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Research Article

**FACTOR CAUSING DEPRESSION AMONG MEDICAL
UNDERGRADUATES**¹ Dr. Hafiza Numrah Fatima, ² Dr. Adina Ayesha, ³ Dr. Iqra Naeem¹Ex-House Officer Bahawal Victoria Hospital Bahawalpur²Ex-House Officer Bahawal Victoria Hospital Bahawalpur³Ex-House Surgeon Nishtar Institute of Dentistry, Multan**Abstract:**

Objective: This study is based to assess the prevalence of clinical depression among the students of medicine to treat and to improve their output and focus towards their career.

Methodology: 450 students from class 1st year to 5th year were included.

Results: The study shows that the depression and anxiety is highly prevalent among the students of medicine. The level of psychological stress in medical students is quite higher as compared to the students of other fields. The study reveals that the female students suffer more as compared to male proportion of the students. And the prevalence of depression increases in the first 3 years of study.

Conclusion: The depression and psychological stress among health professionals and medical students across globe is increasing in order to alleviate unnecessary stress among students, serious measures should be taken to ensure support service delivery to the students on institutional and on government level.

Key words: Depression, Mental Disorder, Demotivation, Highest Prevalence,

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INTRODUCTION:

Depression, a mental disorder, characterized by anhedonia i.e inability to be happy on pleasurable stimuli, lack of interest, disturbed sleep, loss of appetite, feeling of guilt, low self-worth and sleep disturbance. According to the World Health Organization data, 350 million people across the globe are affected by depression. It is a serious health concern and in chronic and serious cases it leads to the suicide, estimating to be more than 800000 people per year. Depression leading to suicide is the second most common cause of death in age group 15-29 years. Stress is the part and parcel of the medical education. The long study hours, lack of entertainment aspects of the life, sleep deprivation and unnecessary sense of competition rather than coordination among medical student's attribute to depression among them and consequently stimulating the fearful feelings, ability anger, lack of confidence, demotivation and poor academic results.

According to the association of American medical colleges, the average age of the medical students who attempted suicide is 24 years, and is the second most common cause of death among them. A review shows that increased level of depression among the physicians and other health care professionals render the quality clinical practice resulting in poor patient care. The clinical symptoms of depression were seen from medical student to consultants and the frequency of female gender suffering was seen to be more than their male counterpart. The demand to control the depression among health professionals is on rise, according to an

estimate 25-90% of medical students suffer from stress and it may then lead to depression. The negative effects of depression among medical professional's result in psychological impairment and poor academic grades in medical students and poor patient management and prescription errors in physicians. This study is based to assess the prevalence of depression in medical students and factors contributing to it, in order to put a check on these factors and quality of life and the quality of education may be improved.

METHODOLOGY AND SITTING:

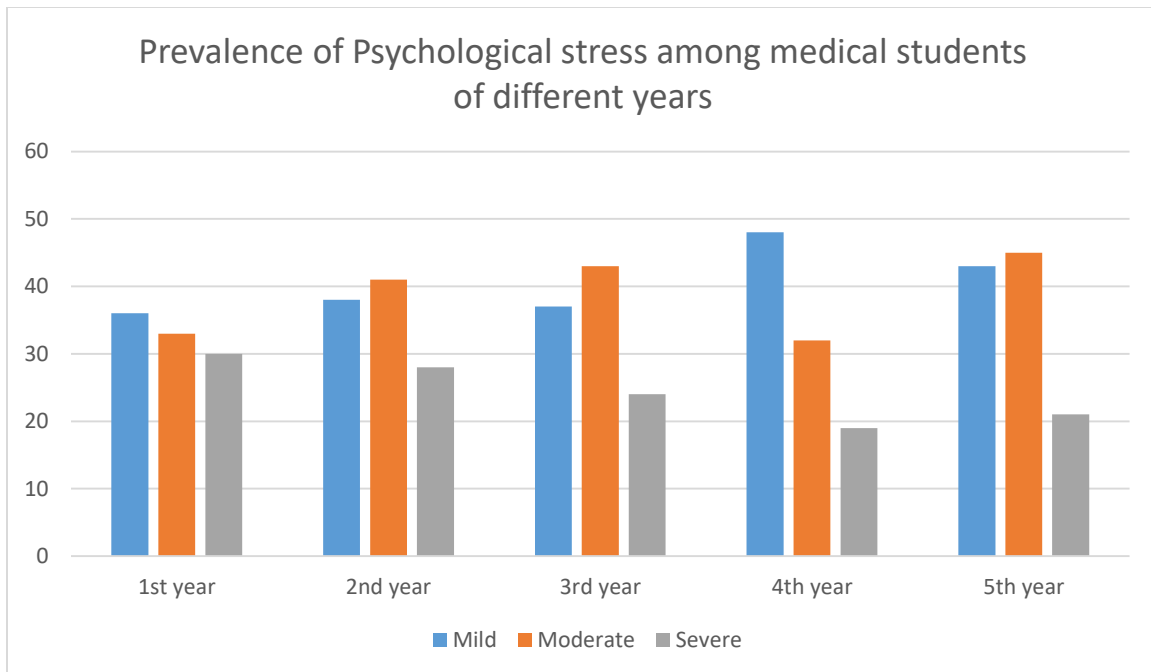
It is a cross-sectional study done at Quaid-e-Azam Medical college Bahawalpur. Informed consent was taken from the student on preformed Performa's. And student who was already suffering from depression or other psychological disorders were not included in the study. The quantitative variables like age, academic year, grades were taken and represented as mean, qualitative data like gender was also recorded, stratification of data was done. The data analysis was done by SPSS2.1.

RESULTS:

Out of 450 students,87% response was received. The mean age of students was 20.59 ± 1.71 year. The prevalence of stress was 61% and it was subdivided into three categories as in table. The highest prevalence of stress was found in the first year student i.e. 76% followed by 64% in 2nd year and 51% in 3rd, 4th years. The results were even less in final year students i.e. 48%. The prevalence is high among females than the males of same age.

Year of study and stress

Year	No	Yes
1 st	24%	76%
2 nd	36%	64%
3 rd	49%	51%
4 th	49%	51%
5 th	52%	48%



Academic grades

Remarks	No	Yes
Excellent	48%	52%
Very good	53%	47%
Good	31%	69%

Regular to academics course

Stress	No	Yes
Regular	56%	54%
Non-regular	14%	86%

DISCUSSION:

A rate of response of our study was 87% and it is demonstrated that the prevalence of the depression is really high among the medical students. And the prevalence varies as the stages of education changes. The psychological stress in health professionals does not only hamper the proper service delivery to patients but also result in poor cognitive abilities and hence poor academic grades. The prevalence of stress was found to be 61% which is comparable to a study done in Thai i.e. 63%. The study shows that level of stress is decreased in 4th and final year students as they may have developed the ability to cope with it.

A prospective cohort study was done by Rosan et al, In America, this was done on residents and interns and it showed that the depression and stress levels are closely related to sleep deprivation and the end of the academic year. A longitudinal study including students of multiple institutions was done by Dyrbye et al, and the results showed that around 10% of students of medical schools are having suicidal

ideation and almost 50% of student's experience burn out.

A cross-sectional study by HSU and Marshall II in Ontario shows that men have low prevalence of stress than women. And the frequency of single health staff suffering from depression is higher as compared to married ones. The results of this study is in line with our study which shows that the women have high prevalence of depression i.e. 67% as compared to men i.e. 48%. A longitudinal study done by Quince et al in UK. (HADS-D) scale depression was used and data was collected by Questionnaires. It shows that the results of depression among both gender groups varied from 2.2 to 1.4%. The difference is due to quality of medical education received and the use of different instruments as depression scale and change in the other variable like age group, academic year, social status etc.

CONCLUSION:

The depression and psychological stress among

health professionals and medical students across globe is increasing in order to alleviate unnecessary stress among students, serious measures should be taken to ensure support service delivery to the students on institutional and on government level.

REFERENCES:

- Sanders AE, Lushington K. Sources of stress among Australian dental students. *J Dent Edu.* 1999; 63:688–97.
- Marcus M, Yasamy T, van Ommeren M, Chisholm D, Saxena S. Depression a Global Public Health Concern. WHO Department of Mental Health and Substance Abuse. 2012. http://www.who.int/mental_health/manage_menti/depression/who_paper_depression_wfmh_2012.pdf. Accessed 4 June 2015.
- Musser LA, Lloyd C. The relationship of marital status and living arrangement to stress among dental students. *J Dent Edu.* 1985; 49:573–8.
- Ibrahim AK, Kelly SJ, Adams CE, Glazebrook C. A systematic review of studies of depression prevalence in university students. *J Psychiatr Res.* 2013;47(3):391–400. doi: 10.1016/j.jpsychires.2012.11.015.
- Polychronopoulou A, Divaris K. Perceived sources of stress among Greek dental students. *J Dent Edu.* 2005; 69:687–92.
- Dyrbye LN, Thomas MR, Shanafelt TD. Systematic review of depression, anxiety, and other indicators of psychological distress among US and Canadian medical students. *Acad Med.* 2006; 81:354–73. doi: 10.1097/00001888-200604000-00009. [PubMed] [Cross Ref]
- Grandy TG, Westerman GH, Lupo JV, Combs CG. Stress symptoms among third-year dental students. *J Dent Edu.* 1988; 52:245–9.
- Akinsola EF, Nwajei AD. Test anxiety, depression and academic performance: assessment and management using relaxation and cognitive restructuring techniques. *Psychology.* 2013;4(06):18–24. doi: 10.4236/psych.2013.46A1003. [Cross Ref]
- Wexler M. Mental health and dental education. *J Dent Edu.* 1978; 42:74–7.
- Sadock BJ, Kaplan H. Kaplan and Sadock's synopsis of psychiatry: behavioral sciences/clinical psychiatry. 10. Philadelphia: Lippincott Williams & Wilkins; 2007.
- Rafati MA F, Ahmadi J. Depression in Nursing Students of Shiraz University of Medical Sciences. *J Res Med Sci.* 2004; 1:39–41.
- Sage J. Depression: a treatable condition that affects the whole person. *Nurse Prescribing.* 2006;4(2):65–68. doi: 10.12968/npre.2006.4.2.20656.
- Papazisis G, Vlasiadis I, Papanikolaou N, Tsiga E, Sapountzi-Krepia D. Depression and anxiety among nursing students in Greece. *Ann Gen Psych.* 2008;7(Supplement 1):S209. doi: 10.1186/1744-859X-7-S1-S209.
- Dahlin ME, Runeson B. Burnout and psychiatric morbidity among medical students entering clinical training: A three-year prospective questionnaire and interview based study. *BMC Med Educ.* 2007;7:6. doi: 10.1186/1472-6920-7-6.
- Puthran R, Zhang MW, Tam WW, Ho RC. Prevalence of depression amongst medical students: a meta-analysis. *Med Educ.* 2016;50(4):456–68. doi: 10.1111/medu.12962.
- Shriyan R, Singh R, Sharma R, Das S. A comparative study to assess the quality of life and mood disorders among medical, engineering and other undergraduate students. *Indian J Physiol Pharmacol.* 2011;55(5):299.
- Khan M, Mahmood S, Badshah A, Ali S, Jamal Y. Prevalence of depression, anxiety and their associated factors among medical students in Karachi, Pakistan. *J Pak Med Assoc.* 2006; 56:583–6.
- Wallace B, Masiak J, Pabis M. Depression in medical students: reviewing its prevalence, risk factors, consequences, and management in order to provide student treatment recommendations for the Polish medical education system. *Polish J Public Health.* 2013;123(3):259–64.
- Goebert D, Thompson D, Takeshita J, Bryson P. Depressive symptoms in medical students and residents: a multi school study. *Acad Med.* 2009; 84:236–41. doi: 10.1097/ACM.0b013e31819391bb.
- Asante KO, Andoh-Arthur J. Prevalence and determinants of depressive symptoms among university students in Ghana. *J Affect Disord.* 2015; 171:161–6. doi: 10.1016/j.jad.2014.09.025.
- Hunt K, Gable KN. Prevalence of depressive symptoms and obsessive–compulsive personality traits among pharmacy students. *Curr Pharm Teach Learn.* 2013; 5:541–5. doi: 10.1016/j.cptl.2013.07.013.