

Impact of COVID-19 on academic stress among nursing students

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Abstract:

Background: The present world has been shuddered by COVID 19. The pandemic affected the regular education and forced to switch into virtual learning platforms for the continuity of classes. This sudden change affected the students as well as their families. The present study is done with the objective to assess the extent and impact of COVID 19 on academic related stress among nursing students at Institute of Nursing Sciences and Research, Malabar Cancer Centre, Thalassery, Kerala, India.

Materials and methods: A descriptive study design is used. Data is collected from 78 nursing students using demographic performa and academic stress rating scale. Purposive sampling technique is used.

Results: The study result points that majority of nursing students 57.7% have moderate stress, 34.6% have severe stress and 7.7% have slight stress with a mean academic stress score of 18.24±5.02. The study highlighted that majority of students have academic related stress on university examination (50%), portion completion (44.9%), availability of study materials (50%), clinical training (53.8%) and missing of friends (56.4%). Chi-square test was done to check the association between academic stress due to Covid 19 and selected demographic variables. No significant association was found between academic stress score and demographic variables.

Conclusion: The nursing students are more worried on their university examination and meeting the curricular requirements. The study results points the need of adequate stress reduction measures for the students to sustain the after effects of the pandemic COVID 19.

Key Word: Nursing students, COVID 19, academic stress.

Date of Submission: 06-09-2021

Date of acceptance: 20-09-2021

I. Introduction

COVID 19 interrupted the normal academic programs very much. As per the data of WHO, it is affected more than 200 countries all over the world. Approximately 1.8 billion students are affected the impacts directly or indirectly. Education is the area which never be interrupted at any cost, but COVID 19 is a disastrous pandemic which challenging the human survival, hence all the systems are focused on the survival and all the routine education systems are interrupted. The impacts of COVID 19 in education won't be able to measure completely now because it affected the excellence of individual students. The academic developments are the base of all human growth.

The traditional way of teaching is not possible because of fast spreading of COVID 19. The approved face to face teaching is currently outdated because of COVID 19. The newly adopted online teaching is not much effective in all geographical territories. Online education needs uninterrupted networks and supportive devices. Achieving those facilities are not easy task for a developing and populated country like India. The geographical diversity is also a problem for online education, the populations who live in the rural and hilly areas; approximately 65% to 70% are not having the sufficient accessibility of electricity and internet facility. The students from such remote areas are suffered a lot because of device unavailability, electricity and internet issues. Also family issues such as poverty and economic instability due to parent's job loss due to COVID 19 lockdown also affects the studies.

The COVID 19 is an unexpected pandemic which starts to spread suddenly and India moved towards complete lockdown from March 2020, where the academicians are forced to turn into online mode of education which was new to majority of population. Changing traditional method of teaching to online is not an easy task for both teachers and students. The challenges faced during initial phases of online education were accessibility of students through proper devices and adequate connectivity, identifying better online platform and accepting the change in the mode of education. Students and teachers need to get sufficient training

regarding the online class. Students are facing stress on various aspects such as completion of academic curricula, unrectified doubts, completion of practical sections, and fear of examination and so on.

Need for the study

The entire health care system is fighting for survival from the pandemic. Nurses are the front line fighters in the healthcare system. Nursing students are the future nurses and they may become the baton holders of healthcare in the near future. COVID 19 pandemic is affected the academics of nursing students in a negative way. Online academics can be compensatory only to certain extent, where practical training is least possible. Professional clinical exposure and training is unavoidable for nursing profession. The current study is focused to find the academic stress level of nursing students related to the impact of COVID – 19 pandemic. This study information is important to deal the changes in students, as the uncertainty remains as such to start the regular classes and to mold them to face the unexpected modifications in the curriculum.

II. Review of literature

Ferrel M. N, Ryan. J.J (2020) conducted a study with an aim to find the impact of COVID – 19 among medical students at United States of America. This study was conducted on March 2020, they found that COVID – 19 will not affect seriously on medical student and their faculties because they all need to work against the virus and also have the responsibility to protect the world from the pandemic. This study also recommends that medical student have to take this high time as an opportunity to work with the pandemic and learn the newer strategies to handle the patients with COVID – 19. The challenging of pandemic will affect the regular classes of students, which would be tried to replace with online classes.

Mehar R, Arora N did an exploration on higher education to find the impact of COVID – 19 pandemic at Punjab University, Chandigarh, India. This study points the consequences of closure of educational institutions during lockdown period of COVID – 19. They reviewed various aspects such as distance education possibilities, obstacles to online classes in terms of poor access to technology or bad internet connectivity and difficulties to access to educational resources. The challenges identified were difficulty in syllabus completion, training in practical subjects, research works, library facilities and inadequate knowledge on technical platforms for online education for both teachers and students.

III. Material And Methods

A descriptive study was conducted to find out the academic stress among nursing students related to the COVID 19 lockdown and associated social changes.

Research approach: Quantitative approach

Study Design: Descriptive research design

Study Location: Institute of Nursing Sciences and Research, Malabar Cancer Centre, Thalassery, Kerala, India

Study Duration: July 2020 to August 2020.

Subjects: Nursing students

Sample size: 78 Students.

Subject's selection method: Purposive sampling technique

Method of data collection: Survey method

Inclusion criteria:

1. Those who are studying B.Sc. Nursing course at Institute of Nursing Sciences and Research, Malabar Cancer Centre, Thalassery, Kerala, India
2. Those who are willing to participate in the study.
3. Those who are available at the time of data collection period.

Exclusion criteria:

1. Those who are not interested to participate in the study

Study variables

- **Independent variable:** COVID-19 pandemic.
- **Dependent variable:** Academic stress.
- **Demographic variables:** Gender, year of study, earning member of family, work sector of earning member, geographical area, type of family, gadget used for online classes and source of information on COVID-19 and social class of family.

Tool - Academic stress rating scale

An academic stress rating scale is developed by the researchers and validated to implement in the present study. The academic stress rating scale is a four point scale that consists of 10 components regarding various aspects of academics, curriculum and online classes. The response options are no stress, slight stress, moderate stress and severe stress with scores 0, 1, 2 and 3 respectively. The total stress score is categorized into slight stress, moderate stress and severe stress based on the scores acquired.

Table no 1: Academic stress rating scale

SN	Components	No stress (0)	Slight stress (1)	Moderate stress (2)	Severe stress (3)
1	Extension of academic year				
2	Completion of portions and assignments				
3	University examination				
4	Availability of study materials and reference books				
5	Adopting new scenario to complete curriculum – online class platforms				
6	Following online classes same as regular college time table				
7	Internet accessibility				
8	Completion of clinical training.				
9	Influence of social media and TV in studies.				
10	Missing of friends				

Scoring of academic stress

- No stress : 0
- Mild stress : 1-10
- Moderate stress : 11-20
- Severe stress : 21-30

Procedure

Prior to the study, approval was obtained from the Institutional Review Board of Malabar Cancer center, Thalassery. Samples are selected as per the inclusion criteria. The data from B.Sc. nursing students is collected using demographic performa and academic stress rating scale. Survey method is implemented to gather the data. Tool is administered through Google forms. Privacy and confidentiality is maintained throughout the study.

Statistical analysis

The data is analyzed by the use of descriptive and inferential statistics, with the help of SPSS VerSIO – 25. The association between academic stress of nursing students with regard to COVID-19 pandemic and demographic variables were tested using Chi Square test.

IV. Result

Demographic characteristics

The distribution of demographic characteristics of the patient is analyzed and presented in terms of frequency, percentage and graph. The findings shows that majority samples 91% were females and 9% were males, with 51.3% were III year B.Sc nursing students and 48.7% were II year B.Sc. nursing students. In majority families 75.6%, father is the earning member, where the major group, 43.6% works as daily wager, 25.6% in private sector, 14.1% in government sector and most of the students, 93.6% belongs to middle class family. 83.3% students' lives in nuclear family and 84.6% reside in urban area and 15.4% in rural area. Most of students, 97.4% use mobile phone for online classes and around half of the respondents 48.7%, gained information regarding COVID-19 through different sources such as social media, newspaper, and television and 26.9% only from social media.

Academic stress level of nursing students

Different aspects of academic stress are evaluated using academic stress rating scale. Stress score is categorized into slight stress, moderate stress and severe stress based on the scores acquired. Most of the students were more stressed on university exam conduction, in adequate availability of study materials and reference books at home, online class platforms, practical clinical training and missing friends circle.

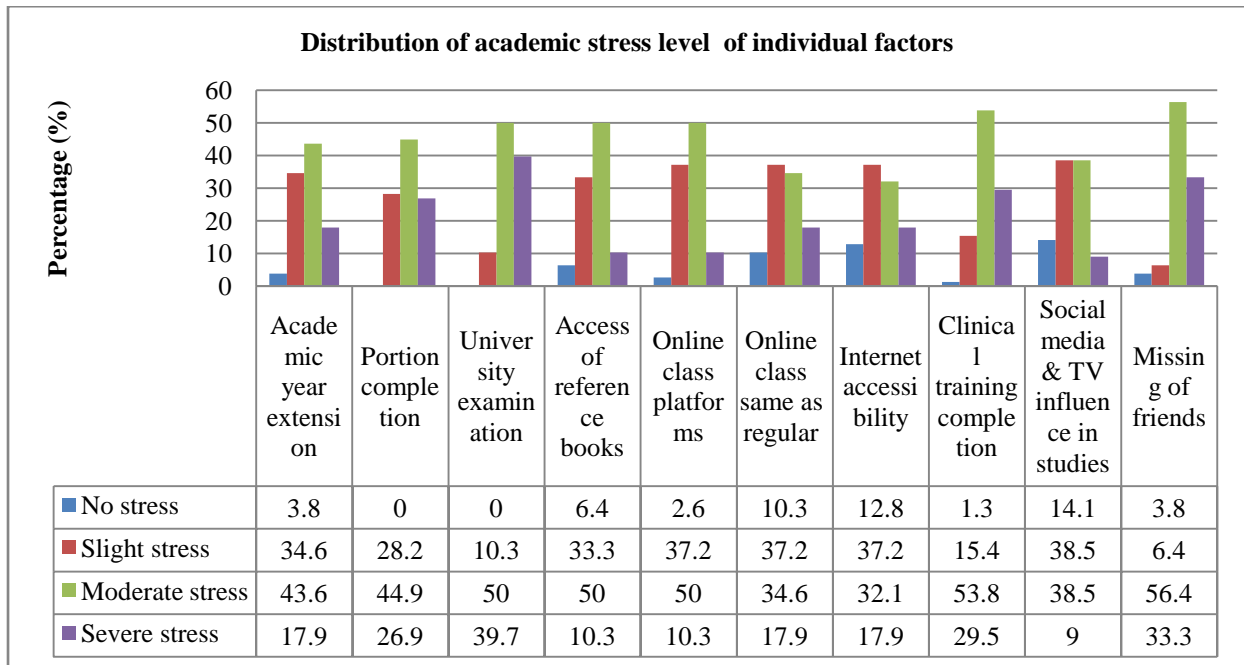


Fig (1): Percentage distribution of academic stress level of individual factors.

Fig (1) represents stress level of nursing students towards each component of academic stress in terms of no stress, slight stress, moderate stress and severe stress. All the students were more concerned on completion of portions and assignments as well as university examination.

On extension of academic year, 17.9% had severe stress, 43.6% had moderate stress, 34.6% had slight stress and 3.8% had no stress. Regarding completion of portions and assignments, 26.9% had severe stress, 44.9% had moderate stress and 28.2% had slight stress. On the subject of university examination, 39.7% had severe stress, 50% had moderate stress and 10.3% had slight stress. In connection to accessibility of study materials and reference books, 10.3% had severe stress, 50% had moderate stress, 33.3% had slight stress and 6.4% had no stress. With regard to the platforms used for online classes, 10.3% had severe stress, 50% had moderate stress, 37.2% had slight stress and 2.6% had no stress. As for following online classes same as regular classes, 17.9% had severe stress, 34.6% had moderate stress, 37.2% had slight stress and 10.3% had no stress. About internet accessibility, 17.9% had severe stress, 32.1% had moderate stress, 37.2% had slight stress and 12.8% had no stress. Regarding completion of clinical training, 29.5% had severe stress, 53.8% had moderate stress, 15.4% had slight stress and 1.3% had no stress. For the aspect of influence of social media and television in studies, 9% had severe stress, 38.5% had moderate stress, 38.5% had slight stress and 14.1% had no stress. And for missing of friends, 33.3% had severe stress, 56.4% had moderate stress, 6.4% had slight stress and 3.8% had no stress.

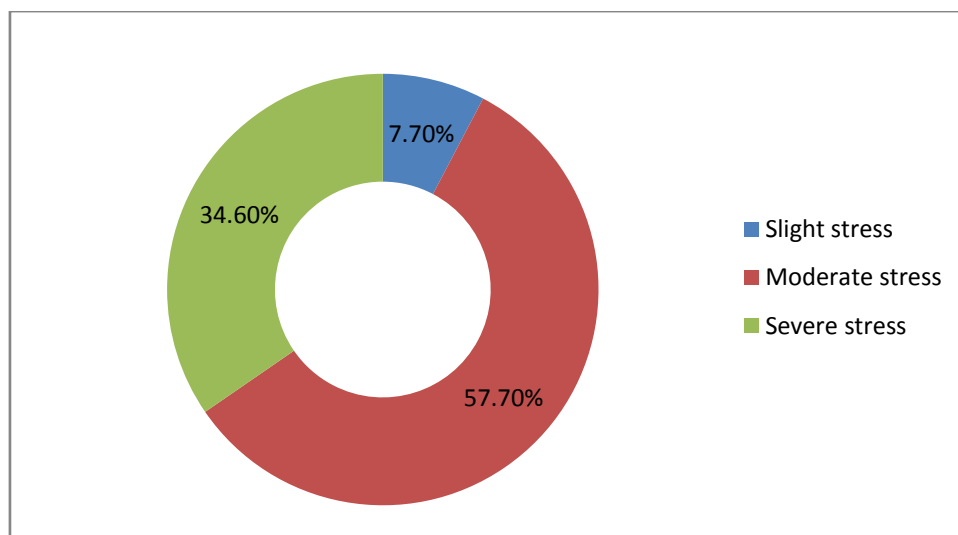


Fig (2): Percentage distribution of academic stress level of nursing students

Fig (2) highlights the overall academic stress level with regard to COVID-19 pandemic. The study result points that majority of students 57.7% have moderate stress, 34.6% have severe stress and 7.7% have slight stress. The mean academic stress score is 18.24 ± 5.02 .

The association between academic stress of nursing students with regard to COVID-19 pandemic and selected demographic variables were tested using Chi Square test. There was no significant association noted between academic stress and demographic variables such as gender, year of study, earning member of the family, working sector of the earning member, geographical area, family type, gadget used for online classes, social class of family and source of information on COVID-19.

V. Discussion

COVID 19 is unexpected pandemic which tremendously affects world population. The spreading of this pandemic is not under control. The WHO and the entire world is fighting against the COVID 19. The education system in the world is collapsed because of this pandemic. The school and collegiate education is continuing with online educational system but the effectiveness is a question. The effectiveness of the online education is completely depends on the internet and device accessibility. The majority of the world population is suffering to get food for their survival and also for medication. They never consider education in their priority list. The developing country like India as per the “world in data” 21.20% that means more than 27 Crore people are living under extreme poverty and more than 57% that means more than 79 crore people are under poverty. The above statistical data proved that the accessibility of internet and devices in public population in India is not an easy task. If healthy individuals are the brain of country then health education is the backbone of a country. Same as medical education is the brain of health education then nursing education is the backbone of health education. The impact of COVID – 19 is widely affected on the nursing education in several ways. A student nursing will acquire patient care knowledge through simultaneous practice of theory and practical. Online education will support theoretical education, but practical it won't. An education like nursing which give equal weightage for both theory and practical will interrupt because pandemic spread. The nursing students are not able to synchronize theory and practical because of lockdown, strict COVID guidelines of hospital and fear. Nursing students already have stress because of their lengthy academic curricula and examinations. The impact of COVID 19 will increases the stress level of students because of various academic factors like examination, missing of friends, device and internet accessibility etc.

VI. Conclusion

The study concluded that nursing students are facing huge stress because of their interrupted academic sessions. Online classes are not able to fulfill all their academic needs. The continuous support of faculties is necessary to reduce the academic stress of students. Much concern should be given to the students to ensure adequate mental health along with ongoing regular online classes. It is recommended that the same study can continue with a huge number of students and also can conduct on the different specialty students.

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