Anxiety levels in First Year MBBS Students

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ABSTRACT
Medical students encounter multiple stresses and emotional challenges from their beginning to a young knowledgeable physician. As far as academic stressors are concerned, academic performance especially in the First Professional, examination criteria dissatisfaction and being overburdened with test schedule were significantly associated with anxiety, which is the case in a number of other studies as well, suggesting academic stressors as being a source of psychological distress among medical students. So the objective of the study was to assess the levels of anxiety among medical students in our region. The study was done on 150 medical students of first year of Mamta Medical College, Khammam. Students were divided into two groups – hostellers and day scholars. Anxiety level was assessed by Hamilton anxiety scale using questionnaire. Student t test and Pearson correlation were used for comparison. The prevalence of anxiety was 31.3% among males and 62.8% among females. The difference in mean values for anxiety score in male hostellers and male day scholars was not significant, whereas, the difference in mean value for anxiety score in female hostellers and female day scholars was highly significant. So anxiety if untreated, can lead to mental distress and have a negative impact on their cognitive functioning and learning behavior.
Keywords – *Anxiety, Stress, Hamilton anxiety scale, Depression*

INTRODUCTION

Medical students confront significant academic, psychological, & existential stressors throughout their college life. Medical student often coping with a new college new schedule can easily feel overextended. It is for students thus to experience symptoms of depression, anxiety & stress[1]. The emotional status of students during medical school training has been a source of concern, reports as early as 1956 [2].

Students are being far and wide from home and stress of the race of doing well in the studies.

These students may face many psychological problems most frequent is the anxiety disorder. Typically, it involves disturbances in their daily mood, thinking, behavior and physiological activity[3].

Anxiety is a physiological and psychological state characterized by cognitive, somatic, emotional and behavioral components[4].

It is a bodily response to a perceived danger or threat that could be real or imagined and triggered by an individual's thoughts, beliefs and feelings. These disorders affect how we feel and behave, and they can manifest real physical symptoms[5]. Anxiety can contribute to absenteeism and lack of confidence among the people [6].

Medical students represent a highly educated section of a society and they encounter multiple stresses and emotional challenges during their transformation from a beginner of a medical student to a young knowledgeable physician[7].

As far as academic stressors are concerned, academic performance especially in the First Professional, examination criteria dissatisfaction and being overburdened with test schedule were significantly associated with anxiety, which is the case in a number of other studies as well, suggesting academic stressors as being a source of psychological distress among medical students[8,9].

So there is a need to quantify the anxiety factors among medical students so that they should be counseled and rehabilitated.

Various studies have focused on the mental health of medical students. In our study, we have tried to find out the anxiety levels in newly admitted MBBS students, grouping them as day scholars and hostellers.

MATERIAL AND METHOD

The present study is a prospective study and was carried out on 150 newly admitted MBBS students in Mamta Medical College, Khammam in the first month after admission in the college with voluntary participation. After obtaining ethical clearance from the institutional ethical committee informed consent was taken from all the participants. All the students were in age group of 17-20 years. They were divided into two groups; Group-A, hostellers and Group- B, day-scholars.

Anxiety levels were assessed using Hamilton anxiety scale[10]. It is a widely used scale to evaluate anxiety symptoms at baseline and it consists of 14 items. Each item is rated on a 0-4 scale (0 = not present, 4 = severe) with a final item which rates behavior. Sum of the score of each will be noted as anxiety score. To ensure ambiguity, the subjects will be asked not to put their names on the questionnaire.

The subjects were asked to fill the anxiety questionnaire without knowing the interpretation of the scoring system. History of any chronic illness or any kind of psychiatric illnesses was ruled out.

Mean and Standard Deviation were calculated and student's unpaired t-test and Pearson's correlation were used for comparison. p-value <0.05 was

considered significant& highly significant if the p-value was <0.001.

RESULTS

In the present study conducted on 150 first year MBBS students the prevalence of anxiety is 31.3% among males (21.9% mild, 7.8% moderate, 1.6% severe) and 62.8% among females (31.4% mild, 20.9% moderate, 10.5% severe). Overall it is 49.3%. Difference in prevalence of anxiety is statistically highly significant among males and females ($p < 0.001$).

Table 1 shows the mean values of anxiety score in both male and female students. According to the table, the difference in mean values for anxiety score in male hostellers and male day scholars was not significant, whereas, the difference in mean value for anxiety score in female hostellers and female day scholars was highly significant. Thus, the anxiety scores were significantly more in female students residing in hostel.

Table 1- Mean ± SD values of anxiety score of Days Scholar and Hostellers

Gender	Hosteller/ Day Scholars	N	Anxiety score	P value
Male	Hostellers	42	10.11±4.13	0.869 [NS]
	Day Scholars	23	9.96±5.49	
Female	Hostellers	69	19.02±6.78	<0.001**
	Day Scholars	16	8.89±7.83	

NS: $p > 0.05$; Not Significant; ** $p < 0.001$; Highly significant

Table 2- Comparison of anxiety score between male and female students

Gender	N	Anxiety score	P value
Male	63	11.49±4.96	<0.001**
Female	87	16.71±7.31	

** $p < 0.001$; Highly significant

Table 2 shows an overall comparison between male and female students with respect to the mean values of anxiety scores. The difference in mean value for anxiety score in males and females was also highly significant.

DISCUSSION

Various studies have focused on the mental health of medical students as medical school is considered to be a time of significant psychological distress for students in training[11]. Some aspects of training may have unintended

negative effects on medical students' mental and emotional health[12]. These studies have reported high prevalence rates of psychiatric disorders, such as anxiety. The prevalence of anxiety in our study was also high also the Difference in prevalence of anxiety was statistically highly significant among males and females ($p < 0.001$). A study suggests that first year students seemed to have more anxiety levels and depression due to pressure of exams, studies etc. This could be due to the stress of new study environment for first year students. The pace of receiving knowledge and type is faster in a medical college than the student ever faced before[13]. The difference in mean values for anxiety score in male hostellers and male day scholars was not significant, whereas, the difference in mean value for anxiety score in female hostellers and female day scholars was highly significant. This is in accordance with the study which found that female students had increased levels of depression and anxiety compared with their male counterparts[14]. When students enter Medical College, they leave behind the comfort that their parents and home provide them. The anxiety of new type of environment and academic performance add to their homesickness. This condition predisposes students to a lot of psychosocial and mental stress. The potential sources of stress among students may include academic stress, enormous syllabus to be covered in a limited period of time, sudden change in their style of studying, lack of proper guidance, thought of failing in exams, relationship with peer groups, expectations of parents, change in medium of

education and to all above the hostilities have their own set of problems including hostel friends, hostel food, peer pressure[15].

CONCLUSION

There is a high prevalence of depression among medical students. The anxiety scores were more in female students residing in hostel as compared to their male counterparts. To tide over this problem, different strategies can be adopted including educational tours, yoga, meditation and Counseling regarding the study pattern and time and stress management techniques should be done at the very start of the study curriculum. Some kind of sports events between different years and among different Medical colleges and different types of creative activities should be made a part of their routine.

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