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Research Article

A CROSS SECTIONAL STUDY ON THE DEPRESSION AND ANXIETY AMONG THE MEDICAL STUDENTS OF NISHTER MEDICAL COLLEGE OF MULTAN**¹Dr. Farkhanda Niaz, ²Dr. Muhammad Waseem Ashraf, ³Muhammad Usman Rasheed**¹MBBS, Independent Medical College Faisalabad²RHC Karianwala³THQ Hospital Shorkot**Abstract:**

Objectives: The aim of this study is to conclude the occurrence of anxiety among students of medical & to find a relationship between anxiety and year of their study, results, constancy & problems of physical health.

Methodology: Six hundred students who were studying in Nishter Medical College Multan were entered in this research work. They were in the 1st, 2nd, 3rd, 4th and 5th year of their study. They were questioned about the whole inventory of anxiety which is known as Kessler10.

Results: Four hundred and ninety-four students gave a response rate of eighty-three percent. The occurrence of anxiety was available among fifty-seven percent & serious depressions was present among 19.6% students. There was an important statistically significant relationship between academic year & amount of the anxiety. The relationship between academic results of the students & their amount of depression is not of much importance, as allocation of occurrence of depression is not considerably dissimilar across each of the 4 grades of academic. The most common reasons of depression present were studies, the environment of their house & about thirty-seven percent population of the research work did not show any reason of their depression.

Conclusion: High amount of the mental depression was available in the students who were in their first three years of studies. It creates other challenges for support services of the medical students which may in need to tackle the problems of mental health along with the normal health procedures for the students of medical field.

Key Words: Depression, Rigidity, Anxiety, Mental, Support Services, Medicine, Significant Relationship.

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INTRODUCTION:

Medical education is considered as full of depression. It is responsible for many mental alterations in the students. The students of the medical fields face many mental issues during the complete process of their studies. This is an increasing problem in the training of medical field. Many research works have concluded that medical student faces many kinds of depressions during their course of study. The high amounts of anxiety can produce the bad impact on the quality of the education and many other mental issues [1]. In all the medical colleges, there is an environment which is full of rigidity [2]. Most of the studies on depression in the education of medical field insist on the documentation of anxiety & data on the association of depression [3-6]. This depression is not only present in the study duration but it is also present in the practical life of the doctors [7-9] & it has the ability to reach at the level of burnout [10].

In 3 universities of Britain, the occurrence of anxiety was 31.2% [11], in a medical school of Malaysia, it was about forty-two percent [12] and it was 61.4% in a medical school of Thailand [13]. The depression in the schools of medicines predicts the later problems in the mental health but students do not take help for this kind of issues [14]. In a research work carried out in Sweden, the occurrence of the signs of depression was about thirteen percent and about three percent students attempted for suicide [1]. The aim of this research work was to conclude the occurrence of the depression among students, find out the relationship between the various variables and the amount of the depression.

METHODOLOGY:

Different measures are in use to address the depression and its symptoms in the students of medical field. Different tools were in use for its assessment as Beck's Depression Inventory [12],

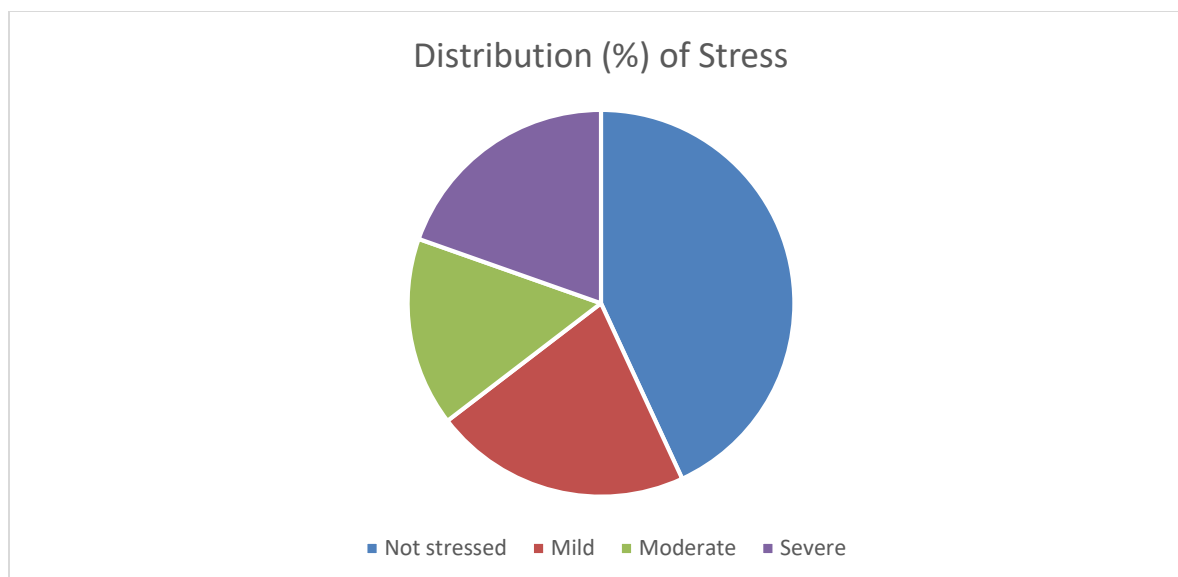
General Health Questionnaire [11] & other very common and less frequent instruments [1, 15]. The Kessler and his companions develop Kessler10 which is has the ability to measure the depression. It is designed to calculate the amount of depression & seriousness linked with the mental symptoms in the surveys of communities. It is very much in use including the WHO World Survey of Mental Health [16-20]. The K10 consists of ten questions on the form to know about the mental condition of the students. Marks less than twenty were thought to be in case of a patient with mental illness. A score of twenty to twenty-four was the presentation of mild depression and twenty-five to twenty-nine was the medium stress and thirty to fifty was the stress of serious nature. This coding was prescribed by the authors [21] of this kit.

The guarantee was given to the students that their data would remain confidential. Ethical committee of the institute gave the permission for this research work. Microsoft Excel was in use for data entry. SPSS software version twelve was in use for the analysis. Pearson's test of chi-square method & odds ratio were in use to check and quantify the connection between the categorical findings & various variables of the research work. Student's t-test was utilized to compare the average amounts of the variables in association to depression. P value of greater than 0.05 was thought to be significant.

RESULTS:

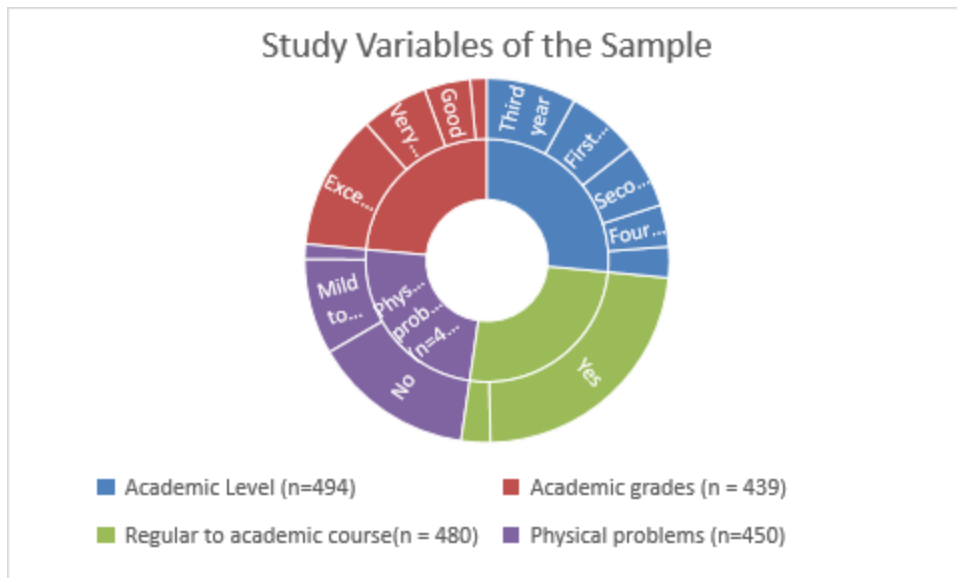
The total response rate was eighty-three percent because only 494 out of 600 students responded. The average age of the students was 21.4 ± 1.9 years. The occurrence of depression of all kinds was available to be about fifty-seven percent & serious nature depression was about 19.6% as mentioned in Table-1.

Status	Not stressed	Mild	Moderate	Severe
Percentage	43.10	21.50	15.80	19.60



The division of the variables is available in Table-2. The occurrence of depression was very high in the 1st year of study about more than seventy-four percent, in 2nd year, it was about seventy percent, 3rd year less about forty-nine percent, fourth year about thirty percent and forty-nine percent was evaluated in 5th year of the study.

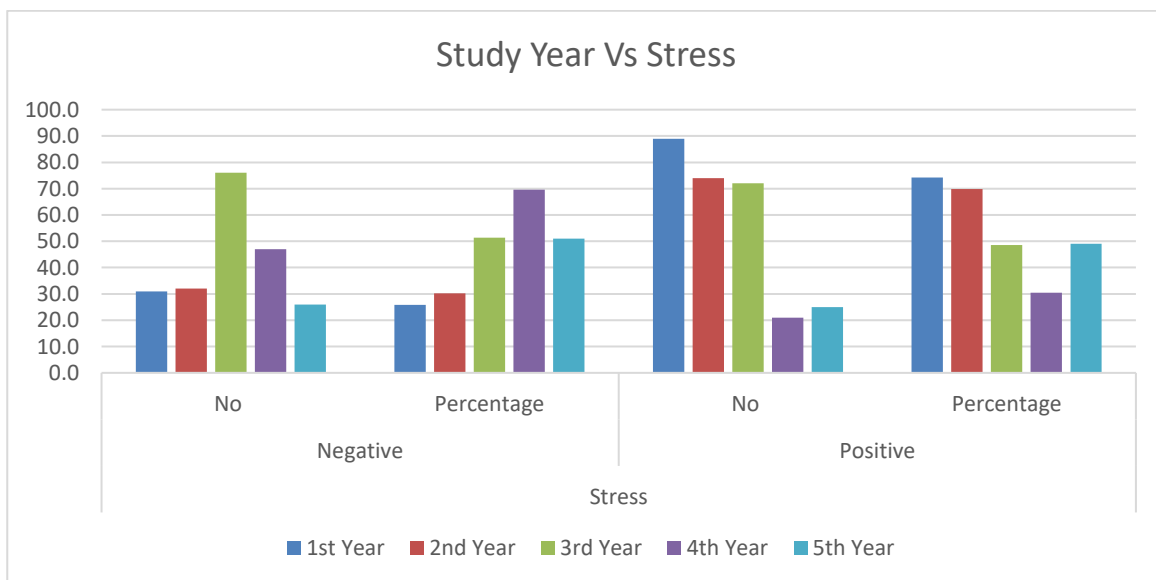
Table-II: Distribution of Variables of Study Sample			
Variables		No of Patients	Percentage
Academic Level (n=494)	1st Year	120.0	24.30
	2nd Year	106.0	21.50
	3rd Year	148.0	29.90
	4th Year	69.0	14.00
	5th Year	51.0	10.30
Academic grades (n = 439)	Excellent	224.0	51.00
	Very good	111.0	25.30
	Good	76.0	17.30
	Poor	28.0	6.40
Regular to academic course(n = 480)	Yes	432.0	90.00
	No	48.0	10.00
Physical problems (n=450)	No	267.0	59.30
	Mild to moderate	158.0	35.10
	Severe	25.0	5.50



There is relationship between the year of study & the amount of the depression. The amount of depression decreases with the increase of the study year. The stress is very in the first two year of study but then decreases with the increase of the academic year as described in Table-3.

Study Year *	Stress				Odds Ratio (OR)	95% CI's of OR
	Negative		Positive			
	No	Percentage	No	Percentage		
1st Year	31.0	25.80	89.0	74.20	6.40	3.2 to13.1
2nd Year	32.0	30.20	74.0	69.80	5.20	2.5 to 10.6
3rd Year	76.0	51.40	72.0	48.60	2.40	1.2 to 4.5
4th Year	47.0	69.60	21.0	30.40	1.00	-
5th Year	26.0	51.00	25.0	49.00	2.10	0.9 to 4.9

* $X^2 = 46.99, p < 0.00001, \#$ reference group

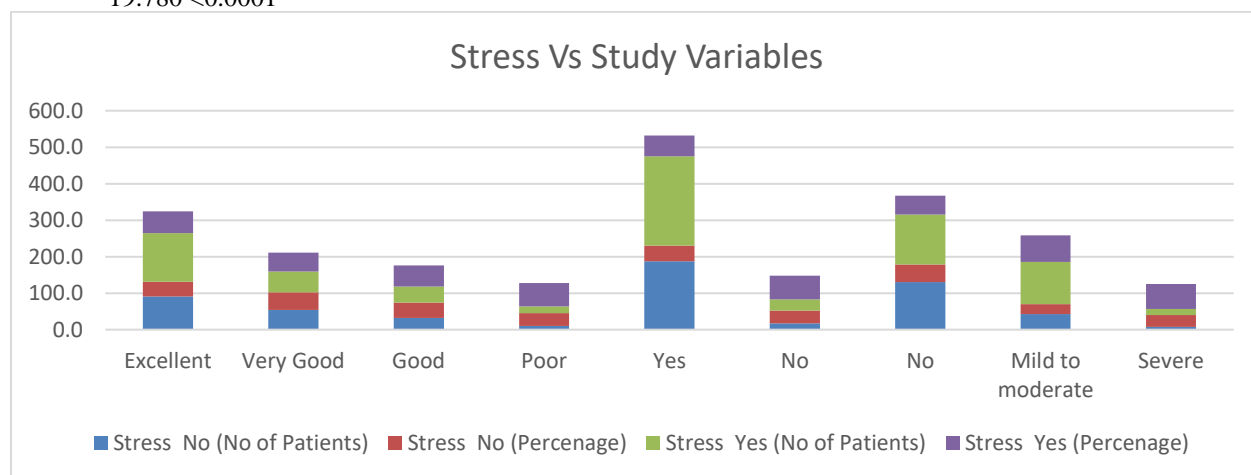


The relationship between academic results & the amount of the depression is not of much importance. There is also no important connection between the regularity & the amount of stress in the study. The division of the amounts of stress is not different significantly in the students who are irregular or regular inn the duration of their academic course. The odd ratios of 2.5 & 2.0 display the odds of to be a prey of depression is greater with mild to medium and severe complications when compared with the physical health without any complication as mentioned in Table-4. The average amount of days powerless to work about 9.5 days was greater in the when compared to the people with no depression which was 2.3 days. The average amount of days cut down was 10.7 days. The main reasons of the depression as mentioned by students were the burden of study in case of 60.5 & environment of the house in case of 2.8%. About 36.9% of the research population did not provide any reason of depression.

Table-IV: Association between stress and study variables (academic grades, regular to academic course and physical problems)

Parameters	Study Variables	Stress				Odds Ratio	95% CI's of OR
		No		Yes			
		(No of Patients)	(Percentage)	(No of Patients)	(Percentage)		
Academic grade* (n = 439)	Excellent	91.0	40.60	133.0	59.40	1.23	0.5-
	Very Good	54.0	48.60	57.0	51.40	1.70	0.7-4.4
	Good	32.0	42.10	44.0	57.90	1.30	0.5-
	Poor	10.0	35.70	18.0	64.30	1.00	--
Regular academic** to course (n=480)	Yes	187.0	43.30	245.0	56.70	1.39	0.7-2.7
	No	17.0	35.40	31.0	64.60	1.00	--
Physical problems*** (n = 450)	No	130.0	48.70	137.0	51.30	1.00	--
	Mild to moderate	43.0	27.20	115.0	72.80	2.50	1.6-3.9
	Severe	8.0	32.00	17.0	68.00	2.00	0.8-5.3

X² - Value P- value
 * 2.570 0.4600
 ** 0.780 0.3700
 *** 19.780 <0.0001



DISCUSSION:

An elaborated study based on a questionnaire took a rate of response about eighty-three percent, which gives a suitable size of sample to cater the aim of the research work. The outcome of this study displays the high occurrence of the depression in the medical students. The amount of the anxiety changes between the progressions of the education stage. The high amount of the anxiety shows a reduction of the mental health in the medical students. The total occurrence of depression in this research work is fifty-seven percent which is very similar study carried out in Thailand as about sixty-one percent [13] but greater than study of Malaysia (41.9%) [12] & Britain (31.2%) [11]. Amount of the stress decreases with the increase of the education year. This is opposite to the findings of another study in which depression increases with the course [22]. Some studies concluded that the mental health remain bad in the whole training [23] especially in the alterations from science to the pure medical field [24].

One study concluded that only the first year is the year of depression [25]. In various countries, students face financial problems which are also a reason of depression [3, 26]. A research work carried out in UK displayed that one third students of mentally ill students did not pass their degree [27]. Our information show that first two year students are with high level of the depression. The programmes of mental health are very necessary to support the students for the betterment of the study in high study burden condition. Medical colleges of USA & Canada have started the programmes of health protection and have concluded positive outcomes in the reduction of the negative impacts of the depression upon the mental health of the medical students and good results in academic [28-30]. Increase in the cigarette smoking is another result of depression with others. If the signs of depression are present, they should take the medical advice.

CONCLUSIONS:

This research work provides the practical evidence about the mental health of the medical students. The outcomes show that high amount of the depression is present in our medical students who are in their first 3 academic years & it creates other challenges for the support services of the medical students. The main outcome is that the mental depression is very common in our students. Therefore, it is in need for good mental health procedures to tackle this problem.

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