

A Study on Stress in Medical Students of North Coastal Andhra Pradesh

Dr. Rekha Dutt¹ Dr. P. Goldennight Phawa

¹ Associate Professor, Department of Psychiatry, NRIIMS, Sangivalasa, Bheemunipatnam, Andhra Pradesh, India.

*Assistant Professor, Department of Psychiatry, NRIIMS, Sangivalasa, Bheemunipatnam, Andhra Pradesh, India.

Corresponding author: Dr. P. Goldennight Phawa

Abstract: Stress can be defined as “a state of mental or emotional strain or suspense” and also as “a number of normal reactions of the body (mental, emotional, and physiological) designed for self preservation”. Despite its diffuse perception, most of the well-known definitions emphasize stress as “any factor that threatens the health of an individual or has an adverse effect on the functioning of the body”. Medical education is perceived as stressful. High levels of stress have been documented in medical students in various studies. Amongst medical students, stress has been reported to be due to academic demands, exams, inability to cope, helplessness, increased psychological pressure, mental tension and too much work load.

The present study was done on about 500 medical students from first mbbs to final mbbs studying in NRI Medical college, sangivalasa, Visakhapatnam district. Students who had spent more than six months in the college were included in this study. Data was collected through a self-administered questionnaire which was distributed among students after explaining the purpose of study and after taking verbal consent. The levels of stress were evaluated using the stress components in the DASS -21 Scale.

The findings of the study suggest that the level of stress was higher amongst medical students. These augmented stress levels in turn are responsible for symptoms such as decreased appetite, impaired attention and clouded judgment.

There is need for greater attention to the psychological well being of medical students. It has been reported that medical students are reluctant to seek appropriate help for mental health problems and view it as a weakness. This issue needs to be addressed and students should be encouraged to seek help along with provision of adequate facilities. Information about effective coping strategies i.e. active coping efforts and ineffective means i.e. avoidant coping efforts of dealing with stress might be helpful in preventing distress. Students should also be encouraged to indulge themselves in various extracurricular activities which may have a refreshing effect on their minds.

Date of Submission: 16-10-2018

Date of acceptance: 31-10-2018

I. Introduction:

Stress can be defined as “a state of mental or emotional strain or suspense” and also as “a number of normal reactions of the body (mental, emotional, and physiological) designed for self preservation” (Princeton University, 2001). Despite its diffuse perception, most of the well-known definitions emphasize stress as “any factor that threatens the health of an individual or has an adverse effect on the functioning of the body” (Oxford Medical Publications, 1985) [1]

Medical education is perceived as stressful. High levels of stress have been documented in medical students in various studies.[2-7] Amongst medical students, stress has been reported to be due to academic demands, exams, inability to cope, helplessness, increased psychological pressure, mental tension and too much work load.[8] The transition from preclinical to clinical training has been identified as a crucial stage of medical school regarding student stress.[9] All this can result in decreased life satisfaction among students.[10]

II. Subjects And Methods:

The present study was done on about 500 medical students from first mbbs to final mbbs studying in NRI Medical college, sangivalasa, Visakhapatnam district.

Students who had spent more than six months in the college were included in this study. Students who reported presence of a physical illness at the time of survey were excluded. Data was collected through a self-administered questionnaire which was distributed among students after explaining the purpose of study and after

taking verbal consent. The questionnaire was given to students who were present at the time of distribution. The students were instructed to return the completed questionnaire.

III. Results:

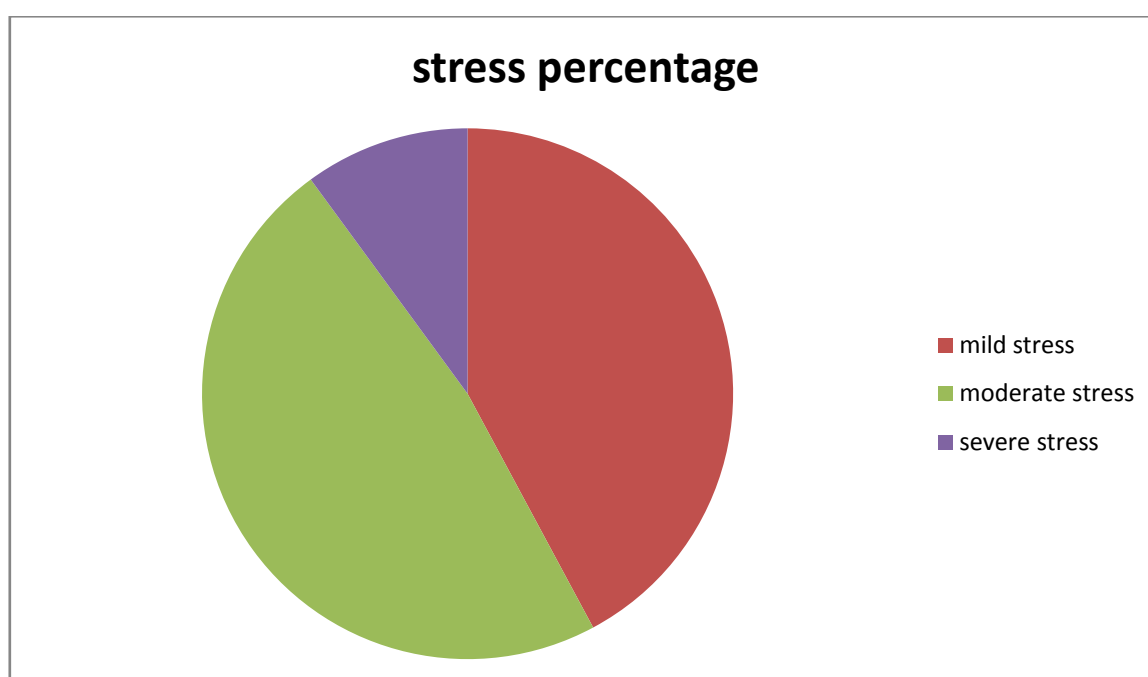
450 out of 500 students have submitted the completed questionnaire. The levels of stress were evaluated using the stress components in the DASS -21 Scale. [11,12,13]

This scale included 21 questions which had a scoring from 0 – 3.

After answering all the questions the scoring was done and the severity of stress was assessed as follows.

	NORMAL	MILD	MODERATE	SEVERE	VERY SEVERE
Stress score	0-14	15-18	19-25	26-33	34+

In the present study about 286 out of 450 students (63.56%) of students experienced the symptoms of stress. Out of this 286, 120 students had mild stress (41.9%), 136 students had moderate stress(47.55%) and remaining 30 students had severe stress symptoms (10.48%).



The stress levels are more in female students in comparison with their male counterparts. Out of 286 , 199 were female students (69.58%)

The stress levels were more in case of first and final mbbs students in comparison with the second and third year students.

IV. Discussion:

Studies have shown that medical students experience a high level of stress during their undergraduate course [14-18]. High level of stress may have a negative effect on cognitive functioning and learning abilities of students in the medical school [19]. The estimated prevalence of emotional disturbance found in different studies on medical students was higher than that in the general population. In three British universities, the prevalence of stress among medical students was 31.2% [20], and 41.9% in a Malaysian medical school [21] and 61.4% in a Thai medical school [22].

When asked if the stress was due to studies, 75.6% of medical students responded with a yes.

Lower levels of depression in 4th Year MBBS shows that students adapt to stress of clinical training after spending a year in it. However, depression again increases in last year of study (Final year MBBS) because of increased workload [7].

The short term effects of stress would be that the lack of physical fitness would reduce the students' ability to learn and perform well in their exams as they are unlikely to be able to focus on lectures during classes. The long term effects of these would be increased likelihood of developing chronic diseases such as ulcers, hypertension and diabetes, psychological abnormalities such as anxiety and depression and poor

professional abilities due to lack of knowledge, poor judgment and inability to make quick and sensible decisions. Therefore, with early identification and effective psychological services, possible future illnesses may be prevented. It is very important to target stress-prevention strategies at students who have any level of psychological stress to prevent the development of more serious conditions relating to stress [1]

V. Conclusion:

The findings of the study suggest that the level of stress was higher amongst medical students. These augmented stress levels in turn are responsible for symptoms such as decreased appetite, impaired attention and clouded judgment [1]. These findings also suggest that special care must be taken to find out the obvious psychiatric problems among them. The major finding of high stress in medical students points to the need for establishing counselling and preventive mental health services as an integral part of routine clinical services being provided to the medical students and initiatives must also be taken by the governing body to bring about a change in the curriculum which may help in decreasing stress due to studies. Students should also be encouraged to indulge themselves in various extracurricular activities which may have a refreshing effect on their minds.

There is need for greater attention to the psychological well being of medical students. It has been reported that medical students are reluctant to seek appropriate help for mental health problems and view it as a weakness. This issue needs to be addressed and students should be encouraged to seek help along with provision of adequate facilities. Information about effective coping strategies i.e. active coping efforts and ineffective means i.e. avoidant coping efforts of dealing with stress might be helpful in preventing distress. Medical schools should encourage students to spend adequate time on their social and personal lives and emphasize the importance of health promoting coping strategies. Recreational facilities should be provided at the campus. Preventive programming efforts should begin early in medical education and address a wide variety of concerns from academic to interpersonal relationships and financial worries. Early signs of depressive symptoms among medical students should be addressed. We need interventions that help students to cope with stress to make a smooth transition from school to medical college and also to adjust to different learning environments during different phases of medical education [7].

References:

- [1]. Stress Level Comparison of Medical and Non-medical Students: A Cross Sectional Study done at Various Professional Colleges in Karachi, Pakistan ; ACTA PSYCHOPATHOLOGICA ; ISSN :2469:6676 Syed Aoun Muhammad Jafri, Ejaz Zaidi, Iram Saddiqua Aamir, Hafza Waqar Aziz, Imad-ud-Din and Mohammad Ali Husnain Shah
- [2]. Bayram N, Bilgel N. The prevalence and socio-demographic correlations of depression, anxiety and stress among a group of university students. *Soc Psychiatry Psychiatr Epidemiol* 2008; 43: 667-72.
- [3]. Dahlin M, Joneborg N, Runeson B. Stress and depression among medical students: a cross-sectional study. *Med Educ* 2005; 39: 594-604.
- [4]. Aktekin M, Karaman T, Senol YY, Erdem S, Erengin H, Akaydin M. Anxiety, depression and stressful life events among medical students: a prospective study in Antalya, Turkey. *Med Educ* 2001; 35: 12-7
- [5]. Azhar MZ. Psychological stress and treatment - research issues. *Med J Malaysia* 2004; 59: 143-5.
- [6]. Firth-Cozens J. Medical student stress. *Med Educ* 2001; 35: 6-7.
- [7]. Anxiety and depression among medical students: A cross-sectional study Nauman Arif Jadoon, Rehan Yaqoob, Ali Raza, Muhammad Asif Shehzad, Zeshan Sharif Choudhry. *J Pak Med Assn*. Vol. 60, No. 8, August 2010; 699-702
- [8]. Shaikh BT, Kahloon A, Kazim M, Khalid H, Nawaz K, Khan N, et al. Students, stress and coping strategies: a case of Pakistani medical school. *Educ Health (Abingdon)* 2004; 17: 346-53.
- [9]. Helmers KF, Danoff D, Steinert Y, Leyton M, Young SN. Stress and depressed mood in medical students, law students, and graduate students at McGill University. *Acad Med* 1997; 72: 708-14.
- [10]. Kjeldstadli K, Tyssen R, Finset A, Hem E, Gude T, Gronvold NT, et al. Life satisfaction and resilience in medical school--a six-year longitudinal, nationwide and comparative study. *BMC Med Educ* 2006; 6: 48
- [11]. Lovibond, P.F.; Lovibond, S.H. (1995). "Manual for the Depression Anxiety Stress scales" (2nd ed). Sydney: Psychology Foundation. (Available from the Psychology Foundation, Room 1005 Mathews Building, University of New South Wales , NSW 2052, Australia.
- [12]. Lovibond, P.F.; Lovibond, S.H. (March 1995). "The structure of negative emotional states: Comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventories". *Behaviour Research and Therapy*. **33** (3): 335–343. doi:10.1016/0005-7967(94)00075-U. PMID 7726811.
- [13]. University of New South Wales Depression Anxiety Stress Scales <http://www2.psy.unsw.edu.au/groups/dass/>
- [14]. Supe AN (1998) A studies of stress in medical students at Seth G.S. medical college. *J Postgrad Med* 44: 1-6.
- [15]. Shaikh BT, Kahloon A, Kazmi M, Khalid H, Nawaz K, et al. (2004) Students, stress and coping strategies: a case of Pakistani medical school. *Educ Health* 17: 346-353. 7
- [16]. Sherina MS, Rampal L, Kaneson N (2004) Psychological stress among undergraduate medical students. *Med J Malaysia* 59: 207-211.
- [17]. Nauert R (2008) Stress affects learning and memory.
- [18]. Rosal MC, Ockene IS, Ockene JK, Barrett SV, Ma Y, et al. (1997) A longitudinal study of students' depression at one medical college. *Acad Med* 72: 542-546.
- [19]. Stewart SM, Lam TH, Betson CL, Wong CM, Wong AM (1999) A prospective analysis of stress and academic performance in the first two years of medical school. *Med Educ* 33: 243-250.
- [20]. Singh G, Hankins M, Weinman JA (2004) Does medical school cause health anxiety and worry in medical students? *Med Educ* 38: 479-481.

- [21]. Wilkinsos TJ, Gill DJ, Fitzjohn J, Palmer CL, Mulder RT (2006) The impact on students of adverse experiences during medical school. *Med Teach* 28: 129-135.
- [22]. Styles WM (1993) Stress in undergraduate medical education: 'the mask of relaxed brilliance'. *Br J Gen Pract* 43: 46-47.

Dr. Md. Al Mamun Hossain. "Breast feeding practice immediately after birth: A study in a tertiary care hospital, Dhaka, Bangladesh." *IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)*, vol. 17, no. 10, 2018, pp 56-59.