ORIGINAL ARTICLE

Influencing Factors of Examination Anxiety among Medical Students in Lahore-Pakistan

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ABSTRACT

Background: Exam anxiety is combination of excessive worry, depression, nervousness, and irrelevant thinking regarding exams. Studies have explored the various stressors to determine which are the most important. Exam anxiety due to high expectations of parents, peer pressure, no free time for extra activity, financial problems, lack of harmony are just a few factors that contribute to the development of anxiety among medical students during examinations.

Aim: to exploring the influencing factors of Examination Anxiety among Medical Students in Lahore.

Methods: It was cross-sectional descriptive survey at Central Park Medical College Lahore (CPMC). The approval for this study was granted by both the University of Lahore and Central Park Medical College Lahore. All students of 4 batches at CPMC were included in the study. An informed consensus was obtained from all participants after confirming their confidentiality. The data was analyzed by SPSS 20.00, Independent t- test and chi- square test was applied.

Results: Demographic and baseline information about the student include their age, gender and professional year of study. The mean age student was 22.14± 2.44 years with range from 17-28 years. There were 165(55%) female and male was 135(45%). Results showed that the comparison of these factors among male and female students. Significantly more males reported doing physical exercise during exam (p=0.001). Slightly more females were using anti-depressants than males during exams (p=0.003). They had more negative thoughts and self-criticism than males (p=0.005) and paid less attention to their nutrition than males, during exams (p=0.004).

Conclusion: Study findings, with regard to factors influencing the increase of exams anxiety in medical students, it is found that female significantly faced memory loss during exams and they had to put extra effort to memorize as compared with males.

Keywords: Exams anxiety; students; study level; undergraduate; influential factors.

INTRODUCTION

Medical schools and universities are recognized as a stressful environment, which often has a negative impact on academic performance, physical health and the psychological well-being of students. Medical education is perceived as stressful, although it is doubtful whether it differs from other higher education in this regard. High rates of psychological illness among students of medical education such as depression and anxiety have been reported from various western countries and other parts of the world.

The medical profession is generally considered an honorable and respected profession because the medical profession deals with death and human life. The general public expects from doctors to provide health services at any costs and circumstances that define careers as the most demanding among other professions. Medical studies are therefore considered as challenging and are mostly stress-oriented due to extensive course load in medical studies [1]. It is proposed that every student in some extent experience anxiety during the different stages of medical education [2]. Anxiety and stress among medical students are also attributed to extensive workload. The medical study is from theoretical studies to clinically oriented based studies also symbolizes a stressful change from a non-technical part to a technical and practical work [3] . These types of anxiety and stressed conditions also lead to poor life satisfaction among scholars and following problems in professional life. Khan M's 2006 conducted a study in Pakistan reported that extraordinary rates of psychosomatic disease among the students who opted medical studies in their future for example, increased alcohol consumption, reduced examination performance and suicide attempts [4].

In Pakistan, anxiety and stress are widespread among medical students prior to the exam. Few studies on various types of stress and anxiety have been conducted among medical students in Pakistan [5]. In particular, no studies have been conducted to measure anxiety levels among students in a private medical school in Pakistan. Because the extent of anxiety among students of private medical schools compared to public medical schools may vary due to factors such as additional economic stress and relatively weak academic history compared to students of medical schools in this sector Starting list of merits of public sector medical schools and higher earning students prefer to enter public sector medical schools. This is somewhat different from those with high performance from others.[6] Such differentiation along with other mental skills, competences and cognitive skills also means that the best students tackle fear differently. Against this background, a

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central approach was taken to assess the level of fear, the associated factors and the perception of private medical universities[7s].

A gender difference regarding stress levels has also been reported, where women reported higher levels of stress than men. Stress during education can lead to mental distress and have a negative impact on cognitive functioning and learning[8]. Hence, there is a need to quantify the anxiety, depression and its associated factors among medical students for their counseling and rehabilitation [9]. The purpose of this study was to estimate the prevalence of anxiety, depression and their associated risk factors among medical students of private sector, Lahore , Pakistan by using a self- administered anxiety and depression questionnaire.

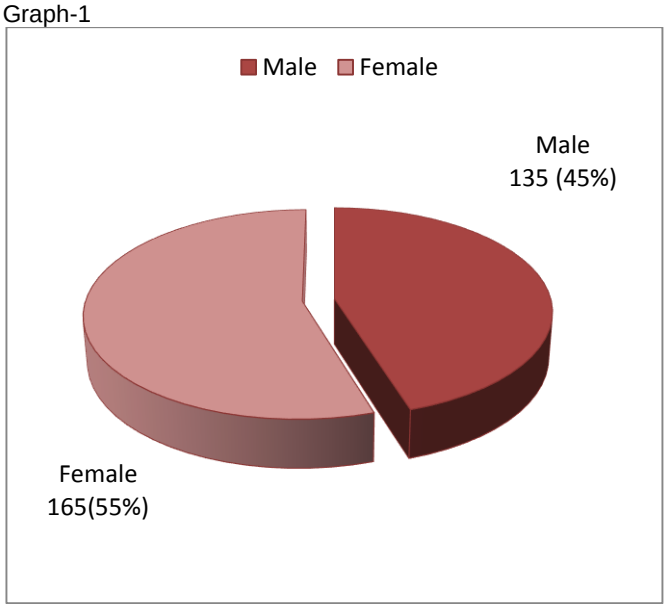
MATERIAL AND METHODS

It is a descriptive cross-sectional survey at Central Park Medical College Lahore (CPMC). The approval for this study was granted by both the University of Lahore and Central Park Medical College Lahore. All students of 4 games in the CPMC were included in the study. An informed consensus was obtained from all participants after confirming their confidentiality. To confirm the acceptance of the questionnaire, the questionnaire was applied to 300 students of our medical school. The language of the questionnaire was understood by the participants.

Statistical Analysis: Data was analyzed by using SPSS version 21.0. Frequencies, percentages were given for qualitative variables.. Statistical test like chi- square test was applied to obtain the required results. Level of significance was taken as ≤5%.

In this study mean age student was 22.14± 2.44 years with range from 17-28 years. There were 135 males (45%) and 165 females (165%) participants in the study. (Graph-1)**.** Results showed that significantly more males reported slightly more females were using anti-depressants than males during exams (38 vs 53, p=0.003). They had more negative thoughts and self-criticism than males (75 vs 114, p=0.005) and paid less attention to their nutrition than males, during exams (90 vs 80, p=0.004). (Table-1, Graph-2)

Graph-1

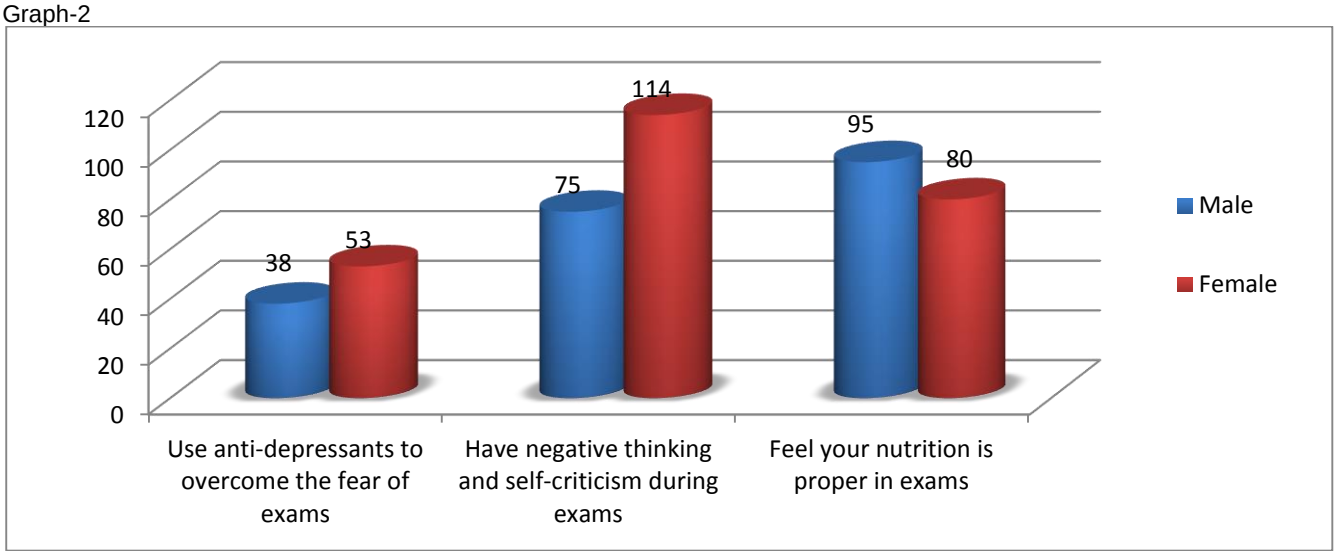


RESULTS

Table-1: Student's response about the Physical/mental factors causing exam anxiety with respect to Gender

Factors	Male	Female	p value
Use anti-depressants to overcome the fear of exams	38 (28.15%)	53 (32.12%)	0.003
Have negative thinking and self-criticism during exams	75 (55.56%)	114 (69.09%)	0.005
Feel your nutrition is proper in exams	95 (70.37%)	80 (48.48%)	0.004

Graph-2



DISCUSSION

A quantitative, descriptive and cross-sectional study was conducted on data collected at a specific time by medical students from Central Park Medical College, Lahore. Demographic characteristics such as age, gender, ethnicity, socioeconomic status, religious beliefs and basic academic background.

More than half of the study participants of current study (55.00%) were females which was correlated with the results of other studies including Abend R 2014, Hashmat 2008, Grassi A [9-11.] On the other hand results compiled by c 2011 supported the conclusion of above researchers as there were 71(65.1%) participants were females [12]. Whereas in the results of Zhang no prominent difference was observed between males and females and out of 33(52%) were females[13]. However controversy existed as Hornblow A et. al as they did not find any gender differentiation in their research studies[14].

Anxiety and depression among medical students is a serious public health problem and a source of colossal human sufferings[15]. But when it comes to students the situation becomes more alarming and dilapidating, affecting almost all areas of daily functioning, including motivation, concentration, perception, self-worth, and mood[16]. The present study is the first assiduous effort evaluating anxiety, depression, and stress among students enrolled in degree programs having annual and semester system of examination at various public and private sector universities of Lahore, Pakistan When it comes to the studies from Pakistan, number of studies have reported the prevalence of anxiety and depression among medical students ranging from 40 to 70%, yet, significantly higher among female students than males[17-18].

Multiple factors existed which affect the exam anxiety in different manners. To assess the relationship and how it affected this study population, questions were added in the questionnaire. An insight on this basis was developed so as to ascertain the lack of positively contributing factors and to evaluate the factors which augment exam anxiety.

In current study only 35.67% participants do physical exercise regularly (p-value <0.01). Of these 32.72% were females with a p-value of 0.001.while 64.33% accepted lack of physical exercise on routine basis. Seventy eight percent of the samples of Simran G 2015 research presented lack of physical and extracurricular activities reduce their anxiety with the mean of 54.71 SD±20.63 (Simran et al., 2015). The number was even higher according to the study of Hashmat where 90% of study participants lacked any physical activities (Hashmat et al., 2008). Lack of physical activities according to the current study and the referring studies was probably due to lack of awareness of the advantages or maybe due to busy schedules of the students. The factors affecting 2nd, 3rd, 4th and final year MBBS students presented in the results of current study display that 193(64.33%) participants feel trouble in sleeping (0.023), tachycardia was observed in 173(57.67%) (p=0.01), whereas 59.33% (n=178/398) had weight loss/gain during their exams period (p=0.004).

In the current study, only 35.67% of the participants exercise regularly (p <0.01). Of these, 32.72% were women with a p-value of 0.001, while 64.33% routinely accepted lack of exercise. 78 percent of the Simran G 2015 research samples showed a lack of physical and extra-curricular activities that reduce their anxiety by a mean of 54.71 SD ± 20.63 (Simran et al., 2015). The number was even higher, according to the Hashmat study, in which 90% of the study participants had no physical activity (Hashmat et al., 2008). The lack of physical activity according to the current study and the reference studies was probably due to a lack of awareness of the benefits or possibly due to the busy schedule of the students. The factors presented in the results of the current study, which affect MBBS students in the second, third, fourth and last year, show that 64.33% (n = 193) of the participants have sleep problems (0.023), in 57.67% Tachycardia was observed (n = 173) (p = 0.01), while 59.33% (n=178/398) showed weight loss / weight gain during the study period (p = 0.004).

CONCLUSION

In conclusion, our data suggested that the factors influencing the increase of exams anxiety in medical students in more high among female. It is found that female significantly faced memory loss during exams and they had to put extra effort to memorize as compared with males.

Multiple reasons behind mental health issues, such as studies, strained relations, away from home, and finances contributed significantly in severity ratings of all three mental states, i.e., stress, anxiety, and depression. Therefore, training and educational programs along with mental health counseling sessions should be offered to the University students at the departmental and University level.

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