

Content available at: <https://www.ipinnovative.com/open-access-journals>

IP Journal of Paediatrics and Nursing Science

Journal homepage: <https://www.jpns.in/>

Original Research Article

Anxiety and its causes among undergraduate nursing students during Covid 19 pandemic

Manju George Pynadath^{1,*}, Usha Marath¹, Akshara M¹, Anjaly Jose¹, Athulya Joseph¹, Dona Rose Joseph¹, Krishna M R¹¹Dept. of Mental Health Nursing, Lisie College of Nursing, Kochi, Kerala, India

ARTICLE INFO

Article history:

Received 11-01-2023

Accepted 11-03-2023

Available online 08-05-2023

Keywords:

Anxiety

Causes of anxiety

Undergraduate Nursing students

ABSTRACT

Introduction: The corona virus disease (COVID 19) had upended medical education. This pandemic had risen the uncertainty over the start of normal routine of studies in medical universities. During this pandemic period educators had to find new alternatives for academic delivery. Various online platforms were used for educating various courses for the students. As COVID 19 is a new disease and was having devastation effect globally its emergence and its spread caused anxiety among students. The exams were postponed due to lockdown and students were under going stress and it further led to anxiety. Nursing education was also most affected by this pandemic. Nursing a practice based profession, apart from the theoretical knowledge they need to acquire clinical expertise. Due to the emergence of COVID 19 pandemic the Undergraduate nursing students had an anxiety of future due to lack of clinical practice. More over students are anxious regarding the course completion, exams, financial constraints of their family and hazards in their working place. This study was aimed at assessing the anxiety and its causes among the Undergraduate Nursing students during COVID 19 Pandemic.

Materials and Methods: Descriptive survey design was used. A total of 200 Nursing students were selected using convenient quota sampling method data was collected using semi structured questionnaire to assess causes of anxiety and rating scale to access the anxiety.

Results: Study results revealed that the 50% of students had mild anxiety, 49.5 % had moderate anxiety and 0.5% had severe anxiety. In the area of technical issues 60% had issues related heavy battery consumption of their devices and reduced storage space. Regarding academic issues 64.5% had issues regarding inability of understand the topic in online classes, 63.5% had concerns regarding the extension of course due to delaying of exam results and 50.5% of them had concerns regarding their skill acquisition since they had only completed 80% of practical requirements. It was found that 88.5% of students faced decreased interaction with teachers due to online classes as a communication issue and 59% of students experienced financial issues due to increase in the expense of PPE kits. Twenty nine percentage of students were having concerns regarding migration difficulties that might come across in their future career. Sixty one percentage of students were having fear of getting infection due to disease transmission.

Discussion: The rapid escalation in corona cases across the globe has created panic among people. Nursing students, being in direct contact with the patients in health care facilities, were always at risk to contact the deadly virus. This anxiety and worry poses a great mental turmoil and impacts the psychological health of the students. The study had generated baseline data with respect to the effect of the COVID-19 pandemic on causing the anxiety among nursing students. Students across the nursing institutes reported high levels of anxiety. Nurse educators should address such issues of students and use appropriate measures to allay their anxiety

This is an Open Access (OA) journal, and articles are distributed under the terms of the [Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License](https://creativecommons.org/licenses/by-nc-sa/4.0/), which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: reprint@ipinnovative.com

1. Introduction

The world was facing unprecedented challenges in the face of a global pandemic. Corona virus 2019 has, to date, killed thousands worldwide. The data related to number of tests administered, positive cases, hospitalization, and deaths, changes on an hourly basis. Mounting concerns regarding the strain on health care systems globally are already occurring and likely to get significantly worse.¹ This health crises impact not only front line staff and clinical leaders but all systems and communities. COVID 19 has also already disrupted Universities and academic institutions. Within the health, field, schools, nursing colleges are bracing for unique challenges related to their role in helping and to develop the next generation of care providers.^{1,2}

COVID 19 also causes a great challenge to health education system. During the first few weeks of pandemic children were kept away from clinical environment. In the later days preceding this decision, numerous questions and concerns were shared in online meeting, over conference call and in urgent emails among colleges while the majority learning is conducted online. Students in this program must complete clinical placement individually to fulfill the Bachelor of nursing degree requirements. If the students were exposed to COVID 19 while in a clinical setting, there is risk for their health and also to their family. Researchers also have to consider that the students could face the financial burden of being quarantined. Additionally, as a post-licensed program, if students were exposed, they would be unable to return to work, adding further strain to the health system.³

Students express concern about what an interruption in their nursing education would mean for their future careers as a registered nurse. Many students in clinical placement where focusing on the clinical practices and thus close to successfully completing their programmes. Some learners were only one or two courses away from completion of their BSc nursing degree. Since our health field is fighting against a pandemic, nursing students miss an opportunity to beat this pandemic along with our health system.^{3,4} If the nursing students were able to enter clinics or graduate, this opportunity may help them to become a better version of themselves in providing care because in a present scenario the major problem faced by hospital setting is lack of nursing staff this can be the reason for lacking of future care resources too. So if nursing students can contribute somewhat it will help in gaining the resources. Now most of the hospitals need more staff due to this situation students cannot start to do jobs. In addition to cancelling their current clinical placement they have concern about progressing in the rest of their program. Some students may have felt selfish and were frightened about not reaching the career goals that they have worked so hard to obtain. Nurse

educators may face difficult discussion on supporting the public and the clinical colleges. However, there also must be a consideration for the needs of current and future nursing students. Even with all the fear and anxiety there are lessons in hope. Students main concerns have been the health of patients and communities.³ Now the students have almost honest thoughts on the impact of this pandemic worldwide. They are studying about the role of registered nurses in online classes.

The study was conducted to assess the level of examination anxiety among B.Sc nursing students in a selected college at Coimbatore. The results revealed that there was a significant increase in examination anxiety among Undergraduate Nursing students.⁴

Nurses' competence is based on the knowledge and skill taught to them. Nursing education is combined with clinical and theoretical learning. Due to emergence of COVID 19 pandemic, B.Sc nursing students had an anxiety about future due to lack of clinical practices. Investigators also felt anxiety regarding their course completion, clinical practices, examinations, financial constraints of their family; moreover there were only a few studies in this area. So it is decided to conduct a study to assess anxiety and its causes among Undergraduate nursing students during COVID 19 pandemic.

2. Materials and Methods

Study was conducted as a part of a research project, for the partial fulfillment of the requirement of 3rd year Undergraduate Nursing degree course. A quantitative approach, descriptive survey design was used. Study was conducted in Kerala India. The participants were 200 student nurses from Ernakulum District. Data collected in the month of March 2022.

The study participants were recruited using convenient cluster sampling method from three different private Nursing colleges of Ernakulam District, Kerala. Subjects were explained about the purpose of the study and were ensured that data collected would be kept confidential and would be used only for research purpose. The data collected using demographic data sheet for assessing the selected demographic variables, rating scale to assess anxiety during COVID 19 pandemic semi-structured questionnaire was given to assess the causes of anxiety among Undergraduate nursing students.

2.1. Tools of data collection

The tool comprised of anxiety rating scale and a semi structured questionnaire to find anxiety and its causes among Undergraduate nursing during COVID 19 pandemic in selected colleges of Ernakulam district.

Tool 1 – Anxiety rating scale

* Corresponding author.

E-mail address: manjusunnyp@gmail.com (M. G. Pynadath).

Section A: Socio - demographic data sheet consist of questions in relation to the socio demographic factors.

Demographic data includes gender, year of study, area of residency, place of residence, family income, parental occupation, source of funding.

Section B: Anxiety rating scale to assess anxiety among Undergraduate Nursing students.

Anxiety scale consist of 40 positive statements under the headings academic, theory and practical examination, skill acquisition, communication, finance, future career, disease transmission, physical problems carrying four options each ,which is never, sometimes, rarely, often, always Tool 2 – Semi-structured questionnaire to assess the causes of anxiety among B.Sc nursing students.

2.2. Data collection process

A formal administrative sanction to conduct the study was obtained from the authorities. Data collection was done from three private Nursing colleges of Ernakulam district. Convenient, quota sampling technique was used to select 200 subjects. Subjects were explained about the purpose of the study and were ensured that data collected would be kept confidential and would be used only for research purpose. The data collected using demographic data sheet for assessing the selected demographic variables, rating scale to assess anxiety during COVID 19 pandemic semi-structured questionnaire was given to assess the causes of anxiety among Undergraduate nursing students.

3. Results

Details of sample characteristics are given in Tables 1 and 2

3.1. Sample characteristics

Table 1 showed that all (100 %) of subjects were females and, about 25% of subjects were taken from each first, second, third and fourth years. Among them 87% of those subjects were living in urban area whereas 13% of them were in rural area. About 73.5% of them were day scholars and outside hostel include 16.5% and remaining 10.5% of them were residing at college hostel. From this it is understood that out of 200 subjects majority of subjects were females and 25% of each subjects were chosen from first, second, third and fourth years about 73.5% of them were day scholars and are from urban area.

The data presented in Table 2 showed that about 33 % of the subjects had a family income of 99,999-50,000 whereas 28% of them were of the income in a range of 1,00,00-2,00,00 ,among them 17.5% of them had an income of less than 2,00,00. In the parental occupation 36% of the fathers were private employees, 21% of them were government employees, 26% of them work as daily wages and 18.5% of them does other jobs. Among mother's 39.5% of them are house wife, 16.5% of them are Govt employees and

Table 1: Demographic characteristics of the participants N=200

Subject	Characteristics	Frequency(f)	Percentage (%)
Gender			
Male		000	0
Female		200	100
Year of study			
First year		050	25
Second year		050	25
Third year		050	25
Fourth year		050	25
Area of residency			
Urban		174	87
Rural		026	13
Place of residence			
Day scholar		147	73.5
Outside hostel		033	16.5
College hostel		021	10.5

Table 2: Frequency and percentage distribution of nursing students according to family income, parental occupation, source of funding for the study. N = 200

Subject characteristics	Frequency(f)	Percentage (%)
Family income		
< 49,000	43	21.5
99,999-50,000	66	33
1,00,000 -2,00,000	56	28
> 2,00,000	35	17.5
Parental occupation		
a) occupation of father		
Govt employee	42	21
Private employee	72	36
Daily wages	52	26
Other	37	18.5
b) occupation of mother		
Govt employee	33	16.5
Private employee	62	31
House wife	79	39.5
Daily wages	27	13.5
Other	05	2.5
Source of funding for the study		
Karshika loan	42	21
Domestic educational loan	52	26
Gold loan	14	7
Other	92	46

remaining 31% of them are private employees about 13.5% of them works for daily wages and 2.5% does other jobs. 46 % of them had other source of funding for the study, 26% of them had funding for the study by domestic educational loan, and 21% of them had karshika loan as the funding for the study. remaining 7% of them had gold loan.

3.2. Anxiety among undergraduate nursing students during COVID 19 pandemic

This section deals with data pertaining to the anxiety levels of Undergraduate nursing students during COVID 19 pandemic. The data was collected by anxiety rating scale and were graded as mild, moderate and severe anxiety. The data was analyzed and interpreted using descriptive statistics in terms of frequency and percentage distribution and is presented in Figure 2

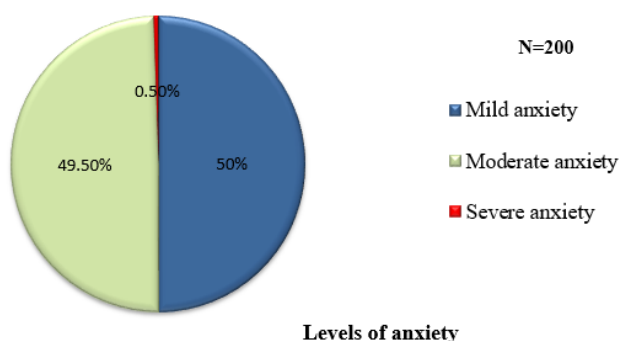


Fig. 1: Pie diagram showing frequency and percentage distribution of nursing students based on level of anxiety.

Figure 1 depicts that the 50% of subjects had mild anxiety whereas 49.5 % had moderate anxiety and remaining. 5% had severe anxiety.

3.3. Causes of anxiety among undergraduate nursing students during COVID 19 pandemic

This section deals with the data pertaining to causes of anxiety among Undergraduate nursing students during COVID 19 pandemic. The data was collected by semi structured questionnaire. The data was analyzed and interpreted using descriptive statistics in terms of frequency and percentage distribution and is presented in Figure 2.

Figure 2 showed that the 31.5% of students had problems of low speed internet, 35.5% of them had power cut issues, 39.5% of students had issues due to changes in weather that interrupt the classes, 62% of them had heavy battery consumption, 45% of them had insufficient data package to attend the classes, 51.5% of them had frequent disconnection issues, 62% of them had reduced storage spaces, 21% of students were sharing their phone with parents or siblings, 28.5% of them were not able to log in with video and audio simultaneously.

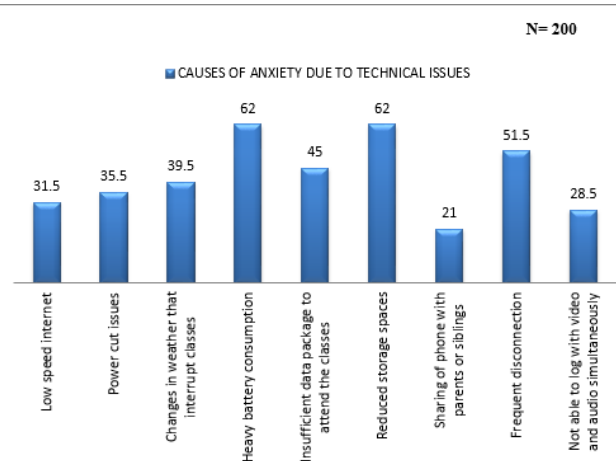


Fig. 2: Bar diagram showing frequency and percentage distribution of causes of anxiety among nursing students related to technical issues.

video and audio simultaneously.

It is clear from the above Table 2 that 64.5% were not able to understand the topics, 45% of them were feeling bored with online classes, 32% reported that the information were too bulky, 33.5% of them were not able to understand the online demonstrations, 29% of them were not physically present even though they login to the classes, 44 % of them reported about lack of study materials and 43.5% were not interested in online quiz and tests. 34% of them had adaptation difficulties. 39.5% were having lack of facility to utilize library and distraction in online classes with pop up messages. 25.5% of the subjects were not having sincerity to search and refer contents adequately, 58.5% of them had increased workload, 51 % of the subjects reported that the influence of social media between the online classes, 36.5% of them had difficulties for uploading of assignments, 21% were having lack of standardized patients clinical settings.

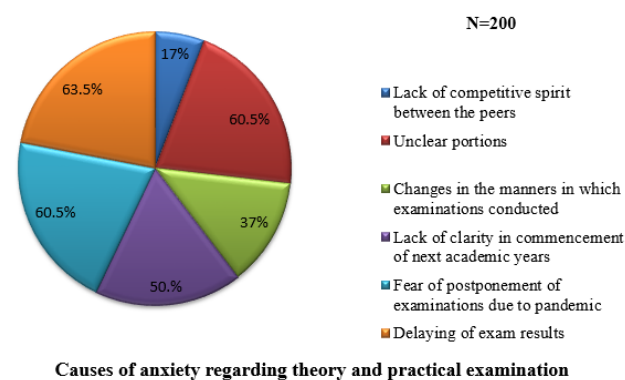


Fig. 3: Pie diagram showing frequency and percentage distribution of causes of anxiety among nursing students related to academic issues- theory and practical examinations.

Table 3: Frequency and percentage distribution of causes of anxiety among nursing students related to academic issues –online class. N=200

SI. NO	Academic issues due to online classes	Frequency (f)	Percentage (%)
1	Inability to understand the topic	129	64.5
2	Too bulky information	64	32
3	Lack of study materials	88	44
4	Adaptation difficulties	68	34
5	Lack of sincerity to search and refer contents adequately	51	25.5
6	Unable to understand the online demonstration	67	33.5
7	Increased workload	117	58.5
8	Influence of social media between the online classes	102	51
9	Lack of facility to utilize library	79	39.5
10	Uploading of assignments	73	36.5
11	Distraction in online with pop up messages	79	39.5
12	Feeling bored with online classes	90	45
13	Online quiz and tests	87	43.5
14	Lack of standardized patients clinical setting	42	21
15	Login to the classes but not physically present	58	29

Figure 3 showed that 63.5% of the subjects had a concern regarding delaying of exams, about 60.5% of them had fear of postponement of examinations and unclear portions, whereas 50% of them had concern regarding lack of clarity in commencement of next academic years and 37 % of subjects reported that changes in manners in which exams were conducted and the remaining 17. 5% 3 of the subjects had lack of competitive spirit between peers

Table 4 showed that 18% of the subjects were not provided with required posting in respective clinical area and missed clinical exposure, 18.5% of them had concerns about the ability to work independently as a nurse and 28 % of them were lacking practical skills, 34% had to complete the remaining practical before the completion of the course, 39 % of them had lack of familiarity with OSCE, 11% of students missed clinical exposures and was concentrated in lab practical's, 28 % were unable to follow the right techniques, 20.5% were not having sufficient time in the academic year to complete 100% clinical experience, 50.5% of students completed only 80% of practical requirements.

Figure 4 showed that 88.5 % of them had decreased interaction with teachers due to online classes, about 34.5 % of them had decreased interaction with peer group, 43% of them were unable to maintain nurse patient relationship effectively whereas 37.5% them had financial burden due to delay in course completion. 59% of them reported that increased expenses for PPE kit was a burden for them and 57% were unable to bear expenses of COVID tests. Among them 34.5% of them were unable to maintain healthy team relationship. 31.5% of them were unable to bear the expenses for internet data packages, 8.5% reported about jobless parents, 27.5% of them had insufficient salary of parents, 19.5 % of them had increased debts and 21% of them were unable to repay loan on time.

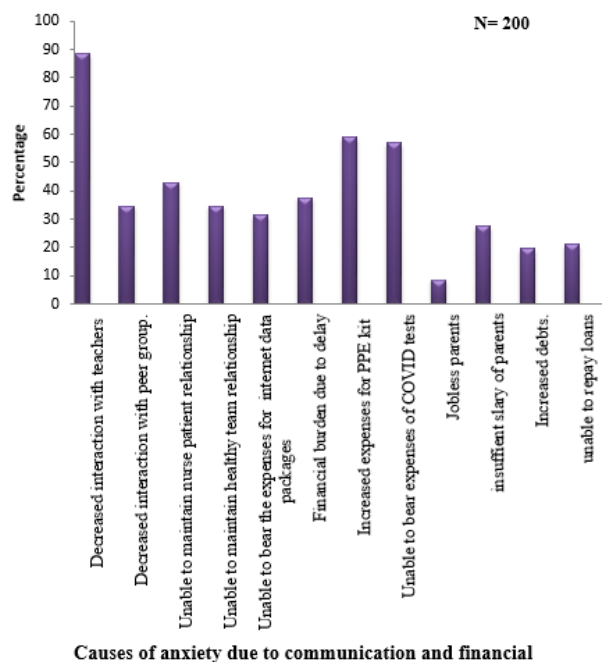
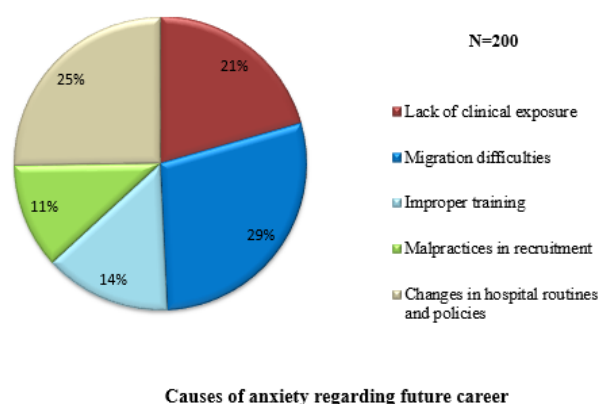
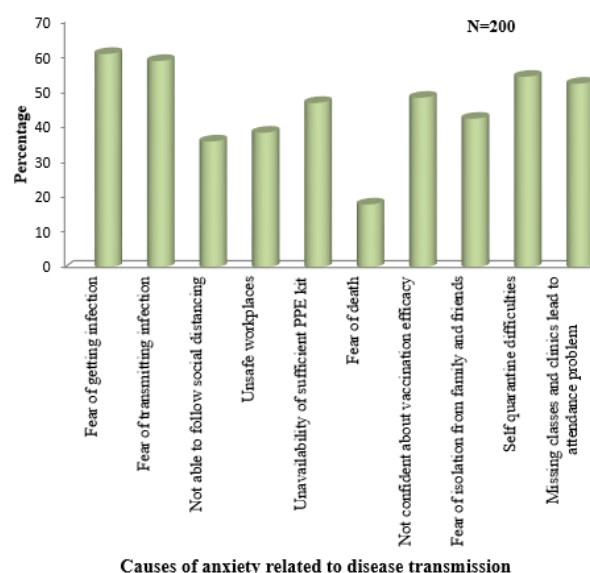
**Fig. 4:** Bar diagram showing frequency and percentage distribution of causes of anxiety among nursing students related to communication and financial issues.

Figure 5 shows that, 29% of them had migration difficulties, 25 % of them were anxious about the changes in hospital routines and policies, about 14 % of the subjects had improper training, whereas 11% of them were feared about the malpractices in recruitment.

Figure 6 showed that sixty-one percentage had fear of getting infection, 59% of them had fear of transmitting infection and 52.5% of them had fear about missing classes

Table 4: Frequency and percentage distribution of causes of anxiety among nursing students related to academic issues-skill acquisition N=200

SI. NO	Academic issues due to skill acquisition	Frequency (f)	Percentage (%)
1	Not provided with required posting in respective clinical area	036	18
2	Worried about your ability to work independently as a nurse	037	18.5
3	Lack of practical skill	056	28
4	Lack of familiarity with OSCE	078	39
5	Missed clinical exposures and was concentrated in lab practical's	022	11
6	Unable to follow the right techniques	056	28
7	Practical requirements were completed in with case scenarios provided to complete care plan or case studies in classrooms.	024	12
8	Not having sufficient time in the academic year to complete 100% clinical experience.	041	20.5
9	Completed only 80% of practical requirements.	101	50.5
10	Will have to complete the remaining practical before the completion of the course.	068	34

**Fig. 5:** Pie diagram showing frequency and percentage distribution of causes of anxiety among nursing students related to concerns of future career.**Fig. 6:** Frequency and percentage distribution of causes of anxiety among nursing students related to concerns of disease transmission.

and clinics due to infections that has lead to attendance problems, 36 % of them were not able to follow social distancing guidelines strictly and 38.5% were anxious about unsafe workplaces, 47% of them had unavailability of sufficient PPE kit, 18% of them had fear of death, 48.5% of the students were not confident about vaccination efficacy, 42.5% of them had fear of isolation from family and friends, 54.5% of them had self quarantine difficulties.

4. Discussion

The current study provided information regarding the anxiety and its causes among B.Sc Nursing students during covid 19 pandemic, 100 % of subjects were females and most of them residing in the college hostel and majority of subjects had financial crisis due to the loss of jobs of

their parents. Most of the subjects had taken loan to meet the expense of their education.

These findings were consistent with the findings of an another study conducted in Pune, to assess the, anxiety levels and coping strategies among nursing students during the COVID-19 Pandemic. The sample size consists of 316 nursing students. Based on the socio-demographic characteristics female predominance was observed and most of them had financial crisis as their parents lost their job.^{1,3,5}

The present study showed that 50% of subjects had mild anxiety whereas 49.5 % had moderate anxiety and

remaining 0.5% had severe anxiety. These findings were consistent with the findings of another study conducted in Nepal to find out Anxiety among Nursing Students towards Clinical Placement during COVID-19.⁶

A cross-sectional study was conducted in Iran to assess the Prevalence of generalized anxiety disorder among nursing students in Iran during the COVID-19 pandemic. This study findings were similar to the present study as the majority of subjects were having mild, moderate and severe anxiety.^{7–9} Contradictory to this study, the present study does not have any subjects with no anxiety.

A web based study was conducted to assess the, Anxiety Levels and Coping Strategies among nursing students during the COVID-19 Pandemic in Saudi Arabia. Findings of study showed that 32.3% of the students had mild anxiety, 40.5% had moderate anxiety, 22.5% had high anxiety, and 4.7% had severe anxiety during the COVID-19 pandemic.^{10–13} This study is similar to the present study as it had subjects with mild, moderate and severe anxiety.

The present study showed that 62% of them reported about heavy battery consumption and reduced storage spaces in their phone was a cause of concern too. About 64.5% of the subjects found the greater cause of concern in academic issues was inability to understand the topic that were taken in online classes. Among them 39% of the subjects had lack of familiarity with the OSCE examination. 88.5 % of them had decreased interaction with teachers due to online classes found the major cause of anxiety. 62% of subjects found that the increased expenses of PPE kit was an issue whereas 25% of subjects were concerned about future career. Among them 61% of the subjects had concern regarding disease transmission.

These findings were similar with the findings of another study conducted among nursing students in Kerala, to determine attitude and related problems of online learning among Undergraduate Nursing students during COVID-19 pandemic. Study revealed that net issues and heavy battery consumption and related financial crisis was the major problems identified.⁸ Similar findings was there in several other studies.^{12,14,15}

5. Strength and limitations of the study

The study helped to reveal anxiety and its causes among B.Sc Nursing students during Covid 19 pandemic. The major limitation of the study was that it was conducted among Undergraduate Nursing students of only three private nursing colleges at Ernakulam which may not be a true representation of the target population. Data was collected through questionnaire and ratings scale technique used were self reporting and self rating in which there was an element of guessing that can influence the actual scores. So generalization should be done with caution

6. Conclusion

The study was focused to assess anxiety and its causes among Undergraduate nursing students during COVID 19 pandemic. The tool used were socio-demographic data sheet, anxiety rating scale to assess anxiety among Undergraduate nursing students and semi structured questionnaire to assess causes of anxiety. Convenient, cluster sampling was used to collect data from 200 subjects who met the inclusion criteria. Quantitative approach was used. Based on the study, the researchers realized 50 % of them are having mild anxiety, 49.5% of them are having moderate anxiety and remaining 0.5 % had severe anxiety were assessed through anxiety rating scale. Major causes of anxiety identified were technical issues while attending online classes, academic issues, lack of communication, financial crisis and future concerns. The study findings gave an insight to the nurse educators to pay attention to students problems during pandemics and other disasters.

7. Source of Funding

None.

8. Conflict of Interest

None.

References

1. Elmer T, Mephan K. Students under lockdown: Comparisons of students' social networks and mental health before and during the COVID-19 crisis in Switzerland. *PLoS One*. 2020;15(7):e0236337. doi:10.1371/journal.pone.0236337.
2. Al-Sukayt A, Chinna K, Nurunnabi M, Sundarasan S, Kamaludin K, Baloch GM. Anxiety Level of University Students During COVID-19 in Saudi Arabia. *Front Psychiatry*. 2020;11:579750. Available from: <https://doi.org/10.3389/fpsy.2020.579750>. doi:10.3389/fpsy.2020.579750.
3. Kalavathi RH, Suchithra S, Shabana A. A study to assess the level of anxiety among I year GNM student at narayana school of nursing. *Int J Adv Sci Res*. 2017;2(6):13–5.
4. Kanthamani S, Vijayalakshmi N. Assess the Examination anxiety among BSc(N) students in selected college. *J Psychiatric Nurs*. 2019;8(3):101–3.
5. Sumathi PV, George M. Attitudes and problems related to online learning in undergraduate Nursing students during COVID 19 pandemic; 2020.
6. Banstola B, Shakya N, Sharma P. Anxiety among Nursing Students towards Clinical Placement during COVID-19 in a Tertiary Hospital of Nepal: A Descriptive Cross-sectional Study. *JNMA J Nepal Med Assoc*. 2021;59(238):8369559.
7. Hasanpour M, Maroufizadeh S, Mousavi H, Noughani F, Afshari M. Prevalence of generalized anxiety disorder among nursing students in Iran during the COVID-19 pandemic: a web-based cross-sectional study. *Int J Africa Nurs Sci*. 2021;15:100360. doi:10.1016/j.ijans.2021.100360.
8. González JG, Ruqiong W, Rodriguez RA, Mullor MR, Ding C, Ventura-Miranda MI. Analysis of anxiety levels of nursing students because of e-learning during the covid-19 Pandemic. *Healthcare*. 2021;9(3):252. doi:10.3390/healthcare9030252.
9. Seyedfatemi N, Tafreshi M, Hagani H. Experienced stressors and coping strategies among Iranian nursing students. *BMC Nurs*. 2007;6:11. doi:10.1186/1472-6955-6-11.
10. Zuhra RM, Nauli FA, Konadi A. 2021.

11. Asad M, Alenezi A, Alsallowly MN, Basheeruddin SM, Alrashed IN, Almutairi MF. Self-reported Anxiety and Coping: A Cross-Sectional Study among Saudi Nursing Students during COVID-19 Pandemic using GAD-7 and Briefcope. *Indian J Pharm Educ Res.* 2021;55(3):1–9.
12. Alama, Nisreen, Khader A. Anxiety level and coping strategies among Palestinian nursing students during COVID-19 pandemic: An Online Cross -Sectional Study. . *Int Med J.* 1994;28:4583.
13. Han S, Eum K, Kang H. Factors Influencing Academic Self-Efficacy Among Nursing Students During COVID-19: A Path Analysis. *J Transcultural Nurs.* 2021;33(2):239–45.
14. Sheroun D, Wankhar DD, Devrani A, Lissamma PV, Chatterjee K. A study to assess the perceived stress and coping strategies among B.Sc nursing students of selected colleges in Pune during COVID-19 pandemic lockdown. *Int J Sci Healthcare Res.* 2020;5(2):280–8.
15. Polit DF, Beck CT. Nursing research. Generating and assessing evidence for nursing practice. 10th ed. and others, editor. Lippincott Williams & Wilkins; 2016. p. 784.

Usha Marath, Professor Cum Principal  <https://orcid.org/0000-0003-0092-0360>

Akshara M, Student

Anjaly Jose, Student

Athulya Joseph, Student

Dona Rose Joseph, Student

Krishna M R, Student

Cite this article: Pynadath MG, Marath U, Akshara M, Jose A, Joseph A, Joseph DR, Krishna M R. Anxiety and its causes among undergraduate nursing students during Covid 19 pandemic. *IP J Paediatr Nurs Sci* 2023;6(1):40-47.

Author biography

Manju George Pynadath, Professor  <https://orcid.org/0000-0003-3420-2797>