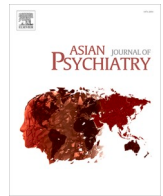




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Letter to the Editor



The mental health impact of the COVID-19 epidemic on college students in India

COVID-19 outbreak has been a bolt from the blue in 2020. Lives of people are remotely affected during this epidemic. It started in Wuhan, China has spread across the world (Verma (2020); Tandon, 2020). One of the biggest challenges faced by people is maintaining mental health. Mind statics is a crucial indicator of mental health but is often neglected by people. In the COVID-19 era, many suicides have been reported due to depression. Therefore, early assessment and timely treatment can help prevent these incidences. A study done in Nepal among the health care workers showed that 38 % suffered from anxiety and/or depression (Gupta et al., 2020).

It came as no surprise that lockdown during the COVID-19 outbreak would adversely affect the mental health of the people. Mental health is the degree of mental prosperity or nonattendance of dysfunctional behaviour. It is the condition of somebody who is "working at a good degree of enthusiastic and social change". From the points of view of positive brain research or of comprehensive quality, mental health may incorporate a person's capacity to appreciate life and to make a harmony between life exercises and endeavours to accomplish mental strength. As indicated by the World Health Organization (WHO), psychological well-being incorporates "abstract prosperity, saw self-viability, self-governance, ability, between generational reliance, and self-completion of one's scholarly and passionate potential, among others". The WHO further expresses that the prosperity of an individual is incorporated in the acknowledgment of their capacities, adapting to ordinary worries of life, gainful work, and commitment to their locale. Social contrasts, abstract appraisals, and contending proficient speculations all influence how one characterizes "Mental health".

Some exploration likewise reasoned that individuals who need passionate articulation are slanted against social practices (e.g., medication and liquor misuse, physical battles, defacing), which reflects one's psychological wellness and smothered feelings. Grown-ups and youngsters who face psychological maladjustment may encounter social disgrace, which can worsen the issues (Table 1).

This was a cross-sectional survey, carried out using Google forms. The study comprised 131 respondents among which 68(51.9 %) are females and 63(48 %) are males. The majority of respondents are in the age group of 20–30 years. GAD-7 and PHQ-9 scores were calculated.

The study shows that anxiety is most prevalent in middle-aged females. Respondents without sleep disturbance and a healthy diet were found with mild to moderate anxiety and depression. A variety of factors influences the level of anxiety in both the genders. Stress is the most common factor leading to anxiety in the population.

The study shows 90(68.7 %) have mild anxiety (GAD SCORE 0–5), 80 (61 %) mild depression (PHQ SCORE 0–5), 28(21.3 %) moderate anxiety (GAD SCORE 6–10), 34(25.9 %) moderate depression, 13(9%) moderately severe anxiety and depression (GAD AND PHQ SCORE 11–15) and 4(3%) severe depression (PHQ SCORE 16–20). No case was found with

severe anxiety. Both anxiety and depression are found more in females.

The main aim of this study was to evaluate the psychological condition of respondents during an epidemic. This survey indicated that the majority of respondents have mild anxiety and mild depression. Both anxiety and depression were more prevalent in females. Sleeping pattern is also disturbed in the respondents.

People with sleeping disturbances are reported with a higher level of anxiety. Sleep deprivation influences the level of anxiety adversely. Moreover, sleep disturbance and depression go hand in hand. Insomnia or inability to fall and stay asleep is a common sign of depression. Sleep disturbance leads to increased irritability, tension, and vigilance. Sleep pattern can influence the psychological and mental status. Dietary changes were also recorded. Diet plays an important role in mental health. Proper diet intake is associated with decreased levels of psychiatric disorders. Self-care should be implemented. A proper diet should be consumed. Both anxiety and depression have influenced the sleeping pattern as well as the intake of food. The majority of respondents felt tired and experienced low energy levels during the COVID-19 era. Individuals should do a physical activity such as exercise, walking, running, swimming, and bicycling so that they can maintain a healthy lifestyle.

This study highlighted the importance of mental health during the COVID-19 era. Along with physical health, mental health is another

Table 1

GAD-7 Anxiety, PHQ-9 Depression with gender, group age and score based on the response.

GAD-7 Anxiety		Mild	Mod.	Moderately severe anxiety	
Female		47	14	7	
20–30 yrs		33	9	4	
30–40 yrs		11	3	1	
< 20		2	0	1	
> 40 yrs		1	2	1	
Male		43	14	6	
20–30 yrs		20	6	2	
30–40 yrs		15	6	2	
< 20		8	2	1	
> 40 yrs		0	0	1	
PHQ-9 Depression		Mild	Mod.	Mod. severe	S. D.
Female		43	17	6	2
20–30 yrs		31	9	4	2
30–40 yrs		8	6	1	0
< 20		2	0	1	0
> 40 yrs		2	2	0	0
Male		37	17	7	2
20–30 yrs		16	8	3	1
30–40 yrs		14	7	2	0
< 20		7	2	2	0
> 40 yrs		0	0	0	1

pillar of a healthy community. During the COVID-19 outbreak, it is extremely crucial to look after our mental health. This helps in preventing suicides and other mental issues. Individuals should be encouraged to undergo psychiatric screening if they are experiencing any problems in their life to maintain a healthy mental status.

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Declaration of Competing Interest

The authors reported no declarations of interest.

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Appendix A. Supplementary data

Supplementary material related to this article can be found, in the online version, at doi:<https://doi.org/10.1016/j.ajp.2020.102398>.

References

- Gupta, A.K., Mehra, A., Niraula, A., Kafle, K., Deo, S.P., Singh, B., et al., 2020. Prevalence of anxiety and depression among the healthcare workers in Nepal during the COVID-19 pandemic. *Asian J. Psychiatry* 54, 102260 <https://dx.doi.org/10.1016%2Fj.ajp.2020.102260>.
- Verma, Kalpana, 2020. Comprehend the COVID-19 virus in the human body and its symptoms. *Int. J. Sci. Res.* 9 (7), 1707–1709. https://www.ijsr.net/search_index_resuIts_paperid.php?id=SR20725125823.
- Tandon, R., 2020. COVID-19 and mental health: preserving humanity, maintaining sanity, and promoting health. *Asian J. Psychiatry* 51, 102256. <https://doi.org/10.1016/j.ajp.2020.102256>.

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