

ANXIETY AMONG UNDERGRADUATE STUDENTS “COMPARING MEDICAL WITH NON MEDICAL STUDENTS”.

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ABSTRACT

Objectives: To assess the prevalence of anxiety, to determine various factors associated with anxiety among undergraduate students.

Methods: Descriptive cross sectional study done at different Institutions of Abbottabad from December 2016 to August 2017. Samples of 137 students selected by using non-probability convenient sampling technique, and were included in our study. A self-administered questionnaire was used as a tool for data collection which was analyzed using SPSS-21.0.

Results: Out of 137 undergraduate students, 31(22.6%) were males and 106(77.4%) were females, 62(45%) students were boarders and 75(55%) were day scholars, mean age was 20.80 ± 1.5 years. 42(30.7%) were normal, 27(19.7%) were suffering from mild anxiety, 48(35.0%) from moderate anxiety while 20(14.6%) students from severe anxiety. Among normal students 11(8.0%) were male and 31 (22.6%) were female. In mild anxiety 6(4.4%) were male and 21(15.3%) were female, 11 (8.0%) males and 37(27.0%) female were suffering from moderate anxiety while in severe anxiety 3(2.2%) were males and 17(12.4%) were female. It is clearly showing that anxiety is more prevalent among females than males. Other Demographics showed that 51 were feeling home sickness, 12 students were cigarette smokers. 54 students were using self-medication during exam, 37 students in the sample faced financial difficulties and 106 students had chosen career of their own choice while others didn't.

Conclusion: Our study concludes that anxiety is highly prevalent in undergraduate students. Moreover prevalence of anxiety was high among female students compare to males, in day scholars and medical students as compared to students of other fields.

KEYWORDS: Anxiety, Undergraduate students, Universities, day scholars.

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INTRODUCTION

Health is define by WHO as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.¹ The role and importance of a healthy physical, and mental state of a person cannot be denied and neglected,

both are inter-dependent for a good quality and standard of living.² Therefore, a person's physical and mental well-being is extremely important to tackle the difficulties of life and to move on with normal life.³

Anxiety is one of the mental disorder which is char-

acterize by fear and worry about future events.⁴ Anxiety is very common psychological and behavioral health problems which affects most of the people during their life time.⁵ Anxiety is the fourth leading cause of disability globally, and if it increases at this rate, then by the year 2020 it could become the second leading cause of global disease burden.⁵ According to a study conducted in Pakistan in 2004, 6% of the population shows symptoms of anxiety and other mental disorders.⁶

According to WHO in mental disorder like anxiety, young adults contribute to nearly half of total burden of disease in United States.⁷ Similarly, other studies suggest that mental problems like anxiety are increasing among students in institutions of higher education which are majority young adults.⁸ In Pakistan anxiety and depression is also a major problem of undergraduate students. Research studies in Pakistan have revealed that 39% of the students were having different psychological diseases and 36% of the students were the victims of anxiety.⁹

According to the source of stressors, the top ten stressors selected by the students were mainly academic, personal factors.¹⁰ Other factors such as moving away from family members, financial problems, thoughts about future, study burdens, poor eating habits, food problems etc. also contribute in causing anxiety among students. As a result, they are stressed and fail to cope these stresses and develop anxiety and depression.¹¹ According to a study done in Malaysia the prevalence of moderate to extremely severe level of anxiety among undergraduate students was ranging from 51.5% to 55.0%.¹² Due to this increase in prevalence of anxiety among undergraduate students; drug abuse, alcohol abuse and suicidal attempts have increased by 58%, 42%, 35% and 23% respectively.¹³ Increase in the level of anxiety, affects proficiency of academic record, deteriorates clinical practice, patient care and society economically.¹⁴⁻¹⁹

In order to promote mental health among young people universities are the best platform because as they come across different aspects of students' personality; like academics, health services, social networks and residences etc.²⁰ It is the responsibility of the university to provide the students all the needed facilities which help them in coping up with the stresses.²¹ The mental illness among students can be prevented if the universities look at their strengths, potential capabilities, and involve them in activities according to their potential and interest, so as if there is some mental illness it will come up at an early stage.²² Counseling groups and psychiatrists should be arranged to deal with students.²³ The stigmas whether personal or social should be discouraged so that students take treatment confidently.²⁴ Education to students at all levels and to public should be given so as not to stigmatize the

patients suffering from psychological problems.²⁵

The main objective of this study is to assess the prevalence of anxiety, to determine various factors associated with anxiety among undergraduate students of different Universities.

METHODS

It is a descriptive cross sectional study done at different universities and colleges of Abbottabad from December 2016 to August 2017. Total samples of 137 candidates selected by using non-probability convenient sampling technique was used in our study. Undergraduate students of any age, gender, course of study and university were included, while postgraduate students and those who didn't give consent were excluded from the study. An informed verbal consent was obtained from all those who participated in the study. A self-administered questionnaire was used as a tool for data collection. The questionnaire included several independent and dependent variables of interest. The data was collected by students of 4th year MBBS.

Data was analyzed using SPSS-21.0. Quantitative variables like age and year of study were described in terms of mean and standard deviation. Categorical variables like gender, boarding status, course of study were described in terms of frequencies and percentages. Tests of significance were applied where we want to know whether difference between two variables is statistically significant or not. Chi square test was applied for categorical variables and P-value was calculated. P-value of 0.05 or less was considered significant. The data was presented in the forms of paragraph and tables.

RESULTS

Out of total sample of 137 undergraduate students, 31 (22.6%) were males and 106 (77.4%) were females, 62 (45%) students were boarders and 75(55%) were day scholars, mean age was 20.80±1.5 years with minimum of 18 years and maximum of 26 years.

Data was collected from seven different universities of Abbottabad. Out of 137 students, 9 students were from BBA, 18 from BDS, 2 from BES, 8 from BS engineering, 13 from BSC, 1 student computer science, 8 from DEV studies, 1 student from electrical engineering, 3 students from environmental sciences, 49 MBBS students, 17 MSC students while 8 were pharmacy students.

Out of total sample 42(30.7%) were normal, 27(19.7%) were suffering from mild anxiety, 48(35.0%) were suffering from moderate anxiety

while 20(14.6%) students were suffering from severe anxiety. Among normal students, 11(8.0%) were male and 31 (22.6%) were female. In the mild anxiety group 27(19.7%), 6(4.4%) were male and 21(15.3%) were female, among the moderate anxiety group, 11 (8.0%) males and 37(27.0%) female, while 20(14.6%) students were suffering from severe anxiety out of which 3(2.2%) were males and 17(12.4%) were female. This clearly shows that

anxiety is more prevalent among females than males. Other Demographics showed that 51students were feeling home sickness while 86 were not, 12 students were cigarette smokers while 125 were not. 54 students were using self- medication during exam while 83 were not, 37 students in the sample faced financial difficulties while 100 did not and 106 students had chosen career of their own choice while 31 did not.

Table: 1. Comparison of anxiety in students versus different institutions and field of study.

		Normal	Mild Anxiety	Moderate Anxiety	Severe Anxiety
Field of study	BBA	2 (1.5%)	1 (0.7%)	3 (2.2%)	3 (2.2%)
	BDS	3 (2.2%)	4 (2.9%)	8 (5.8%)	3 (2.2%)
	BES	2 (1.5%)	0 (0%)	0 (0%)	0 (0%)
	BS English	3 (2.2%)	1 (0.7%)	4 (2.9%)	0 (0%)
	BSC	3 (2.2%)	2 (1.5%)	6 (4.4%)	2 (1.5%)
	CS	0 (0%)	0 (0%)	0 (0%)	1 (0.7%)
	DEV studies	1 (0.7%)	2 (1.5%)	3 (2.2%)	2 (1.5%)
	Electrical Engineering	1 (0.7%)	0 (0%)	0 (0%)	0 (0%)
	Env. Science	2 (1.5%)	1 (0.7%)	0 (0%)	0 (0%)
	MBBS	19 (13.9%)	13 (9.5%)	14 (10.2%)	3 (2.2%)
	MSc	5 (3.6%)	3 (2.2%)	6 (4.4%)	3 (2.2%)
Pharmacy	1 (0.7%)	0 (0%)	4 (2.9%)	3 (2.2%)	

C S = Computer Science
 Env. Science = environmental sciences

Comparisons of anxiety versus living status of students, home sickness and parent's pressure to show better results are shown in table: 2 below.

Table: 2. Anxiety status VS demographic variables.

		Normal	Mild Anxiety	Moderate Anxiety	Severe Anxiety	Total
Accommodation	Boarder	18 (13.1%)	13 (9.5%)	23 (16.8%)	8 (5.8%)	137 (100%)
	Day Scholar	24 (17.5%)	14 (10.2%)	25 (18.2%)	12 (8.8%)	
Home sickness	Yes	13 (9.5%)	14 (10.2%)	17 (12.4%)	7 (5.1%)	137 (100%)
	No	29 (21.2%)	13 (9.5%)	31 (22.6%)	13 (9.5%)	
Financial difficulties	Yes	7 (5.1%)	11 (8.0%)	14 (10.2%)	5 (3.6%)	137 (100%)
	No	35 (25.5%)	16 (11.7%)	34 (24.8%)	15 (10.9%)	
Parent's pressure for better results	Yes	9 (6.6%)	8 (5.8%)	18 (13.1%)	7 (5.1%)	137 (100%)
	No	33 (24.1%)	19 (13.9%)	30 (21.9%)	13 (9.5%)	

DISCUSSION

An Indian study finding was of 66.05% students.²⁶ A study at Malaysia among undergraduate students finding was of 63.0%.²⁷ Both of these studies are in correlation to our study showing 69.3% students with different level of anxiety. Another study conducted in Pakistan by Tabassum Alvi et al²⁸ showed results of 47.7% anxiety symptoms, which is much less than our study of 69.3%. The difference is because this study was conducted only in one undergraduate university and sample size was different.

The finding of our study indicates that more female students were suffering from depression and anxiety than male students. These results are in correlation to a study conducted among undergraduate students in Karachi, Malaysia and other studies that female students were having high scores of anxieties than male students.²⁹⁻³²

While prevalence of anxiety was high in medical students MBBS/BDS (48.9%) as compared to students of engineering, arts group, financial studies, pharmacy included in the sample. This result was in correlation with the study conducted in Karachi among medical students which reported that majority of medical students suffered from anxiety and other mental disorders.²⁶ This fact may be due to medical school study burden induce anxiety and stress.³³⁻³⁵

Regarding the boarding status of students, our study indicated that those students who were day scholars suffered more from anxiety than boarders. This result is in contrast with the study done in Pakistan that students living in hostels are at higher risk of developing anxiety.³⁶ This variation in our results is due to variation in instruments used and may be due to traffic problems, mental and physical fatigue, time wastage and other issues faced by the non-boarders. Moreover we found that those students who did not face financial problems were having anxiety as compared to those who faced financial problems. This is consistent with finding of study done among undergraduate students in Karachi which revealed that there is no association between increased level of depression and financial problems.³⁰ Moreover this variation in results may be due to satisfactory socio-economic family history of the participants included in the study at Karachi, as the study was done mostly in private Universities where most of the students were of stable socioeconomic status.

Our study indicated that parent's pressure on students to show better results is not associated with high score of anxiety in our respondents. The p-value was greater than 0.05 suggesting that there is no significant association. This contrasts with the finding of study done by Nasir, et al. The difference in variance is due to the family support with most of

the respondents in our study.³⁶

CONCLUSION

Our study concludes that anxiety is highly prevalent in undergraduate students. This draws an attention towards the mental illness of the students. Moreover prevalence of depression and anxiety was higher among female students compare to males. It also revealed the high prevalence rate of anxiety in medical students as compared to students of other fields. There was no significant association between anxiety and financial difficulties, living status and family pressure to obtain high grades in exam.

RECOMMENDATIONS

Anxiety in students not only affects their social lives but also their academic career, so, early diagnosis should be done to avoid bad consequences. Students should be encouraged to consult psychiatrist. Students should be educated regarding each and every aspect of depression and anxiety by arranging workshops and seminars. Committees should be made in every university comprising of students, teachers and psychiatrists and they should keep an eye on students for early diagnosis and management of mental illness. Healthy and cooperative learning environment should be created in the university.

LIMITATIONS

The students in our sample were selected only from universities of Abbottabad and the findings cannot be generalized to all Pakistani students. Genetic and environmental factors, ethnicity and religion were not included in the study which should be included in future studies. Impacts of depression and anxiety on student's social and academic life should be considered in future studies. Large sample size should be selected in future studies.

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