

Pattern and Associated Factors of Exam Anxiety among Students of Private Medical College Pakistan

FARAH REHMAN¹, IFFAT NAIYAR², MUHAMMAD UMAR³, ABDUL REHMAN⁴, ABEERA SHAHZAD⁵, HIFSA UN NISA⁶

¹Assistant Professor of Medical Education Fatima Jinnah Medical University Lahore

²Assistant Professor Community Medicine, Kharian Medical College, Kharian

^{3,4,5,6}Final year MBBS Central Park Medical College Lahore

Correspondence to Email : dr.sherni@gmail.com Cell No :+92 333-3084303

ABSTRACT

Background: Examination anxiety is usually a combination of reactions, which includes depression, excessive anxiety, inappropriate thinking. Examination anxiety is experienced by many students as they undergo the examination procedure.

Aim: To exploring the pattern and associated factors of exam anxiety among students of Private Medical College, Lahore, Pakistan

Methods: It was a cross sectional descriptive quantitative study. The participants enrolled after taking consents from all students, those studying in central park medical college Lahore. Pre- designed questionnaire was used to collect the data. The multiple rounds of data collection were done. The data was analyzed by SPSS 20. Statistical test like chi- square test was applied to obtain the required results.

Results: The results showed that the mean age of student was 22.14±2.44 years with range from 17-28 years and 165(55%) were females while 135(45%) were males. Symptoms relating to exam anxiety were such that about ¾ respondents felt increased heart beat during exams; more than 60% faced disrupted sleep patterns during exams, more than 55% respondent feared of weight gain/loss and tachycardia during the exams. The results indicate that female students observed increased heartbeat 113(44.33%), disorder sleep patterns 119(39.67%), students those who were facing tachycardia (33%) and experience weight gain or loss during examination 93(31%) which were significantly different as compared with male students (as p-value <0.05).

Conclusion: This study indicates that pattern and associated factors of exam anxiety based on a Visual Analogue Scale students of a medical college and also highlights factors such as tachycardia, disrupted sleep patterns during the exams which contribute to Exam Anxiety.

Key words: Visual Analogue Scale, Exam Anxiety, Anxiety

INTRODUCTION

Anxiety in a high frequency among medical students is almost important issue in Western as well as in Eastern countries. The European countries world steadily proves higher overall mental distress among students of medicine than in general population. (1) Most of the researches on exam anxiety have been cross-sectional surveys on small samples which have been document prevalence and associations of anxiety among medical students².

Although different types of terms like anxiety, depression, and stress are used diversely around the world. Furthermore, with reference to the context definitions may differ. Students of higher education face anxiety, especially when they are preparing for examinations. Examination anxiety is a phenomenon that may lead to low students' performance. This is a physiological condition with student's extreme anxiety, discomforts and stress before and during the examination.⁽³⁾ Among the most important and significant barriers anxiety is considered to be at the top that normally stop students to achieve their targets in learning and academic performance. Globally, educational systems are striving for eliminating barriers in learning and achieving higher academic performance⁴. Exam anxiety is experienced by many students when they undergo the process of examination. Four main areas of stresses

contributing exam anxiety are lack of desired material, life issues, studying style and psychosomatic aspects⁵.

As anxiety level could be different in private medical college students as compared to public medical colleges due to factors such as extra economic burden and relatively weak academic record compared to students from public sector medical colleges. A differentiation along with other mental faculties, competence and cognitive capabilities also renders the top students to tackle anxiety differently⁶.

METHODOLOGY

It was a cross sectional descriptive quantitative study. The participants enrolled after taking consents from all students' those studying in central park medical college Lahore, pre- designed questionnaire was used to collect the data. The multiple rounds of data collection were done. The data was analyzed by SPSS 20. Statistical test like Independent t- test and chi- square test was applied to obtain the required results

RESULTS

Demographic and baseline information about the students include their age, gender and professional year of study. The results showed that the mean age student was 22.14± 2.44 years with range from 17-28 years and 165(55%) were females while 135(45%) were males. medical students. Students of different professional years showed

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that maximum strength of 3rd professional year as 98(32.665) (Table 1).

Symptoms relating to exam anxiety are such that about ¾ respondents faced increased heartbeat during exams; more than 60% felt disrupted sleep patterns during exams, more than 55% respondent feared the weight gain/loss and tachycardia during the exams (Table 2).

The results indicate that female students observed increased heartbeat 113(44.33%), disorder sleep patterns 119(39.67%), tachycardia (33%) and experienced weight gain or loss during examination 93(31%) as compared with male students (Table 3).

Table 1: Characteristics of the participants (n=300)

| Variables | | Frequency | Percentage |
|-------------------|------------|----------------------------------|------------|
| Age Group (years) | | 22.14 ± 2.44 (Age Rang 17-28yrs) | |
| Gender | Male | 135 | 45% |
| | Female | 165 | 55% |
| Professional Year | 2year | 79 | 26% |
| | 3 | 98 | 32.66% |
| | 4 | 70 | 23.33% |
| | Final Year | 53 | 17.66% |

Table 2: Distribution of mean anxiety levels for selected anxiety factors

| Anxiety Factors | VAS Anxiety Level | | |
|---|-------------------|-------|---------|
| | Mean | | p-value |
| | Yes | No | |
| Feel increased heartbeat? | 66.09 | 51.43 | 0.000 |
| Experience disrupted sleep patterns? | 66.08 | 55.14 | 0.000 |
| Face tachycardia by the fear of exams? | 67.28 | 55.23 | 0.001 |
| Experience weight gain or loss during examination | 65.95 | 56.68 | 0.0031 |

Table 3: Symptoms of anxiety among Students

| Factors | Male | | Female | | P value |
|---|------|----|--------|----|---------|
| | Yes | No | Yes | No | |
| Feel increased heartbeat? | 87 | 48 | 133 | 32 | 0.002 |
| Experience disrupted sleep patterns? | 74 | 61 | 119 | 46 | 0.004 |
| Face tachycardia by the fear of exams? | 74 | 61 | 99 | 66 | 0.006 |
| Experience weight gain or loss during examination | 85 | 50 | 93 | 72 | 0.001 |

DISCUSSION

The current study was a cross-sectional, quantitative, descriptive study with data collected at single point in time from Medical Students of Central park medical college Lahore. The target and study populations essentially had similar characteristics.

The mean age of participants of current study was 22.14±2.44 years with range from 17-28 years and 165(55%) were females while 135(45%) were males. Results of majority of the studies demonstrated the age of study participants above than 22 (Abend et al.) which was correlated with the results of current study where 39% (n=118/300) study participants were between the ages of 21-23 years⁸. However there were 64 participants in Zhang study conducted in 2011 and all were at the age of 20±0.1 years⁹.

More than half of the study participants of current study (55%) females which was correlated with the results of other studies including Abend R 2014, Hashmat 2015^{8,10}. On the other hand results compiled by Trifoni 2011 supported the conclusion of above researchers as there were 65.1% (71/109) participants were females¹¹.

Female students perceive more exam anxiety than male. Inam in 2013 declared that 61.5% (n=24/36) females students of 1st year MBBS were anxious about exams, in case of 2nd year students 77.4% girls students (n=24/38) shows anxiety for exams, whereas 50% students n=19/21) of 3rd and 61.9% of 4th females students presented anxiety for their exams as compared to males where the ratio of anxiety was low. Same was observed in current study as the level of anxiety was high where 55% female participants of study showed anxious for exams⁽¹²⁾. Same results were seen in Simran research where 58.18% (n=64/110) were females¹³.

However in current study factors considered were (a) Weight gain or loss during Anxiety (b) Tachycardia related with Anxiety (c) Disturbed Sleep. Authors of current study found significant correlation between these factors and anxiety. The result findings presented that majority (64.33%) of current study population suffer from sleep disorder, whereas second most common disorder found in study participants was weight loss due to the stress of exams as 59.33% participants losses their weight during the period of exams. The 3rd common factor was tachycardia face tachycardia by the fear of exams observed in 57.67% (n=173/) participants of current research. Study result shows that 59.33% (178) students replied that they experience weight gain or loss during the exams were the most important factors reported by the students. In another study conducted by Ans, 2012 the study was conducted to estimate the prevalence of anxiety, depression and their associated risk factors among students of Medical colleges in Pakistan. The mean anxiety level on VAS (Visual Analogue Scale) was evaluated as 62.21±23.01 with mean 0 and maximum anxiety level of 100¹⁴.

CONCLUSION

Anxiety is common in medical students. Exam anxiety is regarded as a major problem in medical students as it affects the psychological well-being. It is proved by World Health Organization (WHO) that QoL is affected with exams anxiety, whereas some aspect to the health of students is also affected through exam anxiety. Students with exam anxiety should be identified and these students should be assisted which not only improve their academics but also quality of life will be ameliorated.

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