Pandemic).**(Fig No 1)**

Fig No. 1:- Pie Chart showing percentage distribution of satisfaction regarding online study.

Section C:
Table 3:- Frequency & Percentage distribution of issues regarding online study among subjects N=278.

S.NO.	QUESTIONS	FREQUENCY (n)	PERCENTAGE (%)
1.	**The major problem faced by you in online learning is**		
	a) Inability to maintain proper time schedule	174	62.6
	b) Burden of various subjects & assignments	68	24.5
	c) Difficulty in asking questions & doubts	15	5.4
	d) Problem in understanding online learning	21	7.5
2.	**The most commonly faced technical issues during online learning classes is**		
	a) Registering online apps	95	34.2
	b)Authenticated educational material	16	5.8
	c) Network problem	167	60
3.	**The most common issue related to assignment is**		
	a) Too lengthy	119	42.8
	b) Require more time for submission	64	23.0
	c) Require detailed directions for online submission	12	4.3
	d) Insufficient resources	83	29.9
4.	**The common aspect which has impacted your experience regarding online learning**		
	a) Lack of teacher & student interaction	190	68.3
	b) Inadequate direction for learning	17	6.2
	c) Lack of own responsibility about learning	29	10.4
	d) Inadequate access to learning material	42	15.1
5.	**Health problems faced during online study**		
	a) No	196	70.5
	b) Eye problems	45	16.2
	c) Headache	23	8.3
	d) Both b & c	7	2.5
	e) Eye problems, headache, neck pain	7	2.5

Regarding issues of online study, majority 174(62.6%) of participants were not able to maintain proper time schedule followed by 68(24.5%) of them had burden of various subjects assignment respectively. More than half 167(60%) of them had faced network issues. 119(42.8%) of them replied that online assignments were too lengthy. 190(68.3%) of them said that there was lack of student and teacher interaction followed by 83(15.1%) has inadequate access to learning material. 196(70.5%) of them had no health issues followed by 45(16.2%) of them has faced eye related problems respectively.**(Table No.3)**

-There was significant association of area of residence with level of satisfaction as p-value was <0.05 level of significance and others has no significant association with level of satisfaction.

Discussion:-
Worldwide spread of corona pandemic has imposed so many limitations on every aspect of life so how can education be spare from it. But as human nature is always so curious and creative and nothing can stop i,ts journey. This pandemic has slowed down the speed of education but taught the world different aspects of experimentation. So the new trend has started in India is of online classes now.

216(77.7%) of respondents stated that classroom teaching is the best teaching learning method. Majority 122(43.9%) of subjects were agreed that online teaching provides opportunity to create student's own leaning environment. Linjawi AI, Alfadda LS (2018)[12]has conducted similar study which has shown that online learning method is an effective way to enhance student learning.

More than half 191(68.7%) of subjects were partially satisfied with online study during COVID-19Similar results showed by a study conducted by AbbasiS et al[13].where 77.4% students had negative perception towards e-learning.

Regarding issues of online study, majority subjects were not able to maintain proper time schedule, faced network issues, less student & teacher interaction and inadequate access to learning material etc.Lorna R. Kearns (2012)[14]has conducted similar study and found that physical distance between student and teacher, adaptations with technology, workload and time management issues and feedback has impacted the online study.A study conducted by Smart K L et al.[15]onstudentsperceived that for 83%students, that was their first online module and they reported lack of technological knowledge waste their time more. Study conducted in Iran also analyzed that major disadvantage considered by students of pursuing online classes was technology issue.

Study also explored that students living in rural area had poor internet bandwidth and less availability of computers at their home place, which leads to partial satisfaction of online classes. Studies indicated that computers and internet speed are the basic requirements for online learning.[16,17]In less developed areas students still don't have proper internet access with computers, which hold back them from using online classes properly.

Conclusion:-
COVID-19 pandemic has impacted the students learning. In order to make effective learning, online study was started by educational institutions. Hence based on study findings, it's concluded that efforts should be taken to make online teaching more interactive and functional which will create student's own learning environment. This will enhance the student's satisfaction level also. In order to overcome the hurdles of online study, there should be proper time schedule, adequate network facilities, Effective student-teacher interaction activities, sufficient educational learning material etc. Hence student's perception regarding online learning not only will help to assess pedagogical approach but also helps the institutions to prepare internet based online education delivery which will be beneficial for students during pandemics such as COVID-19 or emergency situation.

Limitations:
This study was limited to the nursing students only. In addition, study was conducted in selected nursing institute having only female students. Furthermore, all information provided by participants was self-reported. Therefore, results of this study should be generalized cautiously.

Recommendations:-
This study stressed on the need to conduct more studies on assessing the perception of learners and trainers both towards the online classes. Studies must focus on to explore the more barriers and adequate suitable ways to overcome them in order to enhance effective learning.

Conflict of interest:
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