

EVALUATION OF DEPRESSION AMONG MEDICAL AND NON-MEDICAL STUDENTS: A CASE OF PESHAWAR, PAKISTAN

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ABSTRACT

Background: In our daily life every one experiences some un happiness, mostly due to change, either from losing of something or may be due to everyday misery. These painful feelings are usually appropriate and temporary. However, when sadness persists and impairs daily life, it may be an indication of a depressive disorder. Duration, severity and presence of other symptoms are the factors that distinguish normal sadness from clinical depression. Clinical depression is classified a mood disorder. The main subtypes are Major depression, Dysthymia (Longstanding but milder depression) and Atypical depression. Other depressive disorders include pre menstrual dysphoric (PDD or PMDD) and Seasonal affective disorder (SAD)

Objectives: To determine depression level among medical and non medical students

Method: A cross-sectional study was conducted among 300 subjects of the same age group. A scale was devised on the basis of DSM-IV criteria for Depression and was standardized. Data was entered and analyzed using Microsoft Excel and SPSS v17.

Results: Out of 300 students, all the 300 students completed the questionnaire and the response rate was 100%. The mean age of the participants was 20.36 +/- 1.8. Using DSM IV criteria it was found that depression was highest among female medical students that was 78.4% (n=40) , followed by non-medical male students 61.6% (n= 56) and medical male students 59.6% (n=59). The lowest level of depression was found among female non medical students, 57.6% (n=34).

Conclusion: It was concluded from the results that Hospital prevalence of depression is highest among female medical students and non medical female students are less vulnerable to depression among all groups.

Key Words: Depression level. Medical non Medical Students

INTRODUCTION

Depression and anxiety is a hot topic in the field of medicine, yet little work has been done in Peshawar KPK Pakistan. This study will evaluate the level of depression among Medical and Non medical students of university of Peshawar KPK. Depression and anxiety levels in the community are considered as important indicators for mental health. Many studies have shown and documented that the stress among medical students ranges from 12 to 73%.¹ Depression is a common but serious mental illness typically marked by sad or anxious feelings. Most students occasionally feel sad or anxious, but these emotions usually pass quickly—within a couple of days. Untreated depression lasts for a long time and interferes with your day-to-day activities.² A study was conducted in ziauddin medical

university, Karachi, Pakistan. Results showed that the level of depression among 4th year, 3rd year, 2nd year and 1st year was 49%, 47%, 73% and 66% respectively. It was significantly higher in 1st year and 2nd year, as compared to 3rd and 4th year ($p < 0.05$).³ A study was conducted in the medical college of Lahore to find out depression among female medical students. The results showed that Overall, 43.7% of students reported anxiety and 19.5% depression.⁴ A Study was conducted among first year medical students of university of Zimbabwe. According to their study a total of 109 out of 123 first year medical students were used in the study. The results showed with an average of about 35.5% normal and an average of 64.5% of the students being at various levels of stress and or depression.⁵

A study was conducted among the medical students in Saudi Arabia to find out depression among their students. Overall the prevalence of anxiety and depression in the females is higher (60.6%) than the males (44.4%), P -value < 0.01 . No suicidal ideation was found in any response from both males and females.⁶

Depression is one of biggest challenge of modern era, of the world population is suffering from depression. This rate in Pakistan is 34%. It means that it is increasing in our country very rapidly. Depression is also reported

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high in students, which may affect their success and social life in future. It is generally believed that medical students are more prone to depression as compare to non-medical students. Because of studies overload they spend most of their time in social isolation which lead to depression and anxiety. This study is intended to discover this myth and to identify the level of depression in medical and non medical students. In Pakistan previous literature on depression in students is narrow; students were investigated for depression with no classification of medical and non-medical students. Our study identified depression level among both medical and non-medical students. Secondly this is the first study of its type in Peshawar KPK.

MATERIAL AND METHODOLOGY

A cross-sectional study was done on the students of Rehman Medical College Peshawar KPK and Non medical students of Peshawar University Peshawar KPK Pakistan. 300 Students, 150 participants from each Peshawar University and RMC were selected through convenience sampling. Students of 1st year, 2nd year , 3rd year & 4th year MBBS of Rehman Medical College and all students of Peshawar university, whom were available at data collection time Self-administered questionnaire based on DSM IV criteria was distributed among the medical students of Rehman medical college and all the students of Peshawar university Kpk Pakistan. Questionnaire was explained, informed consent was taken, One week time was given for filling and returning of questionnaire. DSM-IV tool was used for diagnosis and classification of depression and is as follow,

DSM-IV

DSM-IV criteria is used for measuring level of depression. According to DSM IV criteria Major Depressive Disorder requires two or more major depressive episodes.

Diagnostic criteria

Depressed mood and/or loss of interest or pleasure in life activities for at least 2 weeks and at least five of the following symptoms that cause clinically significant impairment in social, work, or other important areas of functioning almost every day

1. Depressed mood most of the day.
2. Diminished interest or pleasure in all or most activities.
3. Significant unintentional weight loss or gain.
4. Insomnia or sleeping too much.
5. Agitation or psychomotor retardation noticed by others.
6. Fatigue or loss of energy.
7. Feelings of worthlessness or excessive guilt.

8. Diminished ability to think or concentrate, or indecisiveness.
9. Recurrent thoughts of death

The criteria is classified as follow:

MILD DEPRESSION: 5-6 score but mild in severity and functional impairment.

MODERATE DEPRESSION: 7 – 8 score but moderate functional impairment.

Severe DEPRESSION: fewer score above 8 but any of these, severe functional impairment, psychotic, recent suicide attempt, or has specific suicide plan or clear intent.

RESULTS

For this study data was collected from 300 respondents. Among the respondents 190 were males and 110 were females. Questionnaires were equally distributed among medical and non medical students that are 150 each.

Among the respondents 75% of non medical and 77% of medical male respondents said that they felt tensed lately. While 78% of non medical and 96% of the medical female respondents felt sad or tensed lately. This shows that female medical students are more tensed and sad followed by non medical female students, medical male students and non medical male students. The combine result shows that Medical students were found more tensed than Non medical students 84% and 76% respectively.

Among the respondents 51.6% of Non medical male and 64.6% of Medical male students have lost interest or pleasure in things they previously like to do. While 37.3% of Female Non medical and 62.7% of female Medical students have lost interest or pleasure in things they previously like to do. This shows that female medical students have significantly lost interest in things they previously like to do. While non medical female students showed interest in previous things. The combine result shows that medical students were found to lost their interest or pleasure in things they previously like to do more than Non medical students that is 64%

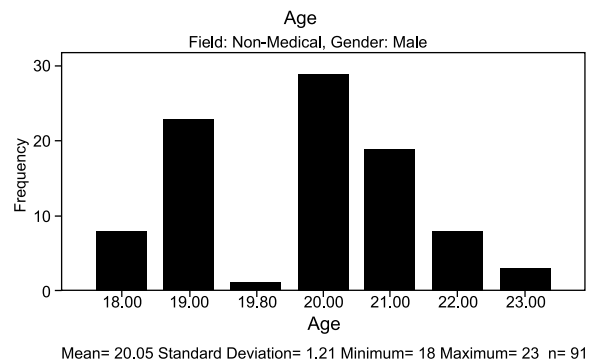


Fig 1: Descriptive Statistics

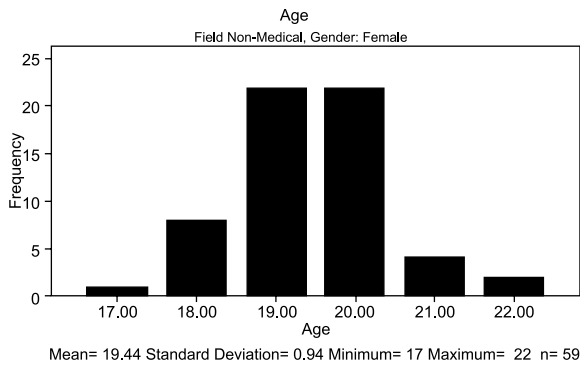


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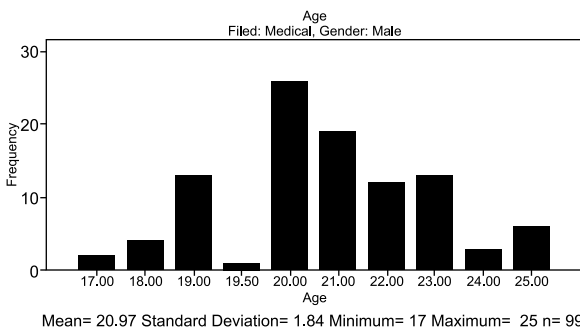


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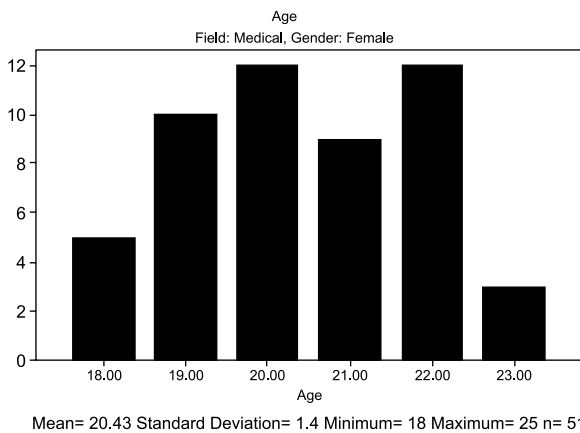


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and 46% respectively.

Among the respondents 56% of Non medical male student and 50% of medical male have appetite much less or greater than usual. While 59.3% of Non medical female and 51% of medical female have appetite much less or more than unusual. The combine result show that Non medical student have appetite much less or more than usual than medical students that is 57.3% and 50.7% respectively.

Among the respondents 39.6% of Non Medical male students and 31.3% of medical male students have a lot of trouble in sleeping. While 35.6% of Non Medical female students and 43.1% of Medical male students have a lot of trouble in sleeping. The combine

result shows that the Non medical students have more trouble in sleeping that is 38% and Medical students is having 35.3%.

Among the respondents 45.1% of Non medical male student and 45.5% of medical male are so agitated restless or slowdown that other have begin to notice. While 33.9% of Non medical female and 54.9% of medical female students are so agitated restless or slowdown that other have begin to notice. The combine result show that Medical student are more so agitated restless or slowdown that other have begin to notice that is 48.7% than Non medical students that is 40.7% respectively.

Among the respondents 51.6% of Non medical male student and 60.6% of medical male get tired and is having no energy. While 59.3% of Non medical female and 47.1% of medical female students are so agitated restless or slowdown that other have begin to notice. The combine result show that Medical student get tired more and is having no energy that is 56% than Non medical students that is 54.7% respectively.

Among the respondents 60.4% of Non medical male student and 66.7% of medical male is have trouble in concentrating, thinking clearly and making decisions. While 64.4% of Non medical female and 58.8% of medical female students are having trouble in concentrating, thinking clearly and making decisions. The combine result show that Medical student is having more trouble in concentrating, thinking clearly and making decisions that is 64% than Non medical students that is 62% respectively.

Among the respondents 13.2% of Non medical male student and 28.3% of medical male thinks that they would be better off dead or have thought about suicide. While 23.7% of Non medical female and 47.1% of medical female students that they would be better off dead or have thought about suicide. The combine result show that Medical student thinks that they would be better off dead or have thought that about suicide is 34.7% than Non medical students that is 17.3% respectively.

Among the respondents 54.9% of Non medical male student and 52.5% of medical male says that they feel worthless or exclusively guilty about the things they have done or not. While 52.5% of Non medical female and 60.8% of medical female students feels exclusively guilty about the things they have done or not. The combine result show that Medical student feels worthless or guilty about the things they have done or not that is 55.3% than Non medical students that is 54% respectively.

Descriptive Statistics

Above results show that depression was highest among female medical students that was 78.4% (n=40), followed by non-medical male students 61.6% (n= 56)

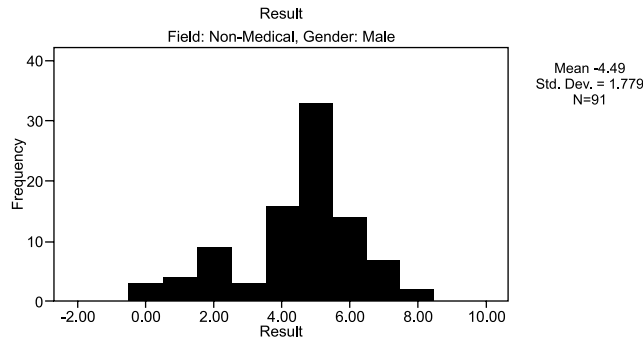
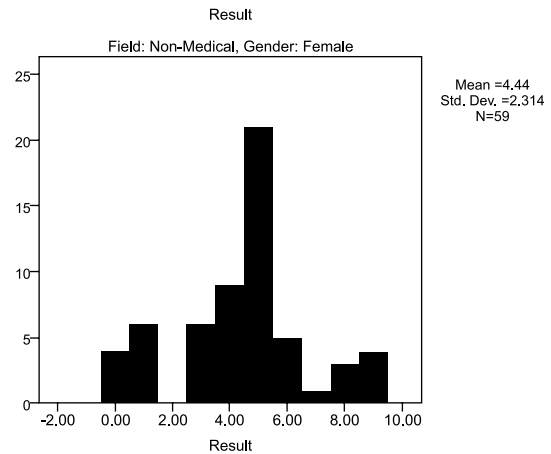
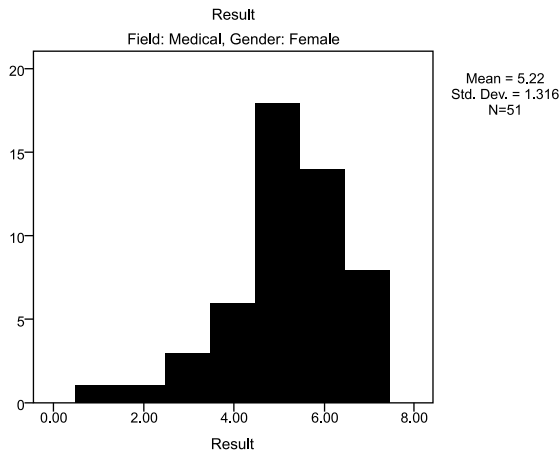
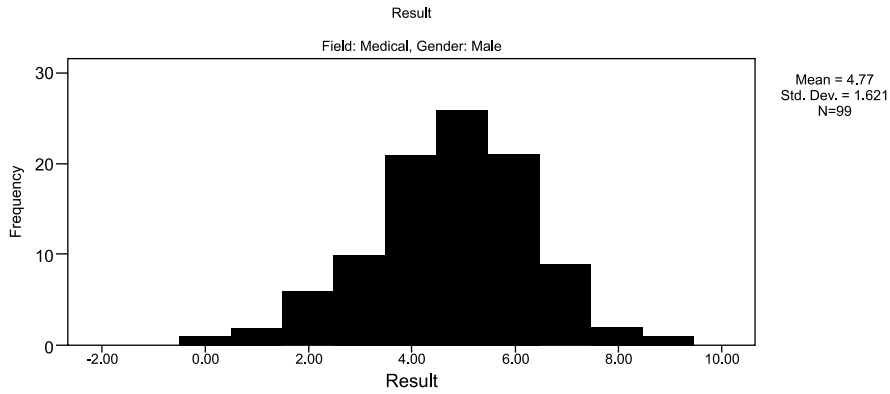


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and medical male students 59.6% (n=59). The lowest level of depression was found among female non medical students, 57.6% (n=34).

DISCUSSION

As an individual you might not accept nor you can tell others that you are depressed. Sometime you may feel that to admit that you are depressed is the job of a weak person and that you should be strong enough to get over your own negative feelings. Depression is quite different from other diseases. Unlike a fractured bone it

is not easy to diagnose, treat and understand. To most of the people you appear to be normal like to your friends and family but inside you feel as broken as that fracture bone. Currently there are no X-rays, CT- Scan or Blood tests for depression. But you can identify depression in yourself or someone you know, whom uses these signs and symptoms of depression, depressed most of day, lost interest in things that you previously like to do, significant weight gain or weight loss, agitation or restlessness, feeling of worthless, diminished ability to think or concentrate, recurrent thought of death or sui-

cide specifically when men are depressed experienced unexplained painful aches, sense of hopelessness, feeling worthless, weak, useless, intense loneliness, isolate themselves from friends and family, act out in angry way and see suicide as the only way out. Anxiety and depression can be taken as a reliable indicator for assessment of mental illness in the community.⁷

Western data shows that females experiences high level of stress as compared to male. The reasons explained by most of the studies are, Females have more tendency to report about the volume and complexity of material they had to cover, they are also most likely to report stress due to self expectations and feeling of lack of competence and tendency of a women to over report medical and psychological symptoms.⁸

Many studies have reported substance abuse and alcoholism among medical students and junior doctors under stress.⁹ It cannot be ruled out in the medical community as access to the drugs is relatively very easy. This study did not explore substance abuse. Medical school curriculum are very tough, depressive, and non enjoyable and require high levels of concentration and time for study. Continuous assessment and examination contributed to stress among medical students and is considered as a risk factor for development of depression among medical students¹⁰

In this study the depression was determined by using DSM IV Tool.300 questionnaires were distributed among medical and Non medical students 150 each. The response rate was 100% both in medical and Non-medical students. By using DSM-IV criteria the level of depression was calculated among medical and non-medical students. According to this criteria the level of depression among medical male students were as follow, 40.4%(n=40) of medical male students were having no depression, 47.5% (n=40)of medical male students were mildly depressed, 11.1%(n=11) were moderately depressed and only 1%(n=1) was reported as severely depressed. Similarly among medical female students, 21.7% (n=11) of medical female students were having no depression, 62.8% (n=32)of medical female students were mildly depressed, 15.7%(n=8) were moderately depressed while no case of severely depressed female student were reported.

By using the same DSM-IV criteria the level of depression among Non medical students were calculated and the results shows that, 38.5% (n=35) of Non-medical male students were having no depression, 51.7% (n=47) were mildly depressed, 9.9%(n=9) were mildly depressed, while no case were reported as severely depressed. Similarly among Non medical female students the trend of depression was as follow, 32.5% (n=25) of Non medical students were having no depression, 44.1%(n=25) were having mild depression, 6.8%(n=4) were moderately depressed, and 6.8%(n=4) were reported as severely depressed.

Above results show that depression was highest among female medical students that was 78.4% (n=40), followed by non-medical male students 61.6% (n= 56) and medical male students 59.6% (n=59). The lowest level of depression was found among female non medical students, 57.6% (n=34).

Anxiety and depression has a dramatic effect on one's personal life and also for the society, due to this many students has been drop out from school, loss of relationships, decreased ability to work with proper concentration, effectiveness ,can lead to marital problems and finally tendency of suicide¹¹. They also have impaired ability to work effectively¹². Initial diagnosis and screening at the time of entering and identification of positive cases by a clinical psychiatrist can establish a base line data.¹³ For this we must need a monitoring prevalence of anxiety and depression that will help in instituting intervention strategies.

CONCLUSION

Therefore it is important that medical educationist in Pakistan should conduct further studies to find the prevalence of anxiety and depression among medical students of all medical colleges in Pakistan and also among Non medical students of other disciplines, the main challenge is to identify stressors and the problem should be addressed by enforcing proper measures. It is also suggested that there should be a clinical psychiatrist in all Institutes in Pakistan, so that the depression and anxiety can be minimized among the students by proper counseling by psychiatrists.

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