### Journal of Advanced Medical and Dental Sciences Research

@Society of Scientific Research and Studies

Journal home page: www.jamdsr.com

doi: 10.21276/jamdsr

Index Copernicus value = 85.10

(e) ISSN Online: 2321-9599;

(p) ISSN Print: 2348-6805

## **Original Research**

# Stress and coping strategies during COVID- 19 among student nurses in Punjab

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#### ABSTRACT:

**Background:** Stress is highly prevalent among college students. The present study was conducted to assess stress and coping strategies during COVID- 19 among student nurses in Punjab. **Materials & Methods:** Among 255 nursing students stress levels and factors were evaluated using student nurse stress index (SNSI). **Results:** Out of 255 subjects, males were 30 and females were 225. Mild stress was seen among 158, moderate in 55 and severe in 42 subjects. The mean score for examination/ grade was 2.91, atmosphere created by teacher was 1.97, too much responsibility was 2.5, clients attitude was 1.62, physical health of family member was 7.51, relation with parents was 2.14, no time to entertain was 2.8 and attitudes/expectations of other professionals toward nursing was 3.2. The mean score for active coping was 6.2, positive reframing was 5.8, acceptance was 5.3, planning was 5.7, self-distraction was 5.1, religion was 5.1, denial was 3.8 and humor was 3.5. **Conclusion:** Academic-related concerns were major source of stress. A positive trend was evident in the use of adaptive coping strategies in COVID- 19 pandemic. **Key words:** COVID- 19 pandemic, Nursing, Stress

Received: 8, January 2021

Accepted: 10 February, 2021

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This article may be cited as: Saini HK, Sumeriya NK, Saini H. Stress and coping strategies during COVID- 19 among student nurses in Punjab. J Adv Med Dent Scie Res 2021;9(2):104-107.

#### **INTRODUCTION**

The COVID-19 virus, which was first observed toward the end of 2019, was declared a pandemic by the World Health Organization (WHO) on March 11, 2020 because 118,000 people had been infected and 4,291 people had died from the virus.<sup>1</sup> The COVID-19 pandemic has caused many problems in the world. Education has been among these problems. Similarly, with many other countries, schools were closed as a measure against COVID-19.<sup>2</sup>

Stress is highly prevalent among college students. The top three concerns among students are academic performance, pressure to succeed, and post-graduation plans. Nursing education has consistently been associated with anxiety among students.<sup>3</sup> Heavy course loads, stringent examinations, continued pressure to attain a high- grade point average, complex interpersonal relationships, challenges of the clinical environment, caring for chronic and terminally ill patients result in greater anxiety among

nursing students than among students from any of the other healthcare disciplines.<sup>4</sup> Furthermore, it has been found that the clinical training taking place during nursing education is more stressful than the theoretical aspect. Stress has a negative effect on the quality of students' life, their education and clinical practice and may cause drop out from the nursing program.<sup>5</sup>

During an epidemic/pandemic state, nursing students are exposed to additional stressful factors, such as fear of being infected. Nursing students' professional identity development and health are negatively affected by stress and anxiety. These negative effects are directly associated with their coping behaviors.<sup>6</sup> The present study was conducted to assess stress and coping strategies during covid 19 among student nurses in Punjab.

#### **MATERIALS & METHODS**

The present study comprised of 255 nursing students of both genders. All were enrolled once they agreed to participate in the study.

Data such as name, age, gender etc. was recorded. A questionnaire was prepared and distributed among all students in the form of google form. Stress levels and factors were evaluated using student nurse stress

index (SNSI). The subscales of the index showed reliability coefficient ranging from 0.68 to 0.80. Coping strategies of students were identified using 28 item brief COPE scale. The various subscales of the scale were found to have reliability coefficient (alpha) ranging from 0.57 to 0.90. Results thus obtained were subjected to statistical analysis. P value less than 0.05 was considered significant.

#### **RESULTS Table I Distribution of subjects**

Total- 255			
Gender	Males	Females	
Number	30	225	

Table I shows that out of 255 subjects, males were 30 and females were 225.

#### Table II Assessment of stress level

Stress	Number	P value
Mild (22-36)	158	0.01
Moderate (38-73)	55	
Severe (74-110)	42	

Table II, graph I shows that mild stress was seen among 158, moderate in 55 and severe in 42 subjects. The difference was significant (P < 0.05).

#### Graph I Assessment of stress level



#### Table III Student Nurse Stress Index

SNSI	Mean	Mean
Academic load	Examination/ grade	2.91
	Atmosphere created by teacher	
Clinical concern	Too much responsibility 2.5	
	Clients attitude	1.62
Personal	Physical health of family member	7.51
problem	Relation with parents	2.14
Interface	No time to entertain	2.8
worries	Attitudes/expectations of other professionals toward nursing	3.2

Table III shows that mean score for examination/ grade was 2.91, atmosphere created by teacher was 1.97, too much responsibility was 2.5, clients attitude was 1.62, physical health of family member was 7.51,

relation with parents was 2.14, no time to entertain was 2.8 and attitudes/expectations of other professionals toward nursing was 3.2.

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Coping strategies	Mean score
Active coping	6.2
Positive reframing	5.8
Acceptance	5.3
Planning	5.7
Self-distraction	5.1
Religion	5.1
Denial	3.8
Humor	3.5

Table IV shows that mean score for active coping was 6.2, positive reframing was 5.8, acceptance was 5.3, planning was 5.7, self-distraction was 5.1, religion was 5.1, denial was 3.8 and humor was 3.5.

#### DISCUSSION

The COVID-19 pandemic and subsequent mandatory lockdown to suppress transmission of the SARS-CoV-2 virus have caused significant global disruption of the educational system.<sup>7</sup> According to the United Nations Educational, Scientific and Cultural Organization (UNESCO), more than a billion students globally have experienced closures of educational institutions during the pandemic. A systematic review carried out during the pandemic found that university students' problems due to the COVID-19 pandemic: Were "transition from face-to face classes to webbased classes", "how exams will be held", "transportation restrictions", "mental health", and "the support of the university".<sup>8</sup> Previous studies have showed that students do not use effective coping strategies during stressful situations. Few studies have investigated the anxiety and stress coping strategies of nursing students during the pandemic.<sup>9,10</sup> The present study was conducted to assess stress and coping strategies during covid 19 among student nurses.

In present study, out of 255 subjects, males were 30 and females were 225. Labrague et al<sup>11</sup> determined the level of stress, its sources and coping strategies among 547 nursing students. Findings revealed that the degree of stress and the type of stressors and coping styles utilized by nursing students differ according to the country of origin. The year of study predicted overall stress while advanced age predicted overall coping in the nursing students. Strengthening nursing students' positive coping skills may be helpful for them to effectively deal with various stressors during their educational experiences while maximizing learning. Implementing empirically tested approaches may be useful to prevent the recurrence of stress and lessen its impact such as stress management counseling, counseling programs, establishing peer and family support systems, and formulating hospital policies that will support nursing students.

We found that mild stress was seen among 158, moderate in 55 and severe in 42 subjects. Kim et al<sup>12</sup> conducted a study on 173 nursing students at a private university. Self-reported stress, anxiety, and

depression were significantly higher during the lockdown compared to the pre-lockdown period (p < 0.001). Almost a quarter of participants reported high stress, while more than half reported moderate-to-severe symptoms of anxiety and depression. High resilience was negatively associated with high stress, moderate-to-severe anxiety, and moderate-to severe depression. Similarly, high family functioning was negatively associated with high stress, moderate-to-severe anxiety and moderate-to-severe depression. High spiritual support was negatively associated with moderate-to severe depression.

We found that mean score for examination/ grade was 2.91, atmosphere created by teacher was 1.97, too much responsibility was 2.5, clients attitude was 1.62, physical health of family member was 7.51, relation with parents was 2.14, no time to entertain was 2.8 and attitudes/expectations of other professionals toward nursing was 3.2. The mean score for active coping was 6.2, positive reframing was 5.8, acceptance was 5.3, planning was 5.7, self-distraction was 5.1, religion was 5.1, denial was 3.8 and humor was 3.5. Nebhinani et al<sup>13</sup> assessed stress and coping strategies among two hundred and twenty-one undergraduate nursing students. Nearly 82.4% of the students reported moderate level of stress. Interface worries (mean score  $17.88 \pm 4.9$ ) and academic load (mean score  $17.6 \pm 4.78$ ) were the major source of perceived stress. Students considered attitude of other professionals toward nursing, lack of free time, and fear of examination as most likely reasons of their distress. Active coping was the most commonly used coping strategies. Level of stress was found to have significant association with the interest of students in nursing.

#### CONCLUSION

Authors found that academic-related concerns were major source of stress. A positive trend was evident in the use of adaptive coping strategies in COVID- 19 pandemic.

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