

# PREVALENCE OF DEPRESSION AND THE USE OF ANTIDEPRESSANTS AMONG THIRD YEAR MEDICAL STUDENTS OF KHYBER MEDICAL COLLEGE, PESHAWAR

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## ABSTRACT

**Objective:** To evaluate the prevalence of depression and the use of antidepressants among undergraduate medical students.

**Methodology:** This was a cross-sectional study done in May, 2011 at Khyber Medical College, Peshawar on third year medical students using Zung self-rating depression scale.

**Results:** 29 out of 166 students (17.5%) were revealed having depression. Two out of these 29 students (6.9%) were using antidepressants.

**Conclusion:** Depression is an under-diagnosed and under-prescribed mental illness.

**Key Words:** Depression, Medical students, Antidepressants

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## INTRODUCTION

Depression is the most common of the affective disorders, estimated to affect 340 million people globally, and according to WHO, by 2020, it would be the second-most prevalent condition worldwide<sup>1-4</sup>. The scenario regarding mental ailments in Pakistan is also quite gloomy with 6% prevalence rate of depression in the general population<sup>5</sup>. But Pakistan has only 0.2 psychiatrists per 100,000 population (meaning a total of 360 psychiatrists if we have a population of 180 million) which is grossly a small number for such a large population<sup>6,7</sup>. So it deems reasonable to presume that depression might be an under-diagnosed and under-treated problem.

The undergraduate medical students are particularly subject to tremendous stress due to the vast and extremely demanding MBBS curriculum and many other psychological pressures, leading to

various emotional disorders, thus reducing their self esteem and academic achievements as well as their functionality as future doctors<sup>8-14</sup>.

Although, determining the prevalence rate of depression among the undergraduate medical students of Khyber Medical College, Peshawar was one of the purposes of the study (irrespective of the gender, social or family background of the students) but it was a preliminary step towards our primary concern of exploring the use of antidepressants among the students with depression.

## METHODOLOGY

This was a cross-sectional study done in May, 2011. This mid-session time was deliberately chosen to minimize the extra stress symptoms because of the coming exam. The study site was Khyber Medical College, Peshawar which is the mother institute of medical education in the province with a 5 years medical curriculum and an annual intake of about 270 students.

All students present in the class at the time of distribution of the proformas were included in the study after informed consent. Any student with current major physical illness was excluded from the study.

Students were briefed about the purpose of the study and proformas were distributed among all of them. They were told clearly that returning the proforma will mean his/her consent to take part in the study. They were also asked not to show their

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identity to assure anonymity of the responses given in the proforma.

The instrument used for collecting the data was a proforma containing Zung self-rating scale for depression<sup>15</sup> with some additionally required information regarding the use of antidepressants.

The Zung self-rating depression scale was developed by Zung WWK in 1965 for the assessment of perceived feelings of individuals regarding their emotional status. It consists of 20 items with scores ranging from 1-4 (per item). The total score is determined by adding all the scores, thus getting values ranging from 20-80. Scores less than 50 are considered normal while those ranging from 50-59, 60-69 and more than 70 are indicative of mild, moderate and severe depression, respectively. The Zung depression scale was preferred to other similar tools as it evaluates depression in normal non-psychotic individuals and has been time tested<sup>15, 16</sup>. The data was analyzed using SPSS version 16.

## RESULTS

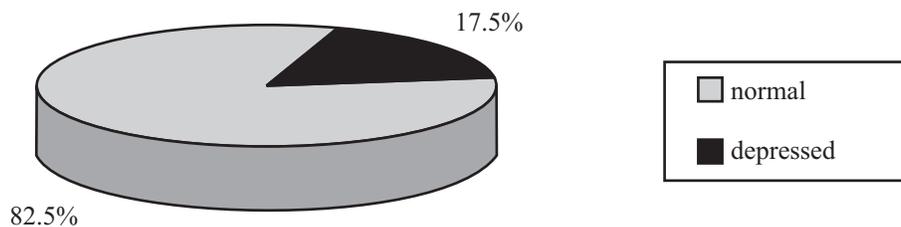
Out of 216 proformas distributed among the students, 166 were returned (response rate: 76.8%). Twenty-nine students (17.5%) had scores equal to

or more than 50, indicating depression. Referring to the severity of the depressive symptoms, 25 students (15.1%) had symptoms of mild depression, 4 students (2.4%) had moderate depression while none of the students (0%) had severe depression. Out of 29 students with depression, only 2(6.9%) were using antidepressants (figures 1 & 2). The antidepressants used by these students were citalopram, fluoxetine and dothiepin.

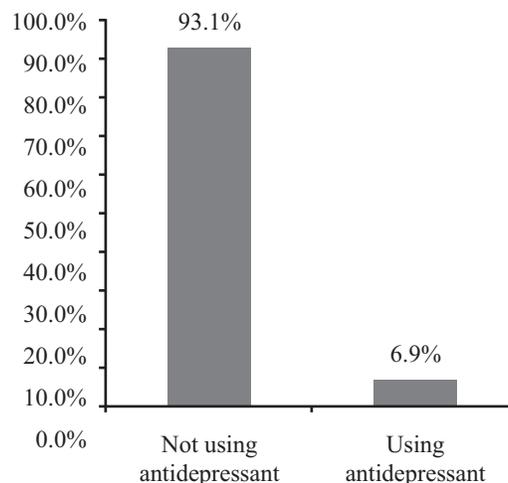
## DISCUSSION

Our study revealed a point prevalence of 17.5% for depression among these students which is considerably higher than the 6% prevalence rate of depression in the general Pakistani population. The reason is quite obvious; medical students are exposed to stressors specific to medical education in addition to the stressors of everyday life. Results of our study are consistent with those of the study done at Allama Iqbal Medical College, Lahore which explored 19.5% prevalence rate of depression among female medical students<sup>17</sup>. Results of our study are also in agreement with the studies from the Western world which report prevalence rates of depression for medical students in the range of 14%-24%<sup>18-20</sup>.

**Figure 1: Frequency of normal and depressed students (n=166)**



**Figure 2: Fraction of depressed students using Antidepressants Versus those not using any kind of Antidepressant**



No doubt 17.5% prevalence rate of depression among these students is a worryingly high figure but what has alarmed us even more than that, is the fact that only 2 out of 29 students (6.9%) had been diagnosed earlier as being depressed and were using antidepressants. We searched the literature/internet but could not find any evidence in support of (or against) our findings; perhaps it is the first study ever done for exploring this aspect of the problem.

## CONCLUSION

This study has intensified our concern that depression is an under-diagnosed and under-prescribed problem among medical students.

## RECOMMENDATION

Undergraduate medical students are a valuable resource for our future. We highly recommend the establishment of student support committee and the initiation of systematic screening and counseling programs for early diagnosis and treatment of emotional ailments to prevent any future complication.

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