

Study of Depression, Anxiety & Stress among First Year Medical Students of AIMS

B.G. Nagara^{1*}, Ravi GN¹, Sudhir GK¹

¹Department of Physiology, Adichunchanagiri Institute of Medical Sciences, B.G.Nagara, Nagamangala Taluk, Mandya district, Karnataka, India

DOI: [10.36348/sijap.2021.v04i08.001](https://doi.org/10.36348/sijap.2021.v04i08.001)

| Received: 23.07.2021 | Accepted: 30.08.2021 | Published: 18.09.2021

*Corresponding author: B.G. Nagara

Abstract

Context: This study was planned to find out the depression, anxiety & stress levels among first year medical students of AIMS, B.G.Nagara. **Aim:** This study was conducted to determine the depression, anxiety & stress levels among first year medical students of AIMS, B.G.Nagara. **Settings and Design:** The present study was a cross - sectional study consisting of 150 first year medical students of AIMS, B.G. Nagara. **Materials and Methods:** This study was conducted in Adichunchanagiri institute of medical sciences, B.G. Nagara, Nagamangala Taluk, Mandya district, after the institutional ethical clearance and written consent to participate was taken from each student. Depression, anxiety & stress levels were assessed using Depression, anxiety and stress scale (DASS 21) questionnaire. **Results:** The DAS levels thus recorded were analyzed for statistical significance using. Data analysis was done using SPSS software version 19. **Conclusion:** The results of this study indicate that Depression, anxiety & stress levels was higher in first year medical students.

Keywords: Depression Anxiety & Stress, mental health, AIMS.

Copyright © 2021 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC 4.0) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.

INTRODUCTION

Globally, mental health among under-graduate students represents an important public health entity. University students face considerable demands in school and family, resulting in significant psychological stress that may lead to serious disorders and mental health issues such as depression and anxiety. As a result, university students' academic performance, physical well-being and mental health may substantially worsen over the academic career and could only be detected at an advanced stage. One would expect medical students to be better off than their peers in other walks of life when it comes to health, and this does hold true to certain extent as far as medical ailments are concerned [1]. Additionally, studies conducted among medical school graduates showed that psychological distress was associated with suboptimal quality of patient care, patient safety and professionalism [2, 3].

Stress can be defined as "a condition or feeling experienced when a person perceives that the demands placed on them exceeds the resources the individual has available" [4]. Stress can therefore be understood as a perceived imbalance between the demands encountered in daily living and a person's capability to respond

[5]. For the medical students, stress represents an important challenge, especially during the first year of medical school, caused by the absence of a learning strategy, the sleepless night before the exam and also an unhealthy food intake during the exams. Medical students may experience stress when curricular demands exceed their resources to deal with them [6], and they have been reported to suffer from higher perceived stress compared to the general population and students in other academic fields [7].

Self-rated depression is also found to be significantly higher in Indian medical students [8]. Depression per se is rated as vastly unrecognized and silent burden. Depression and other related mental health disorders are regarded as a common mental health problem involving adolescents globally, and statistically reflecting with annual estimated prevalence of 4–5% in mid to late phases of adolescence. Adolescent depression poses a major risk factor for suicide and becoming a significant and major cause of death in that age group, with majority of adolescents committing suicide having a depressive disorder before or at time of death following suicide. World Mental Health Day – 2012 had a theme that was "Depression: A Global Crisis." The WHO observations and statistics reveal that depression is a significant disorder affecting

350 million people worldwide and involving people of all ages, genders, and communities, contributing significantly to the global burden of disease and disability-adjusted life years [9]. Worldwide, depression off late is becoming the leading cause of illness and disability in adolescents, and suicide being the third major cause of deaths in adolescents.

Adolescents also are afflicted with another common psychological disorder in the form of anxiety disorder or generalized anxiety disorder quote an instance as an example, whenever anxiety is frequent with severe attacks and persistent course, it is observed that anxiety is routinely coupled with avoidance behavior [10].

Early recognition, identification, and subsequent timely effective intervention go a long way in preventing the long-term sequel and consequences.

METHODOLOGY

Inclusion criteria

First year Undergraduate medical students of Adichunchanagiri Institute of Medical Sciences were included in the study.

Exclusion criteria

First year Undergraduate medical students who did not give consent and who are suffering from mental illness were excluded from the study.

This cross-sectional study was done among first year medical undergraduate students in Adichunchanagiri Institute of Medical Sciences, BG Nagara, and Nagamangala Taluk. The study comprised of 150 students. Depression, anxiety and stress scale (DASS 21) questionnaire was used to collect data regarding, depression, anxiety symptoms, & stress levels Data analysis was done using SPSS software version 19.

RESULTS

Distribution of DAS scores (%)

Subscale	Normal	mild	moderate	severe
Depression	27.58	45.97	25.28	1.14
Anxiety	32.18	34.48	31.03	2.29
Stress	59.77	35.63	4.59	0

DISCUSSION

In the present study, out of 150 participants, 46% students had mild depression, 25% had moderate depression and severe depression in 1% students. 34% students had mild anxiety, 31% had moderate anxiety and severe anxiety in 2% students. 36% students had mild stress, 4% had moderate stress and severe stress in 0% students.

Depression has become a global major public health concern affecting the individual's ability to perform routine daily activities. One of the important findings is that depression setting in an early onset life is more often associated with a persistent and recurrent course often continuing into adulthood, indicating that youth onset depression is a marker for severe illness in adult life and has been reinforced by a prospective study recently published. Depression in early age or in adolescence often occurs coexistent with other mental disorders such as anxiety-related behaviors or societal anxiety disorders. A study by kumar *et al*. revealed that the (80%) medical students suffered from mild &moderate depression. However, the prevalence was much higher compared to our study [8]. Anxiety, although as common and arguably as debilitating as depression, has garnered less attention, and is often undetected and undertreated in the general population. Similarly, anxiety among medical students warrants greater attention due to its significant implications. Travis tian ci quek *et al*. in their study on medical students has found that prevalence rate of anxiety among medical students was 33.8% which was much lesser compared to our study [11].

Abdullah almajoli *et al*. in a study done on medical students has found that high prevalence of poor sleep quality (76%) and stress (53%) & the prevalence of stress was much higher compared to our study [12].

CONCLUSION

Depression, anxiety, stress and emotional distress levels are generally high in Medical students, with personal resources acting as a buffer, thus supporting the population-based general stress model. Results suggest providing individual interventions for those students, who need support in dealing with the challenges of the medical curriculum as well as addressing structural determinants of student stress such as course load and timing of exams. Our findings also point to the importance of broad screening and psychiatric counseling of this vulnerable population.

ACKNOWLEDGEMENT

We sincerely thank participants for participating in the study.

REFERENCES

1. Roberts, L. W., Warner, T. D., Carter, D., Frank, E., Ganzini, L., & Lyketsos, C. (2000). Caring for medical students as patients: access to services and care-seeking practices of 1,027 students at nine medical schools. *Academic Medicine*, 75(3), 272-277.
2. Shanafelt, T. D., Bradley, K. A., Wipf, J. E., & Back, A. L. (2002). Burnout and self-reported patient care in an internal medicine residency program. *Annals of internal medicine*, 136(5), 358-367.

3. Mareiniss, D. P. (2004). Decreasing GME training stress to foster residents' professionalism. *Academic Medicine*, 79(9), 825-831.
4. Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. Springer publishing company.
5. Antonowsky, A. (1979). Health, stress, and coping. 1st ed. San Francisco: Jossey-Bass Publishers.
6. Moffat, K. J., McConnachie, A., Ross, S., & Morrison, J. M. (2004). First year medical student stress and coping in a problem- based learning medical curriculum. *Medical education*, 38(5), 482-491.
7. McGuire, F. L. (1966). Psycho-social studies of medical students: a critical review. *Academic Medicine*, 41(5), 424-45.
8. Kumar, G.S., Jain, A., Hegde, S. (2005). Prevalence of depression and its associated factors using beck depression inventory among students of a medical college in Karnataka
9. Bakhla, A.K., Sinha, P., Sharan, R., Binay, Y., Verma, V., Chaudhury, S. (2013). Anxiety in school students: Role of parenting and gender. *Ind Psychiatry J*, 22; 131-7.
10. Eric, A.S., Carrie, M., Heather, C., Rachel, G. (2005). Peer victimization and social anxiety in adolescence-a prospective study. *Aggress Behav*, 31; 437-52.
11. Travis tian ci quek. (2019). The Global Prevalence of Anxiety among Medical Students: A Meta-Analysis. *Int J Environ Res Public Health*, Jul 31; 16(15):2735.
12. Abdullah, A. (2017). The prevalence and association of stress with sleep quality among medical students. *J Epidemiol Glob Health*, 7(3); 169-174.