

Research Article

Stress level among medical students of first year M.B.B.S. in Government Medical College, Baramulla.

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Abstract

Background

For healthy life, mental & physical fitness is very important. “Stress” term was coined by Hans Selye. Stress has a negative impact on health of individuals. Medical students are hit badly because of stress due to the difficult course of medical studies. Since the medical studies are very demanding, the medical students face high performance pressure leading to stress and depression. Stress leads to decreased concentration, lack of attention, absent minded behavior, increased mistakes & lack of confidence that in turn lead to poor performance by the students.

Aim

The aim of our study is to evaluate the impact of stress factors on medical students of first year MBBS in Government Medical college, Baramulla.

Materials & Methods

An observational, cross sectional study was conducted on the students of first year MBBS (Batch 2023-24) in Government Medical college, Baramulla. 90 students participated in the study. Students having any psychiatric illness or on antipsychotic drugs were excluded from the study. They were guided to fill the pretest questionnaire that enlisted stress sources.

Results

The questionnaire given to the students had various stress sources. Among these stress sources, the most common stress source reported by students was pressure by parents to opt for medical studies (62%) followed by stress during the examination (58%), struggle in coping up with the study pattern in medicine (42%), insufficient college facilities(12%), inadequate hostel facilities (22%), poor performance (19%) and stress induced due to home sickness (30%).

Conclusion

Stress level usually rises to peak in students during assessment period. The exhaustion caused due to stress leads to poor performance. The need of the hour is to opt for the counselling sessions of all the MBBS students to prevent performance pressure such that they can fair well in their exams.

Keywords: Stress, MBBS, Exhaustion, Poor Performance, Medicine.

Introduction

Mental & physical fitness is very important for healthy life. The term “Stress” was coined by Hans Selye (1). Stress usually have negative impact on an individual and continuous stress over time lead to mental health issues and students usually easily get struck by stress (2). MBBS students are always vulnerable to stress as it is one of the difficult courses. Long training period & frequent assessments or exams usually precipitate stress especially in students who have average performance in their pre medicine phase (3).

It has been observed that medical students have higher predilection to stress and depression when compared to general population because of the challenging nature of the course (4-7). Maintaining a balance between personal & medical lives is very difficult for the fragile brains in their teens. So counselling has a role to play to vane off their stress (8). Stress overtime leads to psychotic disorders like depression, medical conditions like hypertension, stress headaches & a student can land in alcohol & drug abuse (9,10). Students adapting to the difficult course of MBBS, land in increasing psychological distress (11).

Aim

The present study is aimed to evaluate the impact of stress factors on medical students of first year MBBS in Government Medical college, Baramulla.

Materials and Methods

The present study is an observational study conducted on 90 students (Batch 2023-2024) of first year MBBS, of Government Medical College, Baramulla. Students having any psychiatric illness or on antipsychotic drugs were excluded from the study. Pre designed questionnaire was used for the collection of data. The confidentiality of the students was carefully maintained. All the students who participated in the study were fully informed about the research study and consent was taken from each one of them.

Results

90 students from first year MBBS contributed to our study. All of them submitted the questionnaire. Out of 90 students 45 were females (50%) and rest were males (50%). A list of stress sources is tabulated in Table no 1 and percentage of students affected by a particular stress source.

Table no 1: showing list of stress sources with percentage of students affected

S. No.	Stress Source	Percentage of Students affected
1.	Pressure by parents to opt for medical studies.	62
2.	Stress during the exams	58
3.	Struggle in coping up with the study pattern in medicine	42
4.	Insufficient college facilities	12
5.	Inadequate hostel facilities	22
6.	Poor Performance	19
7.	Stress induced due to home sickness.	30

Out of 45 female students, 29 had high levels of stress i.e. (64.44%) while as out of 45 males students, 21 had high levels of stress (46.66%) as tabulated in Table no 2.

Table no 2: stress percentage in males and females

Gender	No. of students	No. of students having stress	%age of students having stress
Males	45	21	46.66
Females	45	29	64.44

Discussion

Stress has a negative impact on the performance of the student. Similar findings were seen in study of Melaku et al in Ethiopia (12) & Kumar et al; (13) in Meerut (U.P.). Stress being very common in medical students makes them vulnerable to depression. It is an obstacle in the academic growth of the students. Medical studies are the toughest studies requiring frequent assessments by teachers. Frequent examinations is the major stressor for them. Many educational organizations promote skill stimulation and competency development (14, 15,16). The prevalence of stress in our community especially in medical students is on rise. Hence, educators need to concentrate on the methods to vane off the stress of the students (17).

In our study, female students had higher stress percentage as compared to males. Our study is in coherence with the study of Bazmil et al (18), who observed high stress rates in females students. Similarly Vaz RF et al (19) study is also favouring our study with females having more stress as compared to males.

Methods to decrease stress levels should be included in the medical curriculum. They are seeking counseling classes, time management, student centric study pattern, nutritional care, regulating sleep cycle etc. The medical education should not only enhance academic growth but also well being of our future Indian medical graduates.

Conclusion

Stress being a common menace ruining our medical students, have a negative influence on them. Medicine is very complicated. We need to frame a curriculum & system that is student friendly. Regular counselling of the students should be conducted to increase their confidence level & decrease their anxiety & exhaustion. The teachers need to enhance or augment the programmes that lead to reduction in stress level among students.

References

1. Seyle, H. Stress and the general adaptation syndrome. *BMJ*. 1950; 1:1392-1383.
2. Nechita F, Nechita D. Pirlog M-C, Rogoveanu I. Stress in medical students. *Rom J Morphol Embryol*. 2014;55:1263-6.
3. Salgar ST. Stress in first year medical students. *International Journal of Biomedical and advance research* 2014.05 (01): 05-06
4. McKerrow I, Carney PA, Caretta-Weyer H, Furnari M, Miller Juve A. Trends in medical students' stress, physical, and emotional health throughout training. *Med Educ Online*. 2020;25(1).
5. Quek TTC, Tam WWS, Tran BX, Zhang M, Zhang Z, Ho CSH et al. The global prevalence of anxiety among medical students: a meta-analysis. *Int J Environ Res Public Health*, 2019;16(15).
6. Heinen 1, Bullinger M. Kocalevent RD. Perceived stress in first year medical students-associations with personal resources and emotional distress. *BMC Med Educ*. 2017;17(1):1-14.
7. Miranda IMM, Tavares HHF, Silva HRS, Braga MS, Santos RO, Guerra HS. Quality of life and graduation in Medicine. *Rev Bras Educ Med*. 2020; 44(3):e086.
8. Moreira SNT, Vasconcellos RLSS, Heath N. Stress in medical education: how to face this reality? *Rev Bras Educ Med*. 2015;39(4):558-64
9. Ye WQW, Rietze BA, McQueen 5, Zhang K, Quilty LC, Wickens CM. Barriers to Accessing Mental Health Support Services in Undergraduate Medical Training: a Multicenter, qualitative study. *Acad Med*. 2023;98(4):491-6.

10. Linn BS. Zeppa R. Stress in junior medical students: Relationship to personality and performance. 1985; 59: 7-12
11. Pagnin D, Queiroz V. Influence of burnout and sleep difficulties on the quality of life among medical students. Springerplus. 2015; 4(1):676.
12. Melaku, L., Mossie, A., Negash, A. Stress among medical students and its association with substance use and academic performance. J Biomed Educ. 2015;2015(4):1-9
13. Kumar, M. Sharma, S. Gupta, S. Vaish, S. Misra, R. Medical education effect of stress on academic performance in medical students-a cross-sectional study. Indian J Physiol Pharmacol. 2014;58(1):81-86.
14. Sood R, Singh T. Assessment in medical education: evolving perspectives and contemporary trends. Med J. 2012;25(6):357-64.
15. Castellani L, Quintanilha LF, Arriaga MB, Lima ML, Andrade BB. Objective structured clinical examination (OSCE) as a Reliable evaluation strategy: evidence from a Brazilian Medical School. Probl Educ 21st Century. 2020;78(5):674-87.
16. Heidarzadeh A, Hashemi HZ, Parvasideh P, Larijani ZH, Baghdadi P, Fakhraee M. et al. Opportunities and challenges of Online take-Home exams in Medical Education. J Med Educ. 2021;20(1):e112512
17. Lipp MEN, Guevara AJH. Empirical validation of the stress symptoms inventory. Estud Psicol. 1994;11(3):43-9.
18. Bazimi Inam SN. Anxiety and Depression among Students of a Medical College in Saudi Arabia. International Journal of Health Sciences. Qassim University. 2007; 1(2): 295-300
19. Vaz RF. Mbajiorgu EF. Acuda SW. A preliminary study of stress levels among first year medical students at the University of Zimbabwe. Central African Journal of Medicine. 1998, 44(9):214-219.