

FREQUENCY OF DEPRESSION AMONG STUDENTS AT QUAID-E-AZAM MEDICAL COLLEGE BAHAWALPUR

Tehseen Iqbal¹, Azizullah Bhatti,¹ Hafiz Muhammad Waseem², Muhammad Abdul Razi¹

ABSTRACT

Background: Depression and anxiety badly affects the performance of an individual, especially medical students are exposed to many stresses during their education. **Objectives:** This study was conducted to assess the prevalence of depression among medical students at different levels of their MBBS course. **Subjects & Methods:** It was a cross-sectional, descriptive study, conducted at Quaid-e-Azam Medical College, Bahawalpur. A sample of two hundred (200) medical students (100 males and 100 females) was chosen by stratified systematic random sampling technique. Their age range was 18 to 24 years. Agha Khan University Anxiety and Depression Scale was used to assess the depression among students, with students having score ≥ 20 labelled as having depression. Data was collected on a specially designed questionnaire and entered into SPSS version 16.0 and was analyzed on the same software. **Results:** Out of total 200 participants 53(26.50%) fulfilled the depression criteria while 147(73.50%) scored below 20. Among students, frequency of depression gradually decreases from 1st year MBBS class (29.27 %) through 2nd year (25.64 %) to 3rd year (15.15%). After 3rd year MBBS, frequency of depression among students increased through 4th year (25.53 %) to final year MBBS (35%). **Conclusion:** There is high prevalence of depression among medical students. The rise in depression scores may be due to emotional distress initially on entering the course that decreased with time up to third year. It increased afterwards which may be due to burden of clinical work and ward duties. Academic burden during final year, feelings of having their target a few steps away and anticipation of future responsibilities may be the most stressful during the MBBS course.

Key words: Anxiety, depression, medical students

INTRODUCTION

Depression and anxiety are medically unexplained physical symptoms.¹ Depression has been recognized as a major public health problem evidenced by its ranking of fourth position among the global burden of diseases.² Depression is defined as 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 around.³ Anxiety is a vague, unpleasant and sometimes debilitating emotion that is experienced in anticipation of some misfortune.⁴ According to World Health Organization (WHO), depression is a common mental disorder that presents with depressed mood, loss of interest or pleasure, feelings of guilt or low self-worth, disturbed sleep or appetite, low energy and poor concentration.⁵

In developing countries, 10%-44% individuals suffer from depression and anxiety disorders.⁶ Pakistan, among the developing countries, has a higher prevalence rate of depression because of the current social adversities,² however, the exact prevalence of anxiety and depression in Pakistan

is not known.⁷ In Pakistan, Lahore had the highest percentage of depression (53.40%), as compared with Quetta (43.90%) and Karachi (14%-35%).^{2,8} A study on stress and depression in a tribal area of Pakistan showed that 60% of women and 45% of men were having depression.⁹

Different studies showed that frequency of anxiety and depression among medical students varies greatly from 19.30% in a private medical college in Lahore¹⁰ to 70% in Agha Khan University and Jinnah Medical College Karachi.¹¹ A study showed 23% occurrence of depression¹² and still another study showed a 60% depression rate among the students of Zia-ud-din Medical University, Karachi.¹³ A study, at the University of Zimbabwe showed a depression rate of 64.5% in first year medical students.¹⁴ While a study conducted in three Sydney hostels showed a depression rate of only 20%.¹⁵ The objective of present study was to assess the frequency of depression among MBBS students at Quaid-e-Azam Medical College, Bahawalpur and to find out which part of the MBBS course is more stressful to the students.

SUBJECTS & METHODS

This study was carried out at Quaid-e-Azam Medical College, Bahawalpur during December 2008 to June 2009. This was a Questionnaire based, cross-sectional study. Out of 1300 students, we selected a sample of two hundred students (100 males and 100 females) from first year MBBS to final year MBBS

1. Department of Physiology
Quaid-e-Azam Medical College, Bahawalpur
2. Student MBBS, QAMC, Bahawalpur

Correspondence: Prof. Dr. Tehseen Iqbal, Quaid-e-Azam Medical College, Bahawalpur

class. The sample was taken by using systematic, stratified random sampling technique. The students not willing to answer the Questionnaire were excluded from the sample.

A specially designed and pre-tested questionnaire of The Agha Khan University Anxiety and Depression Scale (AKUADS) was used to assess depression. A score less than or equal to 19 was considered normal. A score more than 19 was taken as a cut-off point to label depression. The questionnaire includes 25 symptoms and signs of anxiety and depression and was self-judged by the interviewee to be present during the last two weeks. Students returned the questionnaire after filling it. The cumulative scores and personal data of the participants was entered in SPSS version 16.0. Descriptive statistics were used to analyze the data and none of the statistical tests of significance was applied.

RESULTS

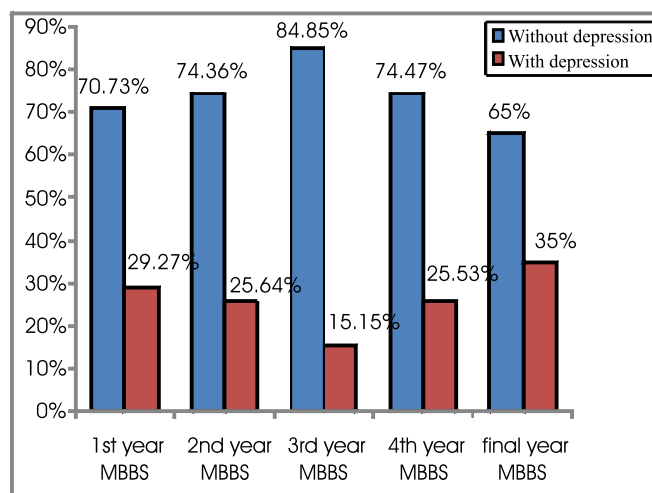
Table-I shows that among 200 consenting participants half (n=100) were males and half (n=100) were females. There was almost equal (about 20 % each) representation from 1st year MBBS class to final year MBBS class. After analyzing the questionnaires, it became apparent that 26.50 percent of the participants were having symptoms of depression and 73.50 percent were without these symptoms. Interestingly, symptoms of depression were slightly more prevalent among male students (28 %) as compared with the female students (25 %).

Table I: Characteristics of the Participants

Characteristics	Percentage
Year wise selection of study subjects	
1 st year	20.50 %
2 nd year	19.50 %
3 rd year	16.50 %
4 th year	23.50 %
Final year	20 %
Depression distribution	
Participants with depression	26.50 %
Participants without depression	73.50 %
Sex wise distribution of Depression	
Males with depression	28%
Females with depression	25%

Figure I, shows the percentages of participants with or without symptoms of depression at different levels of MBBS course. The percentage of depressed participants decreased gradually from 1st year MBBS (29.27 %) through 2nd year (25.64 %) to 3rd year MBBS (15.15 %). It then increased steadily through 4th year MBBS (25.53 %) and reached the highest level in final year MBBS (35 %).

Figure I: Participants with and without depression at different levels of MBBS course.



DISCUSSION

Anxiety and depression has been recognized as a major public health problem evidenced by its ranking of fourth position among the global burden of diseases.² These are very good indicators to assess the mental health as well as the learning capability of the students.¹³ The emotional status of students during medical school training has been a source of concern, reported as early as 1956 as it may effect the over all performance of students and may lead to a cascade of consequences at both personal and professional levels.¹³

Pressure of work, especially in terms of preparing for examinations and acquiring professional knowledge, skills and attitudes were reported as the most stressful aspects of medical training.¹⁶ An interesting finding of this study was that the level of stress gradually decreased during initial 3 years and this finding could be explained by the fact that our students may have developed coping mechanisms with the help of our student's support system.¹⁷ The depression level is raised again in the fourth and final

years possibly because of the clinical rotation of the wards and patient dealing.

Several studies indicated a high incidence of anxiety and depression among the medical students as compared with other undergraduate students.¹⁸ This may be due to the reason that in addition to coping with the normal stressors of everyday life, medical students must deal with stressors specific to the medical school.^{19,20,21} There are several sources of distress from the admission process to graduation, including ethical dilemmas and dissection of the cadavers.²² Some studies showed a very low incidence of depression in medical students.^{23,24} In our study, 26.50 % students have anxiety and depression and this is comparable to other students as far as the overall level of depression in medical students is concerned.^{10,12,15}

We noted that the depression level continues to decrease from 1st year to 3rd year. Our findings differ from a study which reported that depression level raised in 3rd year MBBS.²⁵ We observed that in final year MBBS maximum level of depression was present. Some studies identified factors such as going to hospitals, a closer contact with critically ill patients and patients' death, higher number of study hours, fatigue and job stress, are responsible for this increased percentage of depression.²⁶

Data from Western countries showed that female students experience higher levels of stress as compared with the male students.^{27,28} The possible reason explained by different studies was tendency of women to over report medical and psychological symptoms. We found a low incidence of depression in our female students as compared with the male students (females=25%, males=28%).

This difference might be explained on the basis of religious beliefs in our society as well as more social protection provided to female students in our colleges. Being a lady doctor is still a privilege in our society. High incidence of depression among male students may be because of the fact that in our society, males are considered to be the bread-earner of the family. They are anticipating this role just after MBBS and that may be the reason for the highest frequency of depression seen at the end of the course.

CONCLUSION

There is high prevalence of depression among medical students. The rise in depression scores may be due to emotional distress initially on entering the course that decreased with time up to third year. It increased afterwards and may be due to burden of clinical work and ward duties. Academic burden during final year, feelings of having their target a few steps away and anticipation of future responsibilities may be the most stressful during the MBBS course.

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