# DEPRESSION AND ANXIETY AMONG STUDENTS COMMUNITY DURING COVID-19 PANDEMIC LOCKDOWN IN TAMIL NADU - A WEB BASED DESCRIPTIVE CROSS SECTIONAL STUDY

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# Abstract

Background: The COVID-19 pandemic has had an appreciable impact on public mental health. Hence continuous monitoring of the population's mental health especially during a pandemic demands immediate attention. The COVID-19 pandemic contributing to a rise in depression and anxiety among college students, with more than one third of them experiencing detrimental mental health challenges. Objective: The objective of this study was to investigate the prevalence of depression and anxiety during the COVID-19 pandemic among medical college students.

Methods: This study was conducted among 500 medical college students, after getting approval from the Institutional Ethical Committee. Pre-structured questionnaire-based DASS21 scale was used for this study through Google form after obtaining written

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consent from the students. Using Google Form, a structured e-questionnaire was created and the link was shared via email. All the data were analysed using SPSS ver24. Results are given in frequency and percentage

Results: In our study, we found that prevalence of depression and anxiety, among college students was 16%, and 18%, respectively.

Conclusion: In our study, we found that anxiety, depression, and stress were present among medical students. In COVID-19 phase, students were not attending medical colleges and all the teaching process was online. Even at home, medical students were suffering from anxiety, depression, and stress. Early evaluation and intervention should be prioritized to reduce these morbidities among the medical students.

Key words: Depression, anxiety, college students

### Introduction

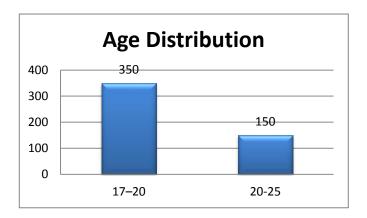
In December 2019, a rare cases of pneumonia caused by the latest Coronavirus (COVID-19) was identified in the city of Wuhan, China[1], and the spread of the virus rapidly became a global health threat[2]. The COVID-19 pandemic has resulted in increased loneliness, stress, anxiety, and depression, among many Indians, including college students. Students can employ many coping strategies while at home, to improve their mental health. To help students receive further support there are local and natural resources. It is well studied that college students are particularly vulnerable to feelings of isolation relative to the general population, they experience higher rates of anxiety and depression. They are vulnerable to more aggravation of these feelings during this time of social isolation, confusion and sudden changes. Students may feel less connected with their peers, groups, and hobbies if they are separated from their social support system and extracurricular activities at their school. Furthermore, they face uncertainty about their future, their own health, and the well-being of their friends and loved ones. The circumstance they are going through is traumatic and induces anxiety, as, in addition to lack of control, there is a constant fear of the unknown, making them more vulnerable to developing mental health problems. While COVID-19 is a new strain of coronaviruses, diseases ranging from cold to more serious diseases such as SARS and MERS [3] are known to be caused. Serious cases of illness can result in heart failure, respiratory failure, acute respiratory syndrome, or even death[4]. COVID-19 may have significant effects on the mental health of people, in addition to its physical effects[5]. The pandemic has had a damaging impact on the mental health of the public that can also lead to psychological crises[6]. Early detection of people in the early stages of a psychiatric illness makes the therapeutic methods are more successful. Hence, this study was undertaken to estimate the prevalence of anxiety and depression among college students.

# **Methods**

This study was conducted among 500 college students in and around Chennai city, after getting approval from the Institutional Ethical Committee. Pre-structured questionnaire was used to conduct this study through Google form after obtaining written consent from the students. The students were explained regarding the questionnaire. In this study, we have excluded all the students who were diagnosed with anxiety and depression before COVID-19 pandemic.

# **Results**

A total of 500 students were enrolled to this study of which majority of the students (350/500) were in the age group of 17-20 years(fig-1), and around 56 % of them were female.(fig-2)



The below figure shows the gender distribution.

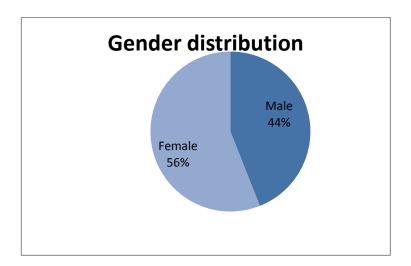


Table-1: Prevalence of anxiety and depression among college students

Variables	Number of students	Percentage
Anxiety	80	16%
Depression	91	18.2%

Prevalence of anxiety and depression among students were 16% and 18%.

Table-2: Mental health status and Gender distribution

Psychological factor	Male N(%)	Female N(%)	Total
Anxiety	55(69%)	25(31.%	80
Depression	67(34%)	24(27%)	91

In this study, Anxiety and depression among male was higher than the female. Table-3:Anxiety and depression scale among gender

Variables	Students (Mean±SD)	Male (Mean±SD)	Female (Mean±SD)
Anxiety	4.59±5.44	3.7±4.40	3.51±4.49
Depression	5.12±5.24	6.12±5.2	5.10±6.22

Anxiety mean score of the students were 4.49 with SD 5.44 and the depression score was 5.12 with SD5.24. Mean score of the anxiety and depression among male was higher in male students as 3.7 and 6.12 and female students were 3.51 with SD and 5.10.

### Discussion

To a large degree, nervousness and anxiety in a group affect everyone. Recent research indicates that people kept in isolation and in quarantine experience substantial levels of stress and anxiety. All of the studies that examined the psychological disorders during the COVID-19 pandemic reported that the affected individuals showed several symptoms of mental trauma, such as emotional distress, depression, stress, mood swings, hyperactivity disorder of attention deficit, post-traumatic stress, and anger. In this study, male students are higher in number than the female students and anxiety and depression also high among male than the female students. With its rapid spread, the emergence of COVID-19 has exacerbated anxiety in populations worldwide, leading to mental health disorders in individuals. This has even resulted in stereotyping and discrimination cases[7]. It is therefore important in this difficult, disruptive and unparalleled period to investigate and understand the mental states of people. Evidence indicates that people can experience symptoms of psychosis, anxiety, trauma, panic attacks, and suicidal thoughts[8]. Similarly, new research has shown that COVID-19 impacts mental health effects such as anxiety, depression and symptoms of post-traumatic stress. The findings of epidemiological research suggest that women are at greater risk of developing depression[9]. In contrast to this study, Saran et al., study showed Women are more sensitive than men to depression and post-traumatic stress disorder [10]. The prevalence of anxiety, depression and stress during the COVID-19 pandemic has been shown to be higher in women than in men in recent studies [11].

### Conclusion

COVID-19 not only triggers physical health problems but also results in a variety of psychiatric disorders. The spread of the new coronavirus in various communities especially can affect the mental health of student's community. Therefore, during the COVID-19 pandemic, it is important to maintain the mental health of individuals and to establish therapeutic strategies that can enhance the mental health of vulnerable groups.

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