

FREQUENCY OF STRESS, ANXIETY AND DEPRESSION IN CLINICAL AND PRE-CLINICAL PHYSIOTHERAPY STUDENTS

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ABSTRACT

Background: Depression is a psychological disorder which is characterized by persistent low mood for two weeks or more. Anxiety is a state of uneasiness. Stress occurs when an individual is in such a condition that he/she is unable to cope with. Students especially those belonging to health sciences are seen to be more affected by these psychological phenomena. Burden of study, huge syllabus and continuous exams and visas are considered to be leading causes. **Objective:** To calculate the frequency of stress, anxiety and Depression in the physiotherapy students of Allama Iqbal Medical College. **Study design:** A cross-sectional Study. **Setting:** Department of Physiotherapy at Allama Iqbal Medical College Lahore. **Period:** Nov 2016 to Feb 2017. **Material and Method:** 40 subjects were included in the study. The duration of the study was four months. Convenience Sampling was carried out. The data was collected with the help of DASS21. The data was analyzed with the help of SPSS version 16.0 **Results:** Results show that 70% students had depression, 82.5% had anxiety and 37.5% had stress. The frequency of stress, anxiety and Depression was resulted to be higher in males as compared to females. Depression and Stress was higher in students in their pre-clinical years of study whereas anxiety was higher in clinical years of study **Conclusion:** Students of physical therapy are prone to Depression, Anxiety and Stress. Males were seen to be more affected. Students in their pre-clinical years were seen to be more affected.

Key words: Frequency, Depression, Stress, Anxiety, Pre-clinical, Clinical, Physiotherapy

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INTRODUCTION

Major Depressive Depression (MDD) which can also be termed more commonly as Depression is a Psychological Disorder which comprises of episodes of persistent Low mood for a time period of two weeks or more. (Organization, 2012). A person suffering from depression goes through a number of symptoms like lack of self-esteem, low mood, a lack of interest in the daily activities of life, Pain in the body without any apparent reason, lack of sleep, lack of concentration, loss of appetite (Ali et al., 2014). More serious conditions might include hallucinations and suicidal thoughts.

As a result of this, teenagers and young adults

suffer a number of problems including lack of interest in studies which leads to leaving school. Also, they suffer issues with friendships and relationships. It is one of the leading disorders of young adults and is also suspected to be the major cause of disease burden by 2030 throughout the world. (Bassi et al., 2014)

Anxiety can be described as a condition of uneasiness. In a state of danger either real or stimulated by one's own beliefs, the body responds and causes anxiety (Syed et al., 2018). Anxiety can be either Chronic which is experienced over a long span of time ultimately reducing the quality of life or it can be Acute which is experienced over a short span of time in

the form of anxiety attacks. (Rynn and Brawman-Mintzer, 2004). Psychiatric symptoms of anxiety include change in the sleeping pattern, change in appetite, low moods, fear, increased motor tapping for example foot tapping, negative thoughts.

Stress is characterized as the impression of incoherency between natural requests (stressors) and an individual's capacity to satisfy those requests. (Rehmani et al., 2018) It occurs when an individual faces a situation that is perceived as over-whelming with which they cannot cope. A Person undergoes stress when he/ she goes through a situation too difficult for him/ her to cope. (Agolla and Ongori, 2009).

An examination was completed in Zia Uddin Medical University. Aga Khan University Anxiety and Depression Scale (AKUADS) was utilized to evaluate the understudies. Out of 252 understudies from first year MBBS to fourth year MBBS, 189 took an interest in the overview. After investigation it was discovered that 113 (60%) understudies had nervousness and discouragement. Commonness of nervousness and misery in understudies of fourth year, third year, second year and first year was 49%, 47%, 73% and 66% respectively. It was higher in understudies of first year and second year when contrasted with the understudies of third year and fourth year. (Inam et al., 2003)

An investigation was completed to decide the predominance of sadness and stress in clinicals in Islamabad, Pakistan. 66 clinical understudies partook in the investigation. The predominance of sorrow was 40.9%, where 9.09% were somewhat discouraged, 16.67% decently discouraged, 13.64% seriously discouraged and 1.52% were amazingly seriously discouraged. The pervasiveness of nervousness was 74.2%, where 13.64% were somewhat on edge, 27.27% were reasonably restless, 19.70% were having serious tension and 13.64% were experiencing very

extreme uneasiness. The pervasiveness of stress was half, out of which 18.18% were somewhat focused, 24.24% were respectably pushed and 7.58% were seriously focused. (Rizvi et al., 2015)

A cross sectional examination was led at Aga Khan University which included understudies from Medical School, School of Nursing and Midwifery, and Dental Hygiene program. 283 understudies took an interest in the investigation. The scores were higher in young ladies when contrasted with young men. Understudies from dental cleanliness program detailed more stressors when contrasted with MBBS. (Rehmani et al., 2018) A cross sectional investigation was led in different Physiotherapy Institutes in Sindh, Pakistan. 267 understudies with no physical and psychological sickness were remembered for the investigation. The greater part were female understudies 75.3%. The Frequency of discouragement, uneasiness and stress found among students Physiotherapy understudies was 48.0%, 68.54% and 53.2%, separately. (Syed et al., 2018)

Study Design

The study design used was Observational Cross-Sectional Survey.

Sampling Technique

Non-probability Convenience Sampling was used as the technique of sampling.

Study Setting

The study was conducted in Physiotherapy department, Jinnah Hospital, Lahore.

Sample Size

A total of 40 subjects were enrolled in the Survey.

Duration of Study

The study was conducted over a time period of 6 months after the approval of synopsis.

Sample Selection

Inclusion Criteria:

Subjects who are willing to take part in this research

Only undergraduate students of physical therapy in AIMC were taken in this research

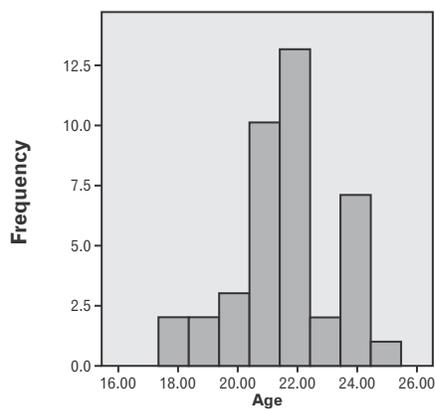
Exclusion Criteria:

- Graduates or House officers were not included in the study
- Students from departments/programs other than Physical Therapy
- Malignancy
- Chronic Illness

Data Collection

Data was collected from the physiotherapy students of AIMC/JHL. No student was reported to be chronically ill. All the students were interviewed and proforma was filled under the direct supervision of the researcher. A consent form was filled prior to data collection. Data was collected using the DASS21.

RESULTS:



The mean age of the subjects was 21.72

Figure 1. Graphical representation of age

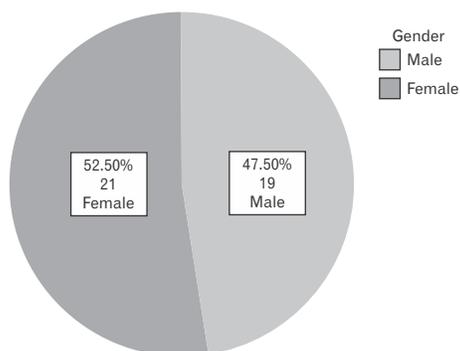


Figure shows that 21(52.5%) participants were females whereas 19(47.5%) participants were males

Figure 1. Graphical representation of Year of

Statistical Analysis

Using SPSS version 16, the data was managed and analyzed. The categorical variable was expressed in the form of frequency table and percentages. Appropriate graphs were used to display the data.

The mean age of the subjects was 21.72

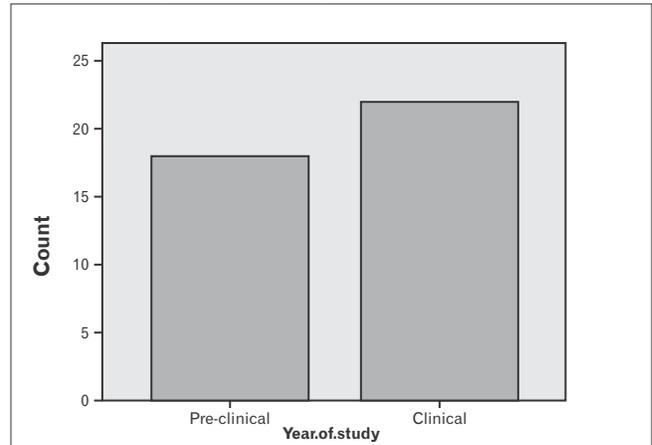


Figure 1. Graphical representation of year of

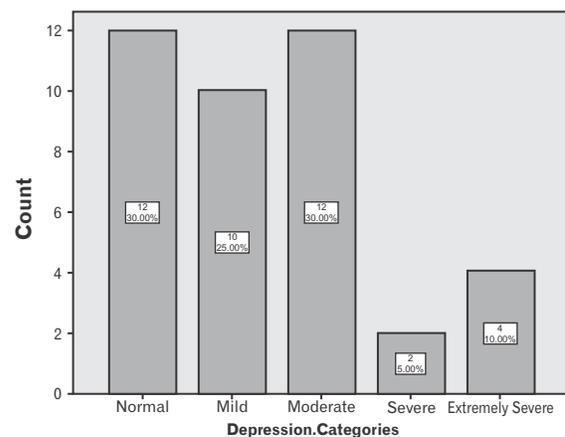


Figure 5. Graphical Representation of anxiety category

		Gender		Total
		Male	Female	
Normal	Count	4	8	12
	Categories % within Depression	33.3%	66.7%	
Mild	Count	6	4	10
	% within Depression	60.0%	40.0%	
Moderate	Count	5	7	12
	% within Depression	41.7%	58.3%	
Severe	Count	1	1	2
	Categories Extremely Severe	50.0%	50.0%	



Depression Categories			
Total % within Depression			
Count	3	1	4
% within Depression	75.0%	25.0%	100.0%
Depression Categories			
Count	19	21	40
% within Depression	47.5%	52.5%	100.0%

Figure shows that 21(52.5%) participants were females whereas 19(47.5%) participants were males

Table 2. Comparison of Year of Study with depression categories

		Year of study		Total
		Pre-clinical	clinical	
Normal Mild	Count	3	9	12
	% within Depression	25.0%	75.0%	100.0%
Moderate	Count	5	5	10
	% within Depression	50.0%	50.0%	100.0%
Extremely Severe	Count	7	5	12
	% within Depression	58.3%	41.7%	100.0%
Depression Categories	Count	0	2	2
	% within Depression	0.0%	100.0%	100.0%
Total	Count	3	1	4
	% within Depression	75.0%	25.0%	100.0%
Total	Count	18	22	40
	% within Depression	45.0%	55.0%	100.0%

Study

This figure shows that out of all the 40 subjects, 18 (45%) were from pre-clinical years of study whereas 22(55%) were from clinical years of study. Figure shows that out of 40 subjects 12(30%) were normal with respect to depression, 10(25%) suffered from mild depression, 12(30%) suffered

Table 3. Comparison of Gender with anxiety

		Gender		Total
		Male's	Female	
Normal	Count	2	5	7
	% within Anxiety	28.6%	71.4%	100.0%
Moderate	Count	6	5	11
	% within Anxiety	54.5%	45.5%	100.0%
Extremely Severe	Count	3	4	7
	% within Anxiety	42.9%	57.1%	100.0%
Anxiety Categories	Count	8	7	15
	% within Anxiety	53.3%	46.7%	100.0%

Categories			
Count	19	21	40
% within Anxiety	47.5%	52.5%	100.0%
Total			

from moderate depression, 2(5%) suffered from severe and 4(10%) suffered from extremely severe depression.

Table 4. Comparison of anxiety categories

		Year of study		Total
		Pre-clinical	clinical	
Normal	Count	3	4	7
	% within Anxiety	42.9%	57.1%	100.0%
Moderate	Count	5	6	11
	% within Anxiety	45.5%	54.5%	100.0%
Severe	Count	2	5	7
	% within Anxiety	28.6%	71.4%	100.0%
Extremely Severe	Count	8	7	15
	% within Anxiety	53.3%	46.7%	100.0%
Total	Count	18	22	40
	% within Anxiety	45.0%	55.0%	100.0%

Figure shows that out of the 40 subjects, 7(17.5%) were normal with respect to anxiety, 11(27.5%) suffered from moderate anxiety, 7(17.5%) suffered from severe anxiety and 15(37.5%) suffered from extremely severe anxiety.

Table 5. Comparison of Stress Categories

		Gender		Total
		Male	Female	
Normal	Count	11	14	25
	% within Stress Categories	44.0%	56.0%	100.0%
Mild	Count	1	3	4
	% within Stress Categories	25.0%	75.0%	100.0%
Moderate	Count	4	3	7
	% within Stress Categories	57.1%	42.9%	100.0%
Severe	Count	1	0	1
	% within Stress Categories	100.0%	0.0%	100.0%
Extremely Severe	Count	2	1	3
	% within Stress Categories	66.7%	33.3%	100.0%
Total	Count	19	21	40
	% within Stress Categories	47.5%	52.5%	100.0%

Figure shows that out of 40 subjects, 25(62.5%)

were normal with respect to stress, 4(10%) suffered from mild stress, 7(17.5%) suffered from moderate stress, 1(2.5) suffered from severe stress and 3 (7.5%) suffered from extremely severe stress.

Crosstab

This table shows that out of 12 subjects who were normal 8(66.7%) were females whereas 4(33.3%) were males. Out of 10 subjects showing signs of mild depression 4(40%) were females and 6(60%) were males. Out of 12 subjects with moderate depression 7(58.3%) were females and 5(41.7%) were males. Out of 2 subjects with severe depression 1 was male and 1 was female. Out of 4 subjects with extremely severe depression 1(25%) was female and 3(75%) were males.

Table 6. Comparison of Stress Categories with year of study

		Year of study		Total
		Pre-clinical	clinical	
Normal	Count	10	15	25
	% within Stress Categories	40.0%	60.0%	100.0%
Mild	Count	2	2	4
	% within Stress Categories	50.0%	50.0%	100.0%
Moderate Stress Categories	Count	4	3	7
	% within Stress Categories	57.1%	42.9%	100.0%
Severe	Count	0	1	1
	% within Stress Categories	0.0%	100.0%	100.0%
Extremely Severe	Count	2	1	3
	% within Stress Categories	66.7%	33.3%	100.0%
Total	Count	18	22	40
	% within Stress Categories	45.0%	55.0%	100.0%

This table shows that out of 12 subjects who were normal with regard to depression 3(25%) belonged to pre-clinical years whereas 9(75%) belonged to clinical years. Out of 10 subjects suffering from mild depression 5(50%) belonged to pre-clinical years and 5(50%) belonged to clinical years Out of 12 subjects with moderate depression 7(58.3%) belonged to pre-clinical years and 5(41.7%) belonged to clinical years. 2 subjects suffered from severe depression, both

belonged to clinical years.

DISCUSSION

A research was performed to calculate the frequency of Stress, Anxiety and Depression in the Physical Therapy Students of Allama Iqbal Medical College Lahore. 40 students were included in this research. The frequency was calculated and compared with various aspects like gender and the years of study. the mean age of the subjects was 21.72, S.D. was 1.66. Minimum age was 18 while the maximum age was 25. out of the 40 subjects 19 (47.5%) were males whereas 21

(52.5%) were females. out of 40 subjects, 18 (45%) were from the pre-clinical years of study whereas 22 (55%) were from clinical years of study. out of 40 subjects 12(30%) were normal with respect to depression.

Out of the 40 subjects, 7(17.5%) were normal with respect to anxiety, 11(27.5%) suffered from moderate anxiety, 7(17.5%) suffered from severe anxiety and 15(37.5%) suffered from extremely severe anxiety and 25(62.5%) were normal with respect to stress, 4(10%) suffered from mild stress, 7(17.5%) suffered from moderate stress, 1(2.5) suffered from severe stress and 3 (7.5%) suffered from extremely severe stress.

Males suffered more from these disorders as compared to females. The frequency of these psychological disorders was high in Physiotherapy students. This is probably because students from the health sciences programs suffer from huge workload, difficult exams and continuous assessment.

A lot of research has already been done on this which helped me out for my research work. I took the data of 40 subjects and evaluated different variables to justify the topic of research.

CONCLUSION

Results show that 70% understudies had wretchedness, 82.5% had uneasiness and 37.5% had pressure. The recurrence of Stress, Anxiety and Depression was discovered to be higher in guys when contrasted with females. Sorrow and Stress was higher in understudies in their pre-clinical long periods of study while uneasiness was higher in clinical long stretches of study.

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AUTHORSHIP AND CONTRIBUTION DECLARATION

Sr. #	Author's Full Name	Contribution to the paper	Author's Signature
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2	Shah Salman	Writing/Data collection/Data analysis	
3	Zainab Hassan	Supervisor	
4	Masooma Gull	Co-Supervisor	