

**EVALUATION OF DEPRESSION AND ANXIETY AMONG THE MEDICAL STUDENTS OF PUMHSW NAWABSHAH.**

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**ABSTRACT**

**Objectives:** To evaluate the prevalence of anxiety and depression among medical students of PUMHSWNawabshah and factors associated with mental retardation of students. **Methodology:** Across-sectional study was conducted atPUMHSW Nawabshah for the period of 07 monthsfrom August 2019 to February 2020. Total 319 study subjects had participated belonging to various medical disciplines. A questionnaire was given to them and all the participants were guided about filling of that questionnaire. Questions regarding the mental approach of students, level of anxiety & depression and factors associated with psychiatry problems were asked. Different measuring scales were used to evaluate the frequency of depression and anxiety. Chi-Square test was applied to evaluate the research data.

**Results:** The students with various age groups from 21 to 30 with each type of gender and total 319 study subjects were included. Among all 207 were females and 112 were males. Frequency of anxiety and depression was more common in females because of socio economic values and educational burden was the route cause for creating depression and anxiety. **Conclusion:** One-third portion of total study subjects were found with anxiety and depression because of their academic burden and non-academic factors such as economy of students, psychiatry issues, residential problems and even sudden loss of family member or close friend can enhance the prevalence of depression & anxiety.

**Keywords:**Depression, Anxiety, Pharmacy, Psychiatry.

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**How to cite this article:** Ahmer A<sup>1</sup>, Ahmed T<sup>2</sup>, Bhatia MR<sup>3</sup>, Malik D<sup>4</sup>, Siyal FJ<sup>5</sup>, Lakho SA<sup>5</sup> Abbas J<sup>7</sup>.

**EVALUATION OF DEPRESSION AND ANXIETY AMONG THE MEDICAL STUDENTS OF PUMHSW NAWABSHAH. JPUMHS;2020;10(03);22-26.**

<http://doi.org/10.46536/jpumhs/2020/10.02.220>

**INTRODUCTION**

Depression can be defined as persistent feelings of misery and unimportance and not need of any desire to engage in formerly congenial activities and it is considered as complex mind or body infirmity.<sup>1</sup>Anxiety is defined as characteristics of stress, bothered thoughts and substantial changes such as hypertension and effected person commonly have chronicdisturbing thoughts or distress.<sup>2</sup>They may pass up certain situation out of worry.Depression is assessed by using Montgomery Asberg Depression Rating scale whereas anxiety of participants is measured with Hamilton Anxiety rating Scale (HAM-A)Puberty age is more interesting age in one's life as it enhances the hormonal changes within body and responsible for secondary characteristics such as sound changes, hormonal influences in both gender and appearance of puberty hairs. <sup>4</sup>Person with initiative stage of

anxiety must conflict with social behavior and his mind is not ready to adopt the environmental stress. The main causes of depression and anxiety includes gender discrimination, academic performance, economic values and social interaction with others.<sup>5</sup> Many studied has conducted on the same issue that prevalence of depression finds more among the university students as compare to students of college or school. Some researcher even conducted a research on specific universities and concluded that mental strength of medical students was gradually retarded with increasing academic burden upon them.<sup>6</sup> According to research; mental approach of medical students as compared with general students reduces with upgradation of study. They didn't have any social contact with community and they were living in a bound environment and rate of mental disease found more common in such type of students.<sup>7</sup>According to survey of Pakistan, it was assumed that about 60-70% of medical students of

various colleges and universities were found with the symptoms of psychological problems most probably with depression.<sup>8</sup> Various aspects were involved in the prevalence of depression such as financial crises, study pressure, carrier choices and many others. If we discussed about gender, the frequency of depression and anxiety found more in females as compared to males, the root cause of depression among females was non-academic factors such as family history of depression and death of close friend or family member. Sleeping pills or drug abuse can also be responsible for the same cause.<sup>9, 10</sup> The main theme of the study was to evaluate the level of depression and anxiety among medical students of SMBBMU Larkana and factor associated with depression causes.

**METHODOLOGY**

A cross-sectional study was conducted at People’s University of Medical and Health Sciences for Women (PUMHSW) Nawabshah for the period of 07 months from August 2019 to February 2020. Students from various disciplines of MBBS, BDS, Pharmacy and Nursing were included except those who recently joined the university. A total 319 students were selected from various medical disciplines. All selected students were instructed to fill proforma with consent form and all students were facilitated with seclusion that their identity was kept confidential. Students who had recently joined this university or students with mental disturbance were not included in this study. Questionnaire that was given to study subjects comprises of 02 parts, initial part of questionnaire depend upon demographic data whereas second part comprised on 02 different measuring scale of anxiety and

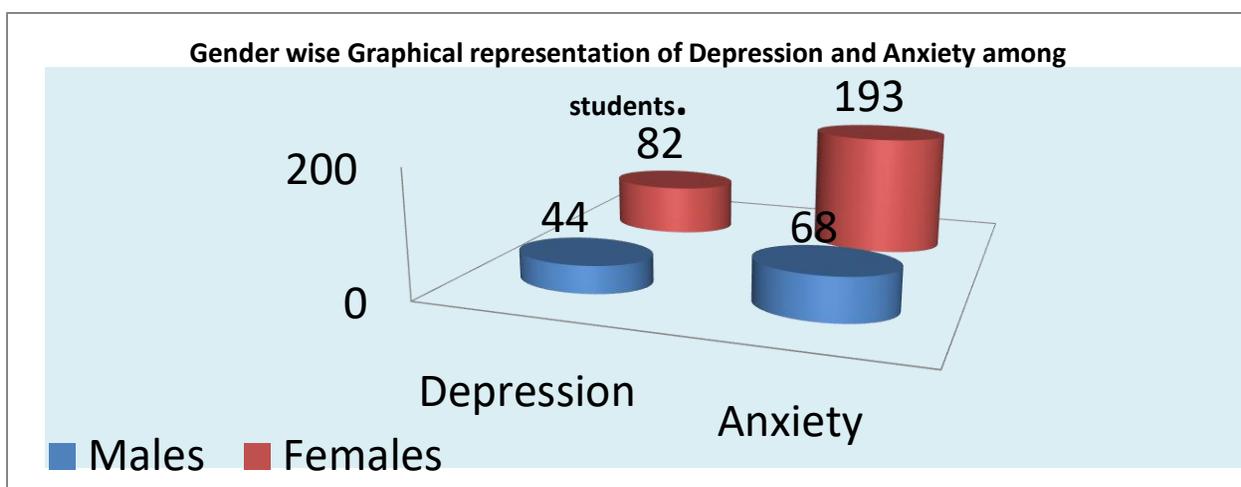
depression and in each section various questions were asked from them and they had to answer with number from 0-4 and 0-6 respectively and these numbers had contained the answers according to mental approach.

**RESULTS**

Total 319 study subjects were included in the research study. 74% of the participants responds to the questionnaire properly whereas 26% of participants did not follow the instruction due to ashamed feeling or criticism. Students of Postgraduate were 183 (57.36%), from MBBS89 (27.89%), from Nursing 34 (10.65%) and from Pharmacy only 13 (4.07%) were included. Students were divided in to three age groups. 1<sup>st</sup> age group contained 57 participants; second group contained 214 students whereas 48 students were under the category of third age group. As far as gender is concern 112 students were males and 207 were females. Anxiety was measured by using Hamilton Anxiety Rating Scale (HAM-A) and results were analyzed accordingly and depression of the students were measured by using Montgomery Asberg Depression Scale. The symptoms of anxiety were found among 193 (60.50%) students whereas depression symptoms were found among 126 (39.49%). Depression and anxiety symptoms were measured in accordance with severity scale such as mild, moderate and severe. Besides this some other factors were also associated for the development of depression and anxiety as low income families, birth countand expenditure on academic carriers, psychiatric histories of family and drug abuses.

Table no 01: Age wise distribution of the study subjects.

Age wise difference	Number of study subjects(n)	Frequency (%)
21-24 years	57	17.86
25-28 years	214	67.08
29-32 years	48	15.04



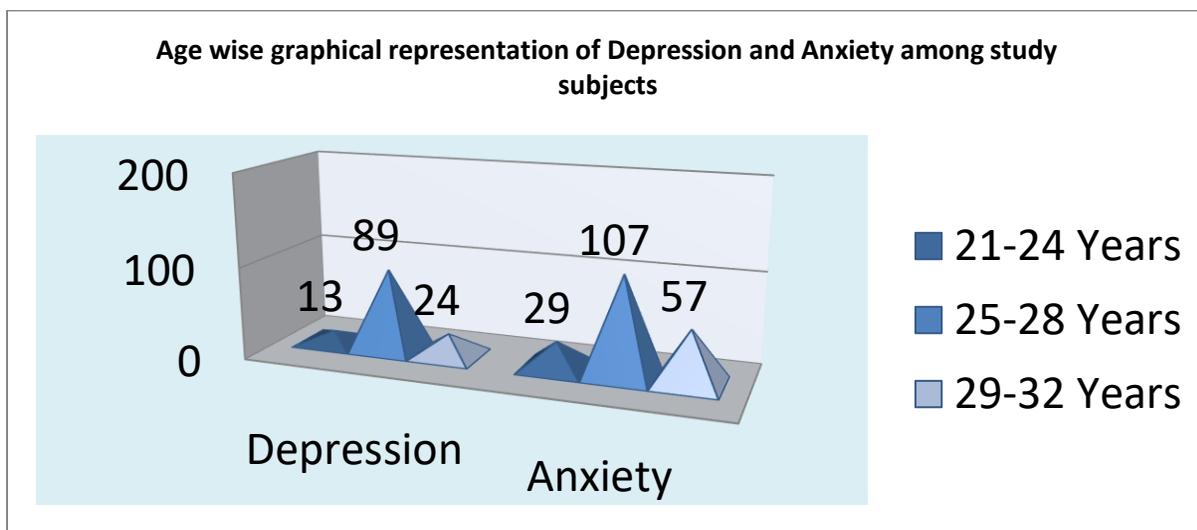


Table no 02: Gender wise distribution of the study subjects.

Gender	Number (n)	Frequency (%)
Males	112	35.10
Females	207	64.89

Table no 03: disease/disorder wise distribution of the study subjects.

Factors	Number (n)	Frequency (%)	P-Value
Depression	126	39.49	0.041
Anxiety	193	64.89	

Table no 04: Severity wise distribution of the study subjects in both conditions.

SEVERITY SCALE	DEPRESSION n (%)	ANXIETY n (%)	P-Value
Mild	95 (75.39)	128 (66.32)	0.001
Moderate	29 (23.01)	51 (26.42)	
Severe	02 (1.58)	14 (7.25)	

Table no 05: Professional examination results of study subjects

Academic Performance	Male n (%)	Female n (%)	P-Value
1 <sup>st</sup> Division	42 (37.5)	168 (81.1)	0.005
2 <sup>nd</sup> Division	53 (47.3)	36 (17.3)	
3 <sup>rd</sup> Division	17 (15.1)	03 (1.4)	

Table no 06: Family History of students about Depression and Anxiety.

Gender	YES n (%)	NO n (%)	DON'T KNOW n (%)
MALE	17 (15.1)	73 (65.1)	22 (19.6)
FEMALE	02 (0.9)	149 (71.9)	56 (27)

Table no 07: Knowledge regarding drug abuse among study subjects.

GENDER	YES n (%)	NO n (%)	DON'T KNOW n (%)
MALE	03 (2.6)	81 (72.3)	29 (25.8)
FEMALE	21 (10.1)	113 (54.5)	73 (35.2)

Simultaneously, severity of depression and anxiety was measured with scale of Moderate, Mild and Severe and its description along with its tabular form is mentioned as under.

**DISCUSSION**

Simultaneously the symptoms of anxiety and depression was found number among study subjects with the frequency of 126 (39.4%) and 193 (60.5%) current study resembles with various other research conducted in different areas of world.<sup>10</sup> The frequency of depression and anxiety was quite

differed from the studies Khan and Inam. According to Khan et al research, the symptoms of depression and anxiety were associated with mental disorder of either member of family or drug abuse might be the causative agent for the same.<sup>11</sup> As far as from the Inam et al research, the instruments used for the assessment of

depression or anxiety were quite change with respect to current study. Depression was found among 126 students that correlate with the study conducted in India with the prevalence of 39.9% and same research was applied for the anxiety assessment, which was found among 193 students but the results were changed with respect to depression and anxiety which was found more among 2<sup>nd</sup> year students as compared to seniors or those who recently joined university.<sup>12</sup> The causative agent for the depression and anxiety was allied with techniques and procedures for the study environment induced stress just because of high intensity of work load and hindrances correlated to their success.<sup>13</sup> Senior students had adopted the university environment and academic stress so the prevalence rate of anxiety was found not more than normal ranges.<sup>14</sup> A study concluded that students below the age of 20 years were found more with the symptoms of anxiety and depression but it is not related with current research. Another study was conducted with same parameter in Turkey and rate of pervasiveness was 21.9%. Researcher surveyed on the Chinese Medical colleges and students were evaluated with the symptoms of depression to know the level of depression and results were very strange as 50% of study subjects were found depressed and 2% of the students appeared with severity of depression.<sup>16, 17</sup> Another research was carried out in western world and its result concluded that feminine gender had additional psychological disorder with respect to masculine gender, various factors were involved for the persistence of depression in females as they were more conscious about their academic carrier and grades and beside this non-academic factor were also involved to induce the same symptoms among them. Sibling count, type of family or hostel allotted partner, profession of guardian versus their monthly expenditure on academic and non-academic work might be the causative agents for the development of depression and anxiety.<sup>18</sup> Same scenario was implemented on the Pakistani studies and demographic variables were not affecting the frequency of depression and anxiety. On the other hand, observational study was conducted and result concluded that family with low income and qualification hinder the level of student's maturity that ultimately enhance the depression.<sup>19</sup> Birth order also affect the depression level among university students, it was the study with significant result rarely conducted in previously research among medical students. Anxiety and depression persistence were also associated with busy schedule of examination especially for the new inducted students in university and over burden of the academic assignment made the students psychological ill. [20] According to Nepalian study the dramatic cause of depression among university students was being resident at hostels and high persistence of vast syllabus and their parent's expectation leads them to wards depression. This study resembles with study conducted in Pakistan based on different stress factors such as Drug abuse and family history of depression. Current studies suggest that medical students with high academic burden and non-academic factors should be

facilitated with effective counseling regarding management of stress and its hazardous effects and beside this a limitation was also implemented in the study as students with confirmation of having stress and mental or psychological illness were excluded from the study and recent studies did not worked on the clinical manifestation of depression cause or management whereas Beck depression inventory or Beck anxiety inventory was not carried out because of limited number of students and the results of current studies cannot be considered as generalized as it was only conducted in one medical university.<sup>20</sup> In United States a survey was conducted on medical students and the level of depression was assessed and the rate of morbidity among them was 16% and it was concluded that mental retardation was associated with academic and non-academic burden and frequency of depression varies from 14-24%.

### CONCLUSION

According to results, it was concluded that majority of students were having anxiety because of various reason and the range of severity was quite different but in case of depression the rate was quite less than anxiety and the reason of depression were includes academic pressure, failure fear and hostel residency. Family expenditure was also major factor in association with development of anxiety and depression. It was necessary to develop the open seminar for the management of stress and how to overcome socio-demographic values.

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