ORIGINAL ARTICLE

Psychological Distress in Medical Students: Cross Sectional Study

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ABSTRACT

Background: Medical students, especially those of higher classes, are more likely to be severely distressed due to their clinical rotations. Moreover, exposure to critical patients, lack of social life and selection of speciality etc are few of the stresses in the lives of senior medical students.

Aim: To assess the degree of mental stress in medical students.

Study Design: Cross-sectional study.

Methodology: The M.B.B.S students of higher classes, i.e., third, fourth and fifth year students, were included in the current study. The Kessler psychological distress scale was used to assess the degree of mental stress in medical students. Each questionnaires, having 10 questions, was distributed among the 230 students at Farooq Hospital Westwood, Lahore. Out of 230, 189 students filled the questionnaires. Data was evaluated by using SPSS version 20.

Results: Majority of the students 36% had severe psychological distress. About 19% and 16% students had been found to have mild and moderate level of psychological distress respectively. Only 29 % students were doing well. **Conclusion**: It was concluded that Majority of medical students were found suffering from severe psychological distress.

Keywords: Social Media, Medical Students, Mental Health and Mental Distress.

INTRODUCTION

Medical education is a stressful period in a medical student's life¹. Various factors have been found to be responsible for this increased stress. Medical students face a great deal of academic stress in order to become competent health care workers2. Test anxiety is one of the reasons of stress in them³. Sleep deprivation. financial issues and speciality selection also contribute to mental distress. Medical students have been found to suffer from higher rate of mental distress⁴⁻⁶. Psychological distress is manifested through various ways among medical students. This is increased sometimes to such an extent that it leads to the dropout of the students from the medical education⁷. Some students are indulged into the habit of substance abuse8. Many students have been found to suffer from severe anxiety and depression. These symptoms sometimes lead to the suicidal thoughts among them9. The research has indicated that distress among medical students increases, as they advance towards higher classes, when their ward rotations are started10.

So, the current study has been conducted on third, fourth and final year medical students, as the clinical rotations of those students had been started and they were likely to be more suffering from mental distress as compared to first and second year medical students.

The objective of the study was to assess the degree of mental stress in medical students.

METHODOLOGY

The current study was conducted at Farooq Hospital Westwood, Lahore. The study was conducted on third, fourth and fifth year MBBS students after permission from Ethical Review Committee. Both males and females were included in the study. The age range of the students was between 17 and 25 years. Students of other speciality, such as those of nursing, physiotherapy and BDS were excluded from the study. 230 questionnaires were distributed among the students, under the supervision of facilitators. The Kessler psychological distress scale was used to assess the degree of mental stress in medical students.

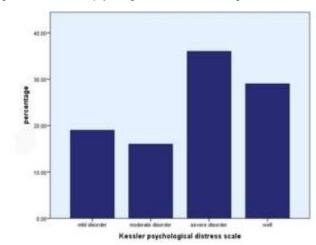
Statistical analysis: The data collected was analysed by SPSS version 20. The scores that were obtained from Kessler psychological distress scale were compared among students.

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RESULTS

The data analysis revealed that the 29 % of the students had Kessler psychological distress score between 1-19, which showed that they were doing well. About 19% of the students had the score between 20-24, which revealed that they were having mild psychological disorder. The students who had score between 25-29, which indicated that they were having moderate amount of psychological distress were 16%. But 36% of the students had the score between 30 and 50. So, the majority of the students were having severe psychological distress (Figure 1).

Figure-1: Distribution of psychological distress score among students



DISCUSSION

The results of current study revealed that most of the students are suffering from severe psychological distress. The results are consistent with the study conducted by Bore M, et al. According to their study, the majority of medical students had more than 30 score on Kessler psychological distress scale. So, most of them were suffering from severe mental distress. Their study also revealed that medical students were found to be more distressed than non – medical students of the same age.

Similar results were obtained in the study conducted on medical students in Saudi Arabia. Assessment of distress by Kessler psychological distress scale revealed higher prevalence of stress among medical students. It was found that poor sleep quality due to high level of stress, led to poor cognition and concentration in those medical students¹².

A study conducted on medical students, in Canada, revealed that more anxiety and depression was present in medical students of higher classes than those of first and second year medical students. The reason was that the preclinical training of those higher class students had been started13.

A study conducted in Pakistan revealed various reasons of higher stress in senior medical students.¹⁴ The fear of exams in a highly competent environment, higher expectations from teachers, family and self, fear of practical life ahead and difficulty in choosing the desired speciality, were found to be the major stressors among

Third, fourth and fifth year medical students, in most of the medical colleges of Pakistan, start their clinical rotations. During the clinical rotations, they interact with patients. They observe critically ill patients and face patient's deaths. A study conducted on senior medical students in Canada, exposed certain causes of higher stress level in senior medical students than in first and second year medical students¹⁵. It was found that, due to breaking the bad news to patients, exposure to serious cases like those of child abuse and patients deaths, many students were found suffering from anxiety and depression. They also found that medical students of higher classes also had less time for social life. All these factors were found to be the causes of stress in senior medical students.

The current study has also been aimed on senior medical students. Severe distress among majority of these students have probably been found due to exposure to critical patient cases, less social life and career choosing difficulties. So, more work needs to be done to rule out the causes of severe distress in medical students so that an effective measure can be taken to prevent them.

Limitations: Long term follow up could not be completed. Students unwilling to participate due to Covid-19 Pandemic. Limited financial resources.

CONCLUSION

It was concluded that Majority of medical students were found suffering from severe psychological distress.

Author's contribution: SK: Conceptualized the study, analyzed the data, and formulated the initial draft, UAH & ZM: Contributed to the proof reading, SM & SA: Collected and analyzed data.

Conflict of interest: None

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REFERENCES

- Saadi T, Zaher Addeen S, Turk T, Abbas F, Alkhatib M. Psychological distress among medical students in conflicts: a cross-sectional study from Syria. BMC medical education. 2017 Dec;17(1):1-8.
- Dyrbye LN, Thomas MR, Shanafelt TD, Systematic review of depression, anxiety, and other indicators of psychological distress among US and Canadian medical students. Academic medicine. 2006 Apr 1;81(4):354-73.
- Saravanan, C. And Kingston, R., 2014. A randomized control study of psychological intervention to reduce anxiety, amotivation and psychological distress among medical students. Journal of research in medical sciences: the official journal of Isfahan University of Medical Sciences, 19(5), p.391.
- Sahu PK, Nayak BS, Rodrigues V, Umakanthan S. Prevalence of psychological distress among undergraduate medical students: a crosssectional study. International Journal of Applied and Basic Medical Research. 2020 Oct;10(4):270.
- Dyrbye LN, Thomas MR, Shanafelt TD. Systematic review of depression, anxiety, and other indicators of psychological distress among US and Canadian medical students. Academic medicine. 2006 Apr 1;81(4):354-73.
- Lyndon MP, Strom JM, Alyami HM, Yu TC, Wilson NC, Singh PP, Lemanu DP, Yielder J, Hill AG. The relationship between academic assessment and psychological distress among medical students: a systematic review. Perspectives on medical education. 2014 Dec;3(6):405-18.
- Raiapuram N. Langness S. Marshall MR. Sammann A. Medical students in distress: The impact of gender, race, debt, and disability. PloS one. 2020 Dec 3;15(12):e0243250.
- Dyrbye LN, West CP, Satele D, Boone S, Tan L, Sloan J, Shanafelt TD. Burnout among US medical students, residents, and early career physicians relative to the general US population. Academic medicine. 2014 Mar 1;89(3):443-51.
- Arif, N.M.N.A., Roslan, N.S., Ismail, S.B., Nayak, R.D., Jamian, M.R., Mohamad Ali Roshidi, A.S., Edward, T.C., Kamal, M.A., Mohd Amin, M.M., Shaari, S. And Shaharudin Basri, M.F., 2021. Prevalence and associated factors of psychological distress and burnout among medical students: findings from two campuses. International journal of environmental research and public health, 18(16), p.8446.

 Compton MT, Carrera J, Frank E.
- Stress and symptoms/dysphoria among US medical students: results from a large, nationally representative survey. The Journal of nervous and mental disease. 2008 Dec 1;196(12):891-7.
 Bore M, Kelly B, Nair B. Potential predictors of psychological distress and
- well-being in medical students: a cross-sectional pilot study. Advances in medical education and practice. 2016;7:125.
- Almojali Al, Almalki SA, Alothman AS, Masuadi EM, Alaqeel MK. The prevalence and association of stress with sleep quality among medical students. Journal of epidemiology and global health. 2017 Sep 1;7(3):169-
- Maser B, Danilewitz M, Guérin E, Findlay L, Frank E. Medical student psychological distress and mental illness relative to the general population: Canadian cross-sectional survey. Academic Medicine. 1:94(11):1781-91
- Kumar B, Shah MA, Kumari R, Kumar A, Kumar J, Tahir A. Depression, anxiety, and stress among final-year medical students. Cureus. 2019 Mar
- Neufeld A, Malin G. How medical students cope with stress: a crosssectional look at strategies and their sociodemographic antecedents. BMC Medical Education. 2021 Dec;21(1):1-2.