ORIGINAL ARTICLE

PREVALENCE OF MENTAL ILLNESSES IN PUBLIC SECTOR MEDICAL COLLEGE, PESHAWAR

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ABSTRACT

Objective: The aim of this study was to determine the frequency of mental distress in undergraduate medical students and to identify related factors.

Material and Methods: A cross-sectional study was performed in a sample population of Khyber Medical College Peshawar students. Mental illnesses were identified according to the 20-item Self-Report Questionnaire.

Results: A total of 669 students were screened and those who scored 10 or more were 187 (27.95%). Total number of male students was 344 (51.42%) and 79 (22.96%) scored high on SRQ. Total number of female students was 325 (48. 57%) and 108 (33.23%) scored in the range of mental distress. Our results showed that mental distress was highest in 3rd year students (37.03%), followed by 1st year (31.69%), 2nd year (29.59%), final year (24.50%) and 4th year (19.66%).

Conclusions: Our findings indicate a high prevalence of probable psychiatric illnesses in medical students and are important for developing strategies to prevent mental disorders in them. Changes in curriculum and establishing of students counseling services may reduce this morbidity.

Key Words: Medical students, Mental illness, SRQ.

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INTRODUCTION

Anxiety and depression are prevalent in both genders and all ages, all over the world. Depression alone is a significant cause of impaired quality of life and subjective distress leading to reduced social and occupational functioning. High rates of common mental disorders and mental distress have been reported in medical students[1] and doctors[2] whereas the rates are lower in case of adolescence and non medical university students[3]. This higher prevalence in medical students could possibly be due to dealing with diseased and distressed population coupled with competitiveness, higher personal standard, and lack of sleep and due to overwork and working in emergency nights[4]. Lack of adequate and expected support from the family members, at times bullying by the staff can also be a contributing factor[5].

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The study was aimed at finding the rate of psychological distress in medical students and the possible risk factors were not addressed. This is not a major drawback of the study since a systemic review of 40 articles on North American Medical Students suggested that increased distress among medical students has been recognized for decades, but data on the possible causes of this problem, its consequences and solutions are quiet limited[6]. However the role of exposure to medical training is well established including difficulties in adjustment to medical colleges' environment, need of continuous hard work, highly competitive system, dealing with sufferers, diseased and death. Even the genetic influence alone does not increase the rate of depression unless interacted with psychosocial causes.

We suggest that future studies should evaluate the contribution of individual risk factors, so that the same could be addressed. At this point we recommend that these findings should be discussed with the students as well as college administrative and academic staff so that adequate remedies like students counseling services and extended psychological support is adopted to help medical students overcome psychological distress. The teachers need to be sensitized so that Student-Teacher relationship improves and teaching strategies more con-

ducive for learning are adopted. In fact overhauling and re-formulation of the entire curricula may be considered.

MATERIAL AND METHODS

It was a cross sectional study conducted on medical students in Khyber Medical College, Peshawar after getting permission from the head of the institution. Total number of students in the college was around 1500. We distributed the Questionnaire (SRQ-20) in each class on a different day in a lecture which was to have maximum attendance of the students of that class. All the students had at least six months of stay in the Institution. The purpose and mode of study was briefly discussed with the students and their consent verbally taken. Although a self-structured performa registered demographic data, the students were reassured about the confidentiality of their identity. The data was collected and kept in safe custody for further evaluation and analysis.

SRQ-20 is a self reporting questionnaire and consists of 20 items and is a reliable tool recommended by WHO for screening of mental disorder in different countries and cultures of varying demographic characteristics. It is already used and found reliable in our neighboring countries of India, Saudi Arabia and Iran. The tool is validated in India and a score of 10 is found to be conclusive of mental distress and probable psychiatric disorder. We also took the score of more than 09 as cut off point.

RESULTS

A total of 669 students were screened and those who scored 10 or more were 187 (27.95%). Total number of male students was 344 (51.42%) and 79 (22.96%) scored high on SRQ. Total number of female students was 325 (48. 57%) and 108 (33.23%) scored in the range of mental distress. Our results showed that mental distress was highest in 3rd year students (37.03%), followed by 1st year (31.69%), 2nd year (29.59%), final year (24.50%) and 4th year (19.66%) (Figure 1-7).

DISCUSSION

There is a wide range and variation in results found in different studies about prevalence of mental distress among medical students all around the globe, ranging from 12% to 73%[7,8]. The present cross sectional observational study conducted in undergraduate medical students of Khyber Medical College, Peshawar employed SRQ-20 for determining the presence of psychological distress. This instrument has the reputation of being a cost effective and fairly valid instrument for screening mental distress at both community and individual levels as has been widely used across cultures and nations of different continents. Cut off score 10 was selected as it was validated and found most sensitive and specific in Indian subcontinent[9].

Our results showed the prevalence of mental distress in 27.95% of all medical students which is comparable to 29.78% in Nepal[10]. This is however higher than 14.5% in India[9] and 12.2% in Dhaka but lower than 40.7% in Iran[11], 48.6% in Saudi Arabia[12] and 57.8% in Egypt[13] — countries of comparable cultural and geo-political background. These higher variations in results could be because of differences in methodologies of the studies.

Female students having mental distress outnumbered males in every academic year, a finding reported in earlier studies in Pakistan[14] as well as Saudi Arabia[13], India, Japan and the western countries[15]. The causative factors for this difference in the two genders are largely unknown or poorly understood but could include cultural differences and exposure to adverse work environment. This is not un-expected since females across the globe report more anxiety and depression even in general population.

Medical students have higher prevalence of mental distress than comparable non-medical university students. There seems to be causal relationship with studying in the medical college as in one study the distress rates were found to be lesser in students prior to admission than after six months after admission. Some of the proposed etiologically significant factors are long study hours, lack of sleep, higher demands of studies, dealing with disease and death, competitive environment and excessive bullying[16]. All these factors accumulate gradually leading to burn-out syndrome[17], drop out from medical college and even higher suicide[18] rates in medical students.

In the present study the rate of mental distress was found highest in students of 3rd year (37.03%) followed by 1st year (31.69%). Both phases involved exposure to new life situation like exposure to beginning of clinical training in tertiary care hospital in the former and entry in a medical college in the later case. Literature has established the role of life events in the causation of psychological distress and disorders.

CONCLUSION

Medical students are more prone to develop psychological disorders for various probable reasons including long study hours, competitiveness and lack of recreation. Measures like life style changes, study scheduling and student counseling services may help in addressing this issue.

LIMITATIONS

Limitations of the study were convenient sampling as only those students were included in the study who attended class on that particular day. Another limitation was that results were based on self-reporting questionnaire alone.

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AUTHOR'S CONTRIBUTION

Following authors have made substantial contributions to the manuscript as under:

Idrees M: Concept and Design, Overall Supervision.
Khan I: Data Analysis and Drafting.
Sarwar R: Acquisition of data and interpretation

Authors agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.