

PREVALENCE OF DEPRESSION AMONG STUDENTS AT BACHA KHAN MEDICAL COLLEGE, MARDAN

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ABSTRACT

Objective: To assess prevalence of depression among medical students at a public sector medical college.

Material & Methods: One hundred medical students (50 males and 50 females) were selected by random sampling technique from first year to final year MBBS. The student's age range was from 18-25 years. A questionnaire and standard scale was prepared and used for assessment of depression among students. The data was summated by manual counting of variables and tabulated by using Microsoft Excel and Microsoft Word-2007.

Results: Present study revealed that 45 students (25 female and 20 males) were having no depression, 30 students (18 females and 12 male) have borderline depression, 15 (6 females and 9 male) were having mild to moderate depression and 10 (6 females and 4 male) students were having moderate to severe depression. Present study showed that 25% students have anxiety and depression (mild, moderate to severe) and that depression level continues to decrease from 1st year to 3rd year. In final year MBBS maximum level of depression was noted, which might be due to some factors such as going to hospitals, closer contact with critically ill patients, patient death, higher number of study hours and fatigue. In present study a low incidence of depression in female students as compared to male students (female = 12% and male = 13%) were observed.

Conclusion: It is concluded from the present study that high levels of stress and burn out have been documented among medical students. Academic burden during final year, feelings of having their target a few steps away and anticipation of future responsibilities are the factors responsible for depression during the MBBS course.

Key Words: Anxiety, Depression, Stress.

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INTRODUCTION

A depressive disorder is an illness that involves the body, mood, and thoughts. It affects the way a person eats and sleeps, the way one feels about oneself, and the way one thinks about things. Without treatment, symptoms can last for weeks, months, or years. Appropriate treatment, however, can help most people who suffer from depression¹. Symptoms of depression include depressed mood (or irritable mood in late adolescence), markedly diminished

interest or pleasure in almost all activities, fatigue or loss of energy, significant increase or decrease in appetite or weight, feelings of worthlessness or hopelessness, feelings of excessive or inappropriate guilt, agitation or lethargy, diminished ability to concentrate and/or indecisiveness, and recurring thoughts of death, recurrent suicidal ideation without a specific plan, a specific plan for dying by suicide or a suicide attempt. Depression as an element of other disorders, Symptoms of depression can also be part of other illnesses, such as bipolar (or manic-depressive) disorder, which is characterized by episodes of depression alternating with episodes of mania². Depression is highly common and according to WHO by 2020, it would be the second-most prevalent condition worldwide.

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Medical Schools and colleges are recognized as a stressful environment that often exerts a negative effect on the academic performance, physical health

and psychological well being of the students. Medical education is perceived as being stressful, although it is doubtful whether it differs in that respect from other higher education³. There is considerable evidence that rates of depression and suicide are higher in medical students and that these rates continue to remain elevated when these students become physicians (US Deptt. of Health & Human Services, 2001). Medical students are a valuable human resource for our future and depression in them leads to less productivity, reduced quality of life, learning difficulties and may negatively affect patient care⁴.

Several studies suggest a high prevalence of depression and anxiety among medical students with levels of overall psychological distress consistently higher than in the general population. In a study conducted in the UK, psychiatric morbidity was found in 16% cases, whereas prevalence rate of depression was found to be in the range of 14-24%⁵. Similarly, in Turkish medical students, prevalence of depression was calculated to be 21.9%. In another study, 335 undergraduate Chinese medical students were assessed for depressive symptoms and nearly half of them were found to be depressed with 2% having severe depression. Anxiety and depression were found to be present in 70% and 60% according to two Pakistani studies respectively. Stressors specific to medical school for development of anxiety and depression were information and input overload, financial indebtedness, lack of leisure time and pressure of work and career choices. Associated non-academic risk factors for development of anxiety and depression were female gender, having family history of depression and anxiety, loss of close relative in past one year and substance abuse⁶.

The level of depression among medical student of KPK has been never documented therefore the objectives of this study were to assess the prevalence of depression among medical students at different levels of their MBBS course at Mardan, KPK.

MATERIAL AND METHODS

This cross sectional study was conducted at Bacha Khan Medical College, Mardan. In this study 100 students having age group 18-25 years, from first year to final year MBBS studying at Bacha Khan Medical, Mardan was randomly selected. For data collection a standard preformed questionnaire with a depression scale to assess depression and achieve the desired objectives was designed. A score less than 10 was regarded as no depression and score more than 21 was taken as a cuff-off point to label depression. The questionnaire included 18 symptoms and signs of depression.

Data Analysis and Interpretation

The data was summated by the manual counting of variables and tabulated for easy access. The data was presented in graphical and text form by using Microsoft Excel- 2007 and Microsoft Word.

RESULTS

The results of the current study are given in Table 1.1 which shows that among 100 consenting participants half (n=50) were males and half (n=50) were females. There was almost equal (about 20% each) representation from 1st year MBBS class to final year MBBS class. After analyzing the questionnaires it was concluded that 45 students (25 female and 20 males) were having no depression, while 30 students (18 females and 12 male) have borderline depression. Among the students, 15 (6 females and 9 male) were having mild to moderate depression, while 10 (6 females and 4 male) students were having moderate to severe depression.

Table 1.1: Characteristics of the Participants

Characteristics	Percentage
Years wise selection of study subjects	
1st year	19%
2nd year	20%
3rd year	20%
4th year	21%
Final year	20%
Depression distribution	No. of students
Participants with no depression	45
Participants with borderline depression	30
Participants with mild to moderate depression	15
Participants with moderate to severe depression	10
Sex wise distribution of Depression	No. of students
Males with no depression	20
Females with no depression	25
Males with borderline depression	12
Females with borderline depression	18
Males with mild to moderate depression	9
Females with mild to moderate depression	6
Males with moderate to severe depression	4
Females with moderate to severe depression	6

DISCUSSION

Out of 45 students with no depression; 10 students were from 1st year, 12 students were from 2nd year, 7 students were from 3rd year, 13 students were from 4th year and 3 students were from final year. Out of 30 students with borderline depression; 3 students were from 1st year, 6 students were from 2nd year, 6 students were from 3rd year, 5 students were from 4th year and 10 students were from final year. Out of 15 students with mild to moderate depression; no student was from 1st year, 2 students were from 2nd year, 5 students were from 3rd year, 3 students were from 4th year and 5 students were from final year. Out of 10 students with moderate to severe depression; no student was from 1st year, 1 student was from 2nd year, 2 students were from 3rd year, 3 students were from 4th year and 4 students were from final year.

Out of 45 students with no depression; 25 students were females and 20 students were male. Out of 30 students with borderline depression; 18 students were females and 12 students were male. Out of 15 students with mild to moderate depression; 9 students were males and 6 students were female. Out of 10 students with moderate to severe depression; 6 students were females and 4 students were male.

Anxiety and depression has been recognized as major public health problem evidenced by ranking of its fourth position among global burden of diseases. These are very good indicators to assess mental health as well as the learning capabilities of the students. The emotional status of medical students has been a source of concern; it may affect overall performance of students and may lead to cascade of consequences at both personal and professional level.

Several studies indicated a high incidence of anxiety and depression among the medical students as compared to other undergraduate students, which might be due to the reason that in addition to coping with normal stressors of everyday life, the medical student must deal with stressors specific to the medical school^{7,8,9,10}.

Present study revealed that 25% medical students were anxiety and depression (mild, moderate to severe) and that depression level continues to decrease from 1st year to 3rd year of MBBS. These finding in line with the finding of many other studies^{11,12,13,14}, they reported more stress in medical student than the general population. In final year MBBS maximum level of depression was noted, which might be due to some factors such as going to hospitals, closer contact with critically ill patients, patient death, higher number of study hours and fatigue. Present finding is in line with the finding of Iqbal et al. (2008) and Khan M.S. et al., (2006)^{15,16}, who reported the same predisposing factors for high level of anxiety and depression among medical students.

In present study a low incidence of depression in female students as compared to male students (female =12% and male =13%) were observed. These differences might be explained on the basis of religious beliefs in our society as well as more social protection provided to female students in the colleges. The higher incidence of depression among male students might be due to the fact that males are considered to be the earner of society. This finding is against the finding of Dehlin M and Jadoon AN et al^{12,17}.

CONCLUSION

High levels of stress and burnout have been documented among medical students.

Recommendations

From the present study, it is recommended for medical schools to identify stress levels among its students and create a student-friendly and tension free working environment for their education. Although stress cannot be eliminated but, appropriate measures can be undertaken to alter the students' maladaptive perceptions and reactions to those events. Students wishing to enroll in this field should be exposed to the nature of the profession and study environment prior applying to program. It is also recommend that an entrance interview to evaluate the candidate's interest and suitability for the course must be taken. Medical colleges should also concentrate on co-curricular activities to keep their students mentally healthy. Medical colleges should collaborate with educational experts in designing and developing a curriculum structure which is more student-orientated, aimed at enhancing the students' psychological well-being whilst maintaining a focus on academic and clinical performance and producing graduates with a positive professional attitude.

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AUTHOR'S CONTRIBUTION

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

Shafiullah: Concept and idea.

Khan S: Data collection.

Nisar S: Data collection.

Din UI: Bibliography.

Sadaf S: Statistics.

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.