

Exploring the Impact of Exam Anxiety by Using Vas Scale Among Students of Private Medical College Pakistan

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ABSTRACT

Background: To assess examination related anxiety among medical students by using VAS (Visual Analogue Scale) and to explore the factors adding to exam anxiety among medical students.

Objectives: The study was conducted to investigate Exam anxiety and its influencing factors on medical and dental students at the Private Medical College in Lahore, Pakistan,

The study was conducted to exploring exam anxiety and its influencing factors on medical and dental students of Private Medical College, Lahore- Pakistan

Methods: A cross-sectional study was conducted among students from central park medical college Lahore. The survey included statements about the demographic profile of the study participants and used the VAS (Visual Analogue Scale). Pre-designed questionnaire was used to collect the data. The multiple rounds of data collection were done. The data was analyzed by SPSS 24. Chi-square test was applied to obtain the required results.

Results: Sign and symptoms regarding exam anxiety among male and female students of different years of MBBS showed mild anxiety level during exams in male 20(14.8%) compared with female students showed 14(8.5%), moderate anxiety among males observed in 3rd year 29(67.4%) compared with female of the same years was moderately high as 43(78.2%), maximum anxiety among 2nd years male and female students as 21(63.6%) versus 30(65.2%) respectively with $p=0.001$ showed there is statistically significant difference among anxiety level of male and female medical students.

Conclusion:

This study indicates moderate level of exam anxiety based on a Visual Analogue Scale in students of a medical college and also highlights factors such as extensive course load, lack of exercise and long duration of exams which contribute to Exam Anxiety.

Keywords: Visual Analogue Scale, Exam Anxiety, Anxiety

INTRODUCTION

Exam anxiety is a set of behaviors that include despair, excessive concern, pointless thinking, and jitteriness, in response to a set of stimuli arising from an individual's evaluation/test and result experience. ⁽¹⁾ Many students have exam anxiety as they are undergoing the examination procedure. Exam anxiety is caused by four primary sources of stress, including a deficiency of required content, life concerns, learning style, and psychosomatic factors. ⁽²⁾ Issues connected to one's lifestyle, such as an ample physical exercise, difficulty to manage time, and insufficient rest, all lead to exam anxiety. ⁽³⁾

According to Sansgiry, exam anxiety is caused by a lack of learning with proper planning, which includes inefficient learning through uncertain course study, studies on the night before exams, and deficit of smart studying, which includes a lack of time to revise and review of subjects and the entire course. ⁽⁴⁾

Anxiety and stress in medical students are frequent in Pakistan during the pre-examination period, and few research on different forms of stress and anxiety in medical students have been undertaken because of reasons such as increased fiscal load and comparatively worse academic record compared to students from public medical colleges, anxiety levels in private medical college students may differ from those in public medical colleges. Because private medical institutions begin accepting students after the public sector medical colleges' merit lists are completed, students with greater merit choose to enroll in public sector medical colleges. ⁽⁵⁻⁶⁾

Despite their understanding of worry, stress, and other health risks, health professionals are frequently unaware of the variables that affect their own physical and mental well-being. In the realm of medicine, several elements have been recognized as contributing to burnout and work satisfaction. ⁽⁷⁾

The purpose of this study was to use the VAS (Visual Analogue Scale) to measure exam-related anxiety in medical students and to investigate the variables that contribute to test anxiety in final professional medical students. The goal of this study was to determine the phases of test stress and anxiety, as well as the elements that contribute to anxiety among medical students at a private medical college in Pakistan. Students at medical colleges should be instructed on test management as part of their training programs in healthcare institutes

METHODOLOGY

Students were enrolled in this study after receiving consent from those studying at Central Park Medical College in Lahore, and information was collected by using a self-structured performa and SPSS 20 was used to enter and evaluate the data. The needed findings were obtained using an independent t-test and a chi-square test.

RESULTS

The results showed that the mean age of the students was 22.14 ± 2.44 years with range from 17-28 years and maximum students having age between 21-25 was 199(66.33%), the female students were 165(55%) while 135(45%) were male's medical students. (Table-1)

Table 1: Participant 's Characteristics (n=300)

Variables	Frequency	Percentage
Age Group (years)	22.14 ± 2.44 (Age Rang 17-28 years)	
Grouped Age	18-20	80 26.67
	21-25	199 66.33
	26-30	21 7.00
Gender	Male	135 45%
	Female	165 55%

The results showed that 34(11.3%) of students showed little anxiety level during exams, 141(47%) showed moderate anxiety and 125(41.7%) showed maximum anxiety levels. Three hundred students responding to the study showed an overall mean anxiety score of 62.18 (SD 22.95), indicating moderate anxiety with approximately one third of students reporting maximum anxiety. (Table-2)

Exam anxiety symptoms among male and female students of different years of MBBS showed mild anxiety level during exams in male 20(14.8%) compared with female students showed 14(8.5%), moderate anxiety among males observed in 3rd year 29(67.4%) compared with female of the same years was moderately high as 43(78.2%), maximum anxiety among 2nd years male and female students as 21(63.6%) versus 30(65.2%)

respectively with $p=0.001$ showed there is statistically significant difference among anxiety level of male and female medical students. (Table 3).

Table.2: Level of Exam Anxiety among students based on Visual Analogue Scale

Level of Anxiety	Number	Percentage
Mild anxiety (0- 35)	34	11.33
Moderate anxiety (36-65)	141	47.00
Maximum anxiety (66-100)	125	41.67
Total	300	100

Table 3: Level of Anxiety Exam among students of Different MBBS Year with Respect of Gender based on Visual Analogue Scale

Gender	Grouped Anxiety	MBBS Year					P-value
		2 nd Year	3 rd Year	4 th Year	Final Year	Total	
Male	Mild anxiety (0- 35)	5(15.2%)	7(16.3%)	3(7.9%)	5(23.8%)	20(14.8%)	0.001
	Moderate anxiety (36-65)	7(21.2%)	29(67.4%)	20(52.6%)	7(33.3%)	63(46.7%)	
	Severe anxiety (66-100)	21(63.6%)	7(16.3%)	15(39.5%)	9(42.9%)	52(38.5%)	
Female	Mild anxiety (0- 35)	0(0.0%)	5(9.1%)	2(6.2%)	7(21.9%)	14(8.5%)	
	Moderate anxiety (36-65)	16(34.8%)	43(78.2%)	8(25.0%)	11(34.4%)	78(47.3%)	
	Severe anxiety (66-100)	30(65.2%)	7(12.7%)	22(68.8%)	14(43.8%)	73(44.2%)	

DISCUSSION

Anxiety is a common occurrence among students all around the world, and it is a leading cause of poor academic performance. An average amount of anxiety is important in keeping individuals industrious and accountable for what they have to achieve. It is an undeniable truth in human existence that influences an individual's accomplishment in a variety of scenarios.

The findings of current study revealed that the average student age was 22.14 ±2.44 years (age range 17-28 years) and the majority of students 199(66.33 %) between the ages of 21 and 25. The enrolled female students were 165 (55 %) as compare with male medical students were 135 (45 %), which was associated with the results of another study conducted by Trifoni (2011), which supported the current study because 65.1 % (71/109) participants were females⁽⁹⁾. In the Zhang results, there was no significant difference between men and females, and out of 64 participants, half (33/64) were males.

Exam anxiety symptoms in male and female MBBS students of different years showed mild anxiety during exams in males 20(14.8 %) compared to female students 14(8.5 %), moderate anxiety in males observed in 3rd year 29(67.4 %) compared to females of the same years was moderately high as 43(78.2 %). Severe anxiety among 2nd year male and female students was 21 (63.6%) vs 30 (65.2%), respectively, with $p=0.001$, indicating that there is statistically significant difference of anxiety level and gender.

The prevalence of pre-exam anxiety was high in female study participants in Simran research in 2015⁽¹⁰⁾ total number enrolled for study was 128 equal divided gender-wise., 1(1.56 %) of female had mild pre-exam anxiety, 16 (25 %) had moderate and the majority 47(73.43 %) had severe pre-exam anxiety. On the other hand, 24(52.17 %) of male study participants have moderate anxiety, none of them have mild anxiety 0 and 47.82 % have severe pre-exam anxiety.

In the current study, 73(44.2%) female students have the most anxiety, whereas 52 (38.5%) male students experience severe anxiety, and only 14 (8.5%) female students experience mild anxiety.

Simran from India conducted a survey in 2015 to explore the level of anxiety among medical students and discovered that female doctors experience severe anxiety during exam time, with 73.43 % of female doctors experiencing severe anxiety and 47.82 % of male students experiencing severe anxiety at the same time. Boys, on the other hand, show moderate anxiety levels (52.17 %) on and before exam days, but only 25% of girls showed moderate anxiety level.

In contrast, none of the men in the group had mild exam anxiety, and just one female in the Simran research had mild pre-exam worry. Simran's findings were compared to those of Ishtiaq.⁽¹⁰⁻¹¹⁾ from Abbottabad, Pakistan, who studied 93 female medical students and discovered that test and study pressure is the leading cause of anxiety among medical students.

Exam anxiety is higher in female students than in male pupils. Inam reported in 2003 that 24(61.5%) of female students of first-year medical education were anxious about exams, 24(77.4 %) of second-year students are anxious about exams, 50 % (n= 19/21) of third-year female students are anxious about exams, and 61.9 % of fourth-year female students are anxious about exams.⁽¹²⁾ In this study, the level of exam anxiety was considerable, with 55 % of female participants expressing concern about tests. Simran study found that females made up 58.18 % (n=64/110) of the participants.⁽¹⁰⁾

The findings of the previous two studies are consistent with the findings of the current study, which show that 41% of the study population suffers from severe exam anxiety, 11.33 % (n=34/300) suffer from mild exam anxiety, and the majority of the study population (n=141/300) suffers from moderate exam anxiety.

CONCLUSION

Medical students are likely to develop anxiety. Exam anxiety is a serious issue among medical students since it has a negative impact on their psychological well-being. This study found by using Visual Analogue Scale (VAS) that students of medical college have a moderate level of exam anxiety. It also identified factors that lead to exam anxiety such as a heavy course load, a lack of exercise, and long period of exams which contribute anxiety.

Recommendation for policymakers: Policymakers and professional bodies such as the Pakistan Medical and Dental Council, universities of health sciences, postgraduate medical schools, and private medical colleges will use the findings of this study as a guide. It's critical to figure out how anxious you are about the exam and what's causing it. Exam anxiety in medical students must be addressed with seriousness. This can be achieved by implementing significant changes in medical education and constructing appropriate educational programs.

The study's limitations: The research was conducted at a single private medical school. Participants' cognitive abilities were not documented (because to a lack of information at the time of the student's entrance to medical school).

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