

# Stress in Medical Students Due to Covid 19

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## Key Points

- Coronavirus pandemic; a source of stress and anxiety
- Moderate to extremely severe levels of depression, anxiety and stress were reported by 57.4%, 51.0% and 31.4% of medical students
- Females showed more stress and anxiety as compared to males

Medical students are known to have high levels of depression, anxiety and stress from the high-pressure environments that they study and train in. The coronavirus pandemic presents source of stress and anxiety to large populations in general, and to healthcare professionals in particular. This study was undertaken to assess the psychological effects of this pandemic on the mental health of medical students and trainees.<sup>1</sup>

The perceived level of changes in attitude, social habits, and personal hygiene of students. A 10- item scale was used to determine the perceived level of change in attitude, social habits, and personal hygiene of students. 10-items were assessed on a 5-point scale to determine the change in attitude and own hygiene habits of students after the COV pandemic outbreak as described in the table shown. It was observed that 52% (n = 104) participant handwashing habits had changed very much followed by 14% (n = 28) participant handwashing habits had moderately altered after the outbreak. More than half proportion of the participants (53%, n = 106) avoid contact with people having flu-like symptoms. It has been observed that after the outbreak, participants concern for own individual necessity, and desires have changed very much as compared to previous days.

Similarly, few studies were conducted to assess the mental health of medical students during previous outbreak, and the study results suggested that the medical student's overall psychological health and learning has been adversely affected during previous

	Change a little	Did not change	Do not know	Moderately	Very much
Fear and anxiety level	68 (34)	70 (35)	32 (16)	22 (11)	8 (4)
Express emotions and reactions	56 (28)	96 (48)	12 (6)	26 (13)	10 (5)
Personal hygiene habits	42 (21)	46 (23)	6 (3)	34 (17)	72 (36)
Hand washing habit	34 (17)	30 (15)	4 (2)	28 (14)	104 (52)
Buying and wearing face masks	40 (20)	28 (14)	6 (3)	58 (29)	68 (34)
Buying and using sanitizers	38 (19)	30 (15)	10 (5)	42 (21)	80 (40)
Avoid social gatherings	34 (17)	22 (11)	4 (2)	42 (21)	98 (49)
Avoid contact with people having flu-like symptoms	26 (13)	18 (9)	6 (3)	44 (22)	106 (53)
Providing social support to health-care workers	32 (16)	34 (17)	10 (5)	52 (26)	72 (36)
Concern over own individual needs and desires	36 (18)	34 (17)	12 (6)	58 (29)	60 (30)

pandemic outbreak due to significant reduction in their psychomotor concentration. Another study has suggested that when the SARS epidemic hit, it not only affect the mental health of medical staff but also sometimes may lead to psychological trauma.<sup>2</sup> In total, 251 medical students who have been in home confinement accepted to participate in an online questionnaire survey. They completed depression, anxiety and stress scale, beck hopelessness scale and cognitive emotion regulation questionnaire.

## Findings

Moderate to extremely severe levels of depression, anxiety and stress were reported by 57.4%, 51.0% and 31.4% of medical students, respectively. Based on the cut-off value of nine, 31.1% of the participants showed high levels of hopelessness. Hierarchical regression analysis identified four cognitive emotion regulation strategies as significant independent contributors to psychopathology above and beyond home confinement related variables. Self-blame positively predicted stress. Catastrophizing positively predicted anxiety and hopelessness. Refocusing on

planning negatively predicted anxiety. Positive reappraisal negatively predicted hopelessness.<sup>3</sup>

In summary, the majority of medical students and Obstetrics and Gynaecology trainees had changed their behaviour related to coronavirus and around half of those surveyed had increased levels of worry and stress. The majority reported worry about their older relatives. In relation to actual mental health morbidity, only 7.3% of respondents had depression scores in the severely depressed range. Female medical students and junior doctors demonstrated significantly higher anxiety and depression scores than males.<sup>4</sup>

## References

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