

Prevalence of Anxiety and its Relationship with Associated Factors among the Medical Students of Isra University Hyderabad

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ABSTRACT

Objective: To evaluate the frequency of anxiety and its relationship with study hours, sleeping hours and mobile phone use among medical students of Isra University Hyderabad.

Study Design: Cross-sectional study.

Place & Duration: Department of Community Medicine, Isra University from 1st January to 31st July 2014.

Material and Methods: A sample of 106 students was selected through convenient sampling according to well delineated inclusion and exclusion criteria. Questionnaire was designed, pretested and filled by Medical students of 3rd year MBBS. Verbal consent was obtained before filling the questionnaire. The study was approved by the ethical review committee of the institute. Data was analyzed on SPSS-21 using descriptive statistics and a p value of < 0.05 was taken statistically significant.

Results: Among 106 students, 57(54%) were female. The majority of students were 32(30%) in the age group of 22 years. There was no student without anxiety and all of 106 students showed mild to severe type of anxiety. The use of mobile phone by students, from 1-5 hours was more frequent in 42 students. 6 hours sleeping time was noted in 22 students. In 5 students, duration of study was 11 to 13 hours. There were 89 students who mentioned their performance satisfactory.

Conclusion: Excessive use of mobile phone, long hours of sleeping and stress are the factors for high anxiety level among medical students.

Key Words: Medical Students, Anxiety, Mobile Phone, Sleeping Pattern, Stress.

INTRODUCTION:

Anxiety is an unpleasant state of inner turmoil, often accompanied by nervous behavior, such as pacing back and forth, somatic complaints and rumination.^{1,2} It is an unpleasant feelings of dread over something unlikely to happen, such as the feeling of imminent death.³ Anxiety is not the same as fear, which is a response to a real or

perceived immediate threat⁴ rather it is expectation of future threat.⁴ Anxiety is a feeling of fear, worry, and uneasiness, usually generalized and unfocused as a reaction to a situation that is only subjectively seen as menacing.⁵ Anxiety can be appropriated, but when it is too much and continues for too long, the individual may suffer from an anxiety disorder.⁶

Medical education is perceived stressful and often exerting negative effects on physical and psychological impact on students.⁷ Several studies from western world⁸⁻¹⁰ as well as from rest of the countries^{11,12} have reported high rates of psychological disorders like depression and anxiety among medical students. Hence, the present study was conducted to evaluate the frequency of anxiety, study hours, sleeping hours and mobile phone use

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by the students and their impact on anxiety level among medical students of Isra University Hyderabad.

MATERIAL & METHODS:

This cross-sectional study was conducted at the Community Medicine Department of Isra University from 1st January to 31st July 2014. A sample of 106 students was selected through convenient sampling according to well delineated inclusion and exclusion criteria. Volunteer healthy students not suffering from any physical and mental illness were selected. Students having family or any other personal social problem and taking tranquilizers were excluded from study protocol.

Questionnaire was designed, pretested and filled by Medical students of 3rd year MBBS. Verbal consent was obtained before filling the questionnaire. The study was approved by the ethical review committee of the institute. Data was analyzed on SPSS 21 (IBM, incorporation, USA) using descriptive statistics and a p value of < 0.05 was taken statistically significant.

RESULTS:

There were 106 students who participated in the study, out of these 49 (46%) were male while 57(54%) were female students. Moreover, majority of students were 32(30%) in the age group of 22 years. With regard to the socio-economic status, 6 students belonged to low economic status, 51 were from middle class and 49 were belonging to high socio-economic class.[Table 1]

Table 2 shows frequency of level of anxiety among the students; the level of anxiety was divided from zero to ten points. The zero meant no anxiety, 1-3 levels showed mild anxiety, 4-6 meant moderate anxiety and 7-10 showed severe anxiety. There was no student without anxiety and all 106 students showed mild to severe type of anxiety; 48 students showed severe type of anxiety 54 students showed moderate anxiety and only four mentioned mild anxiety.

Table 3 shows the use of mobile phone by students, from 1-5 hours was by 42 students,

Table 1. Demographic Variables of Study Population

Demographic Variable	Frequency	Percentage
Gender		
Male	49	46%
Female	57	54%
Age		
20 years	26	25
21 years	28	26
22 years	32	30
23 years	20	19
Socio-economic status		
Low	6	6%
Middle	51	48%
High	49	46%

Table 2. Level of Anxiety

Level of Anxiety	Frequency	Percentage
0	0	0
1	0	0
2	2	2
3	2	2
4	6	6
5	23	22
6	25	24
7	8	8
8	29	27
9	3	3
10	8	8

0=no anxiety, 1-3=mild anxiety, 4-6=moderate anxiety 7-10=severe anxiety.

6 to 10 hours used by 26 (25%) and 15 students were found using the mobile for more than 10 hours daily. It showed the mobile phone use is unnecessary and irrational. Data on sleeping hours of the students showed that 22 students sleeping time was 6 hours, 21 student sleeping time 7 hours, 20 students sleeping time 8 hours ,13 student sleeping time 9 hours, 12 students sleeping time 10 hours, 10 students sleeping time 11hours while 8 students mentioned sleeping time 12 hours. In context to study hours of the students, the

data showed that there were 14 students doing study for 2 to 4 hours, 51 students 5 to 7 hours, 36 students 8 to 10 hours and 5 students doing study for 11 to 13 hours. Table 4 shows academic satisfaction and performance, 89 students mentioned their performance satisfactory while 17 mentioned their academic performance unsatisfactory.

Table 3. Variables on Mobile use, Sleeping hours and Study hours

Variables	Frequency	Percentage
Duration of Mobile Phone use		
1 - 5 hrs	42	40%
6 - 10 hrs	26	25%
> 10 hrs	38	35%
Sleeping Hours		
6 hrs	22	21%
7 hrs	21	20%
8 hrs	20	19%
9 hrs	13	12%
10 hrs	12	11%
11 hrs	10	9%
12 hrs	8	8%
Study Hours		
2 - 4 hrs	14	13%
5 - 7 hrs	51	48%
8 - 10 hrs	36	34%
11 - 13 hrs	5	5%

Table 4. Academic Performance

Academic Performance	Frequency	Percentage
Satisfied	89	84%
Un satisfied	17	16%

DISCUSSION:

During their training, medical students are prone to different sources for developing stress and anxiety.^{13,14} Moreover, previous studies have found prevalence of mental health problems falling between 21-56% among medical students.¹⁵ We found that 54% of females reported some level of anxiety in our study. This may possibly be due to the reason that female medical students are more competitive, aiming to achieve good grades in

exams, tend to be more hard working, are less involved in physical activity or exercise and anxious about their performance.¹⁶ In context to the level of anxiety, 52% students in our study had moderate while 46% had severe level of anxiety. Further, in some recent studies from India, Pakistan, Malaysia and Israel the prevalence of anxiety among medical students was 56%, 43.7%, 44% and 29.4% respectively.¹⁷⁻²⁰

The study showed that the anxiety among the students is prevalent and is not reducing with the time or changing from first year to third year, which is different from a study done in Islamabad which showed 74.2% anxiety and it was reducing as the year of schooling was increasing, but in our study the prevalence was not lowering with the year of schooling.²¹ The moderate anxiety was found more in our study, this needs to be addressed urgently through behavioral modification methods and creating weak recreational facilities like sports water fountain and more recessed time to the students and sometimes anxiety needs medico legal assessment.^{22,23}

CONCLUSION:

The anxiety is present at alarming level especially moderate and severe type of anxiety needs urgent medical, social and recreational measures. In private sector universities the mobile phone and long sleeping pattern and stress are the factors for high anxiety level in the medical students.

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