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Research Paper

COVID-19 Stress among College Students

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ABSTRACT

College students tend to exhibit COVID-19 induced fear of contamination and other psychological issues associated with the virus. This study aims to investigate the level of COVID-19 stress among college students. From December 15, 2021 to January 15, 2022, 150 volunteers filled Socio Demographic Profile developed by the researchers and COVID Stress Scale by Taylor et al. (2020) using incidental sampling technique. 143 data was considered for the final analysis. Percentage analysis showed that 43.3% of the participants were male and 65.7% were female, 46.9% of the participants were first born, 42.7% later born and 10.5% were only child in the family. There was no significant difference in COVID-19 stress based on gender, birth order and type of family. The major findings and implications are discussed in the article.

Keywords: *COVID-19, Stress, College Students*

The recent pandemic of the novel Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2), also known as COVID-19, emerged from Wuhan, China, and has had a global impact, causing massive threats to human health (Abdulghani et al., 2020). The current pandemic is more dangerous to human lives because COVID-19 has different epidemiological features, making it more transmissible than previous pandemics such as SARS-CoV and MERS-CoV. This situation has alarmingly threatened the entire world (Haleem et al., 2020), and the infected people were asked to be quarantined. The quarantine is a state of voluntary home constraints, termination of public gatherings, as well as travel limitations (Kim et al., 2020).

Taylor (2019) investigated that during times of pandemic many people exhibit fear and anxiety-related distress responses that include the following: Fear of becoming infected, fear of coming into contact with possibly contaminated objects or surfaces, fear of foreigners who might be carrying infection (i.e., disease-related xenophobia), fear of the socio-economic consequences of the pandemic (e.g., job loss), compulsive checking and reassurance-seeking regarding possible pandemic-related threats, and traumatic stress symptoms about the pandemic (e.g., nightmares, intrusive thoughts) and college students are not an exception.

It is witnessed that during the current COVID-19 pandemic, many schools and universities have deferred regular teaching activities. The educational department is perceived to be

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challenging and is currently disrupted. One of the most significant changes was the discontinuation of in-person (face-to-face) teaching sessions, which were replaced by online lecturers. Such circumstances have negative bearings on the mental health of the students. Students have high levels of anxiety and depression (Peterlini et al., 2002), which leads to a detrimental impact on the cognitive functioning and learning of students (Dahlin et al., 2005). Regardless of their experience of e-learning platforms or ability to use these emerging information technologies in their education journey, the COVID-19 pandemic has tested the extent to which both academics and students are prepared to adopt and use these technologies in their online learning activities (Allam et al., 2020). As a result, during the COVID-19 period, many university students had no choice but to deal with advanced online information and communication technologies, which could cause immense stress among the students.

Previous studies showed that disease outbreaks impacted individual mental health and well-being. Multiple risk factors were addressed. It was found that women and those aged between 16 and 24 years exhibited a great risk of developing psychological distress (Taylor et al., 2008). Similarly, recent studies showed a positive response to feeling panicked, depressed, or emotionally disturbed during the H1N1 pandemic (Gu et al., 2015). During the SARS outbreak, a population- based survey showed post-crisis mental distress (Peng et al., 2010). Comparably, during MERS, the level of stress was high in medical students in KSA (Virus, 2020). To the best of our knowledge, no studies have been conducted to assess COVID 19 stress among students. Hence, the purpose of this study was to investigate the COVID 19 stress among students.

Need for the Study
The turbulent situation brought by COVID-19 has produced a worldwide crisis with multifaceted dimensions and the rate and pattern of transmission are threatening people's perception of control and is having a profound impact on the people's daily lives (di Fronso et al., 2020; Priya et al., 2020). The crisis is breeding stress throughout the population and the widespread disease outbreak is associated with unfavorable mental health problems and adverse psychological issues (Nanjundaswamy et al., 2020; World Health Organization, 2020). Public mental health during COVID-19 deserves special attention; based on previous experiences, pandemic outbreaks are related to generalized fear that can impede infection control and lead to depression, anxiety, and post-traumatic stress (Dong &Bouey, 2020). Previous health emergencies have shown psychological consequences of quarantine (Huremović, 2019), such as high stress levels and depression (DiGiovanni et al., 2004). Therefore, even though lockdown can decrease the spread of COVID-19 (Zhang et al., 2020), it can increase the level of stress. Indeed, stress has become a major concern since the COVID-19 outbreak especially among college students. The COVID-19 pandemic has had an impact on students' academic performance. Students are highly vulnerable with regard to the negative psychological consequences of the COVID-19 pandemic, such as high stress levels. Hence, perceived stress levels and mental health of students during the pandemic require monitoring and in-depth research.

Overall, whether it's clear that university students" life was subject to broad modifications, up to date, there are no specific tools to understand, comprehensively identify and assess specific sources of stress featuring university students" COVID- 19related experiences. This, however, could help in early recognize those students at higher risk for developing a significant psychological disease related to the pandemic lockdown, and, accordingly, provide timely and tailored interventions fostering their wellbeing.

The present study aimed at assessing the level of COVID stress among college students which can help in designing appropriate remedial measures by counselors and the academicians.

METHOD

Aim of the Study: This study aimed at assessing level of COVID Stress among college and students and find out the difference in COVID stress based on demographic characteristics.

Procedure

The questionnaires were designed in a Google Form. The researchers shared the forms College principals in WhatsApp. The participants who agreed to the "informed consent" form were presented with the questionnaires, others were not allowed to continue.

Tools Used

- **Socio Demographic Profile:** The researcher prepared socio-demographic profile sheet asking their participants to provide their age, gender, birth order, type of family, year of study.
- **COVID Stress Scale:** It was developed by Taylor et al (2020). This tool consisted of 36 items, scored on 5 point Liker scale concerning worries about the COVID-19 virus over past seven days. The tool consisted of six subscales viz danger, socio-economic consequences, xenophobia, contamination, traumatic stress and compulsive checking. Items related to traumatic stress was dropped in this study. The internal consistency of the scale in this study was 0.943

Statistical Analysis

The data was screened in MS-Excel and scoring was done based the manual. Percentage analysis was carried out to find the distribution of the sample. Correlation was carried out to find the inter relationship among the subscales of the tool. "t" was used to find the difference in COVID stress between two groups.

RESULTS AND DISCUSSION

Demographic Characteristics of the Sample

The frequency distribution of the sample (N=143) is shown in table 1. The total sample consisted of male (n=49, 34.3%) and female (n=94, 65.7%) students with mean age of 18.47 (SD=1.60) years. The majority of the participants were studying UG programme (n=131, 91.6%) and PG (n=12, 8.4%); the majority of them were from joint family (n=102, 71.3%) and nuclear family (n=41, 28.7%).

Table 1: shows the frequency distribution of the sample

Sl. No	Variables	Response	Frequency	Percentage
1	**Gender**	Male	49	34.3
		Female	94	65.7
2	**Birth order**	First Born	67	46.9
		Later Born	61	42.7
		Only Child	15	10.5
3	**Programme**	UG	131	91.6
		PG	12	8.4
4	**Type of Family**	Nuclear	41	28.7
		Joint Family	102	71.3

Internal Consistency and correlation of the scale
Table 2: Correlation of the subscales of COVID Stress among college students

Subscales of COVID Stress	A	1	2	3	4	5	6
Danger	0.79	1					
Socio-economic consequence	0.87	0.52**	1				
Xenophobia	0.89	0.60**	0.60**	1			
Contamination	0.86	0.63**	0.52**	0.68**	1		
Compulsive Checklist	0.86	0.47**	0.54**	0.46**	0.49**	1	
Overall Stress	0.94	0.78**	0.80**	0.84**	0.83**	0.73**	1

** Significant at 0.01 level

Table 2, shows the Cronbach alpha and the Karl Pearson correlation for the subscales. It can be inferred that the Cronbach alpha value for all the subscales are greater than 0.75 indicating good internal consistency and the internal consistency of the overall scale is 0.94. And the relationship among the subscales is significant at 0.01 level. Hence, this scale is reliable in assessing the COVID stress among the college students in Indian context.

Table 3: Difference in COVID Stress based gender

Variables	Male (N=49)		Female (N=94)		"t" value
	M_1	SD_1	M_2	SD_2	
Danger	12.29	5.66	14.33	5.95	2.01*
Socio-Economic Consequences	12.88	6.03	13.37	6.99	0.44NS
Xenophobia	11.27	6.71	13.39	7.48	1.72NS
Contamination	11.73	6.54	13.72	6.19	1.75NS
Compulsive Checklist	12.43	5.72	13.05	6.71	0.58NS
Overall Stress	60.59	23.70	67.87	27.20	1.65NS

*Significant at 0.05 level; NS- Not significant at 0.05 level

From table 3, it can be observed that the "t" value is not significant at 0.05 level for the subscales except danger. Hence, it is concluded that students don't differ in COVID Stress based on their gender. However, from the mean value, it is inferred that the female students experience more stress than the male students. This could be due to increased caring responsibilities, increased concern for their academic achievement, or an unfulfilled need for social connectedness, all of which are more likely to affect female students than their counterparts. A study conducted by Debowska at al., (2020) found that stress level was higher among women during the COVID-19 pandemic than men which is similar to the present finding.

Table 4: Difference in COVID Stress based on Course of programme

Variable	UG (N=104)		PG (N=15)		"t" value
	M_1	SD_1	M_2	SD_2	
Danger	13.56	6.00	13.67	5.74	0.06[NS]
Socio-Economic Consequences	13.29	6.64	16.00	6.72	1.47[NS]
Xenophobia	12.90	7.48	13.87	7.58	0.46[NS]
Contamination	12.98	6.48	13.33	6.24	0.20[NS]
Compulsive Checklist	12.54	6.30	15.53	6.12	1.76[NS]
Overall Stress	65.27	27.27	72.40	26.19	0.98[NS]

NS- Not significant at 0.05 level

From table 4, it can be noted that the "t" value is not significant at 0.05 level. Hence, it is concluded that students don't differ in COVID Stress based on their programme. It may be due to fact that all the students UG and PG attend online classes and face similar situation with regard to their studies. Hence, it is logical that they don't differ based on their course of programme.

Implications

This study established the reliability of the COVID-19 stress for the college students in Indian context. The female students experience in the subscale of danger. Hence, special attention may be given to female students in removing their fear related to the danger of COVID virus. Integration of online counselling and stress management programs would help mitigate the stress level of the students as well as prevent further psychological consequences due to the pandemic outbreak. More research is needed to conduct longitudinal assessments of psychiatric disorders like depression and anxiety in order to develop evidence-based mental health interventions during crises. Furthermore, because this is the first survey on the COVID-19 stress level among Indian students, the results could be used as a baseline to investigate the stressors and the extent to which they impact students.

Limitations

Although our study is the first to assess stress levels during the COVID-19 outbreak in India, we recognize that it has several limitations. One of them is the use of an incidental sampling on an online platform, which limits the generalizability of the results. Another potential limitation is reporting bias, as the study relies on self- reported data, which may be influenced by participants' interpretation of the items or their proclivity to report their emotions in a particular way. Finally, the cross- sectional design makes it impossible to draw causal conclusions.

REFERENCES

Abdulghani, H. M., Sattar, K., Ahmad, T., &Akram, A. (2020). Association of COVID-19 pandemic with undergraduate medical students' perceived stress and coping. Psychology research and behavior management, 13, 871.

Allam, S. N. S., Hassan, M. S., Mohideen, R. S., Ramlan, A. F., & Kamal, R. M. (2020). Online distance learning readiness during Covid-19 outbreak among undergraduate students. International Journal of Academic Research in Business and Social Sciences, 10(5), 642-657.

Dahlin, M., Joneborg, N., &Runeson, B. (2005). Stress and depression among medical students: A cross-sectional study. Medical education, 39(6), 594-604.

Debowska, A., Horeczy, B., Boduszek, D., &Dolinski, D. (2020). A repeated cross-sectional survey assessing university students' stress, depression, anxiety, and suicidality in the early stages of the COVID-19 pandemic in Poland. Psychological Medicine, 1-4.

Di Fronso, S., Costa, S., Montesano, C., Di Gruttola, F., Ciofi, E. G., Morgilli, L., Robazza, C., Y Bertollo, M. (2020). The effects of COVID-19 pandemic on perceived stress and psychobiosocial states in Italian athletes. International Journal of Sport and Exercise Psychology, 1-13.

DiGiovanni, C., Conley, J., Chiu, D., &Zaborski, J. (2004). Factors influencing compliance with quarantine in Toronto during the 2003 SARS outbreak. Biosecurity and bioterrorism: biodefense strategy, practice, and science, 2(4), 265-272.

Dong, L., & Bouey, J. (2020). Public mental health crisis during COVID-19 pandemic, China. Emerging infectious diseases, 26(7), 1616.

Gu, J., Zhong, Y., Hao, Y., Zhou, D., Tsui, H., Hao, C., ...& Lau, J. T. F. (2015). Preventive behaviors and mental distress in response to H1N1 among university students in Guangzhou, China. Asia Pacific Journal of Public Health, 27(2), NP1867-NP1879.

Haleem, A., Javaid, M., Vaishya, R., &Deshmukh, S. G. (2020). Areas of academic research with the impact of COVID-19. The American journal of emergency medicine, 38(7), 1524-1526.

Huremović, D. (Ed.). (2019). Psychiatry of pandemics: a mental health response to infection outbreak. Springer.

Kim, U., Bhullar, N., & Debra, J. (2020). Life in the pandemic: Social isolation and mental health. https://onlinelibrary. wiley. com/doi/pdfdirect/10.1111/jocn. 15290.

Nanjundaswamy, M. H., Pathak, H., y Chaturvedi, S. K. (2020). Perceived stress and anxiety during COVID-19 among psychiatry trainees. Asian Journal of Psychiatry, 54, 102282.

Peng, E. Y. C., Lee, M. B., Tsai, S. T., Yang, C. C., Morisky, D. E., Tsai, L. T., ... & Lyu, S. Y. (2010). Population-based post-crisis psychological distress: an example from the SARS outbreak in Taiwan. Journal of the Formosan Medical Association, 109(7), 524-532.

Peterlini, M., Tibério, I. F., Saadeh, A., Pereira, J. C., & Martins, M. A. (2002). Anxiety and depression in the first year of medical residency training. Medical education, 36(1), 66-72.

Priya, K. B., Rajendran, P., Kumar, S., Prabhu, J., Rajendran, S., Kumar, P. J., Thanapal P., Jabez, C., y Jothikumar, R. (2020). Pediatric and geriatric immunity network mobile computational model for COVID-19. International Journal of Pervasive Computing and Communications, 16(4), 321-330.

Taylor, M. R., Agho, K. E., Stevens, G. J., & Raphael, B. (2008). Factors influencing psychological distress during a disease epidemic: data from Australia's first outbreak of equine influenza. BMC public health, 8(1), 1-13.

Taylor, S., Landry, C. A., Paluszek, M. M., Fergus, T. A., McKay, D., & Asmundson, G. J. (2020). Development and initial validation of the COVID Stress Scales. Journal of Anxiety Disorders, 72, 102232.

Virus, M. E. R. S. C. (2020). associated stress among medical students at a university teaching hospital in Saudi Arabia. Al-Rabiaah A, Temsah MH, Al- Eyadhy AA, et al. J Infect Public Health, 13, 687-691.

World Health Organization. (2020). Mental health and psychosocial considerations during the COVID-19 outbreak (No. WHO/2019-nCoV/MentalHealth/2020.1). Retrieved from: https://apps.who.int/iris/handle/10665/331490

Zhang, S. X., Wang, Y., Rauch, A., & Wei, F. (2020). Unprecedented disruption of lives and work: Health, distress and life satisfaction of working adults in China one month into the COVID-19 outbreak. Psychiatry research, 288, 112958.