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

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Abstract

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.

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. 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. Studies suggest that by developing strategies that ensure continuous engagement of students throughout the online study helps more to enhance performance of students.

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.

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.

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.

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 sociodemographic 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

| 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

| 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.

| Rating         | Frequency |
|----------------|-----------|
| Strongly agree | 63        |
| Agree          | 122       |
| Neutral        | 74        |
| Disagree       | 18        |
| Strongly disagree | 1     |

4. ‘By giving assignment or some specific task active learning can be enhanced during online classes.’ Give rating to above statement.

| Rating         | Frequency |
|----------------|-----------|
| Strongly agree | 62        |
| Agree          | 132       |
| Neutral        | 71        |
| Disagree       | 13        |
| Strongly disagree | 0     |

5. According to you, how frequently feedback should be taken from students?

| Frequency | Percentage |
|-----------|------------|
| Daily     | 129 (46.4%)|
| Weekly    | 136 (48.9%)|
| Once a month | 9  (3.3%) |
| Anytime (surprise test) | 4 (1.4%) |

6. According to you, which of the following is the best way to evaluate students?

| Evaluation Method              | Frequency |
|--------------------------------|-----------|
| Synchronous oral test          | 159 (57.2%)|
| Synchronous written test       | 39 (14.0%) |
| Asynchronous written test      | 70 (25.2%) |
| 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 learning environment. Most 132(47.5%) of participants agreed that giving assignment or some specific task can enhance active learning during online study. Greater number 136 (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)

![Percentage distribution of Satisfaction level](image-url)

- fully satisfied
- partially satisfied
- unsatisfied

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 its 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) 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-19 Similar results showed by a study conducted by AbbasiS et al 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) 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. on students perceived 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. 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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**References:**
1. Aspegren K. BEME Guide No. 2: Teaching and learning communication skills in medicine—a review with quality grading of articles. Med Teach [Internet]. 1999 Jan [cited 2020 Jun 4];21(6):563–70. Available from: http://www.tandfonline.com/doi/full/10.1080/01421599978972
2. https://www.financialexpress.com/industry/online-classes-business-schools-distant-learning-coronavirus-lockdown-digital-india-internet-education-infrastructure-online-learning/1945605/
3. Akimanimpaye, F. & Fakude, L.P. (2015). Attitudes of undergraduate nursing students towards e-learning at the University of the Western Cape, South Africa. African Journal for Physical, Health Education, Recreation and Dance, Supplement 1:2 (October), 418-433.
4. Artino, A.R. and Stephens, J.M (2009). Academic Motivation and Self Regulation: A Comparative Analysis of Undergraduate and Graduate Students Learning Online. Internet and Higher Education, 12.
5. O’Doherty D, Dromey M, Lougheed J, Hannigan A, Last J, McGrath D. Barriers and solutions to online learning in medical education – an integrative review. BMC Med Educ [Internet]. 2018 Jun 7 [cited 2020 Jun 4];18(1):130. Available from: https://doi.org/10.1186/s12909-018-1240-0
6. Quesada-Pallarès C, Sánchez-Martí A, Ciraso-Calí A, Pineda-Herrero P. Online vs. Classroom Learning: Examining Motivational and Self-Regulated Learning Strategies Among Vocational Education and Training...
1. Students. Front Psychol [Internet]. 2019 Dec 19 [cited 2020 Jun 4];10. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6931267/
2. Choules AP. The use of elearning in medical education: a review of the current situation. Postgrad Med J. 2007 Apr;83(978):212–6.
3. https://www.weforum.org/agenda/2020/04/coronavirus-education-global-covid19-online-digital-learning/
4. Schimming LM. Measuring Medical Student Preference: A Comparison of Classroom Versus Online Instruction for Teaching Pubmed. J Med Libr Assoc JMLA [Internet]. 2008 Jul [cited 2020 Jun 4];96(3):217–22. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2479068/
5. Pei L, Wu H. Does online learning work better than offline learning in undergraduate medical education? A systematic review and meta-analysis. Med Educ Online [Internet]. 2019 Sep 17 [cited 2020 Jun 4];24(1). Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6758693/
6. Omar ND, Hassan H, Atan H. Student Engagement in Online Learning: Learners Attitude Toward E-Mentoring. Procedia - SocBehavSci [Internet]. 2012 Dec 10 [cited 2020 Jun 4];67:464–75. Available from: http://www.sciencedirect.com/science/article/pii/S1877042812053372
7. Linjawi AI, Alfadda LS. Students’ perception, attitudes, and readiness toward online learning in dental education in Saudi Arabia: a cohort study [Internet]. Vol. 9, Advances in Medical Education and Practice. Dove Press; 2018 [cited 2020 Aug 17]. p. 855–63. Available from: https://www.dovepress.com/students-perception-attitudes-and-readiness-toward-online-learning-in--peer-reviewed-article-AMEP
8. Abbasi S, Ayoob T, Malik A, Memon SI. Perceptions of students regarding E-learning during Covid-19 at a private medical college. Pak J Med Sci. 2020;36(9COVID19-S4):COVID19-S57-S61. doi: https://doi.org/10.12669/pjms.36.COVID19-S4.2766
9. Lorena R. Kearns. Students assessment in online learning: challenges and effective practices. Journal of online teaching & learning. 2012 Sept. [cited 2020 July 5];8(3):190-208. Available from https://jolt.merlot.org/vol8no3/kearns_0912.pdf.
10. Smart KL, Cappel JJ. Students’ Perceptions of Online Learning : A Comparative Study. J InfTechnol Educ. 2006; 5: 201–19
11. Obi I.E., Charles-Okoli A.N., Agunwa C.C., Omotowo B.I., Ndu A.C., Agwu-Umah O.R. E-learning readiness from perspectives of medical students: A survey in Nigeria. Niger. J. Clin. Pract. 2018;21:293–300.
12. Chiu Y., Tsai C. The roles of social factor and internet self-efficacy in nurses’ web-based continuing learning. Nurse Educ. Today. 2014;34:446–450. doi: 10.1016/j.nedt.2013.04.013.