

Experience of Medical Students on Appearing in First Sub Stage of Anatomy

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ABSTRACT

Background: Higher level of stress experienced by medical students has been found to have a negative effect on their cognitive learning. The first year MBBS student have to face the challenge of higher standards of course work and examination as compared to his previous school and college coursework. Moreover, student from rural background and living in hostel has to face additional challenges of coping with homesickness, hostel related and many financial problems.

Aim: To determine the experience and feelings amongst First year MBBS students to the first sub stage in anatomy in different public and private medical colleges of Punjab.

Method: A descriptive cross-sectional study was conducted at Allama Iqbal Medical College, Lahore. A sample of 275 students of First year MBBS class were selected from both public and private sector of medical colleges in various cities of Punjab through convenience sampling technique. A self-administered structured questionnaire was prepared for data collection and distributed amongst First Year MBBS students. Data was entered and analyzed using SPSS 21.

Results: The result of the study showed that 53.8% of First Year MBBS students were nervous before the first substage. Results of the study also showed that hostelites and females students were more nervous and these findings were statistically significant. Also our study showed that government medical college students were better prepared for their substage as compared to private college students and there is statistically significant difference between them ($p < 0.00$).

Conclusion: Majority of First year MBBS students (58%) are facing increase level of stress during their first substage. Statistically significant higher stress levels are observed among females, hostellites.

Keywords: First Year MBBS, Experience, Stress, First substage

INTRODUCTION

Stress in the life of a medical student has always been a source of concern for medical educationist all over the world.¹ It has been found that this stress has its origin back to the time when medical student starts preparation for entry to medical college. Contrary to the expectation of medical student stress experienced by him increases with each increasing year in medical school².

Studies have shown that the environment of a medical student has an important effect on the level of stress experienced by him³. To keep pace with the growing competitive environment and increasing level of difficulties in studies a medical student has to struggle in his initial years. However, it has been observed that instead of encouragement and mentoring, students are exposed to rigid attitudes both on part of administration and teachers⁴. Also senior students instead of guiding them often bully them which in later years can have a very negative influence in the psychological and mental well-being of a student⁵.

Previous studies have shown that anxiety during exam may have a positive influence on students to make them study, but to many it affect their overall performance during the exams⁶. Literature review reports that a medical student in his early years in a medical college is stressed to get better grades in his exams to achieve academic excellence. In an effort to have this he says no to many of his social, physical and emotional desires³. Also the first year MBBS student has to face the challenge of higher standards of course work and examination as compared to his previous school and college coursework. Moreover, student from rural background and living in hostel has to face additional challenges of coping with homesickness, hostel related and many financial problems. Thus he is not only emotionally and physically deprived of the support of his family but at the same time sometimes has to survive in a non-conducive environment⁷.

Previous studies have shown that increased predisposition to stress is one of the main causes of anxiety, depression and suicidal tendencies among medical students⁸. Studies have also shown that medical student suffers from more anxiety and depression as compared to non-medical peers⁹. This also results in cognitive impairments like, poor concentration, low recall of his subject and low academic performance¹⁰. However, some

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of the students are able to cope stress in a much positive way by positive improvement in their personalities who later become strong, composed and competent doctors¹¹.

The present study had been designed to study the experience of a medical student to the first substage in anatomy. No such study had been done before to see the experience of medical students to the first sub stage. The study aims to identify the causative factors responsible for the stress experienced by the first year MBBS medical student.

METHODOLOGY

A descriptive cross-sectional study was conducted at Allama Iqbal Medical College, Lahore. The sample size was calculated using open epi software at 95% confidence level taking margin of error as 5% and frequency of anticipation factor (stress among medical students) as 22%¹². Calculated sample size was 250. We recruited sample of 275 students of First year MBBS class.

Ethical consideration was adequately accounted for. Identity of students was concealed. Data was collected after informed consent and permission to use data for publication was sought. Students were selected from both public and private sector of medical colleges in various cities of Punjab through convenience sampling technique.

Dependent variable of our study was exams feelings (nervous, scared, Normal Excited) while independent variables were gender, boarding status, advice from peers, public Vs private medical colleges and choice of their own to become doctors.

A self-administered valid and structured questionnaire was prepared for data collection and distributed amongst First Year MBBS students. Students were asked about basic demo- graphic details and answered the structured questionnaire in a friendly and conducive environment.

The data was recorded and analyzed using SPSS version 21.0. Data is described in the form of frequencies and percentages. Chi square test was applied to see statistically significant differences between groups. P value of less than 0.05 was considered statistically significant.

RESULTS

The results of the study showed that 53.8% of First Year MBBS students were nervous before the first substage, 28.5% were scared while 11% were normal. Among study participants 7.5% expressed to be excited before first substage (Graph 1).

Gender was cross tabulated against the feelings during exam and it revealed that 96 females were nervous,

57 scared as compared to 52 males who were nervous and 21 of them were scared. The result showed females were more nervous as compared to males. Difference between them was statistically significant with a p value of 0.048 (Table 1).

Data of our study depicts that 98 students of the government college were more nervous as compared to 50 students of private colleges. However, there was no statistically significant difference when nervousness of students of Government College was compared to Private College (Table 1).

Among hostelites, 114 students were more nervous as compared to 34 day scholars. There is statistically significant difference between the two with a p value of 0.012 (Table 2).

However no statistically significant difference was observed among students on nervousness taking senior advice. It shows advice of the seniors did not lessen their nervousness. Out of 148 students 98 were nervous (Table 2).

As regards preparation of substage 100 students of public colleges had a more detailed study of subject as compared to 32 students of private medical colleges and p value of 0.00 showed statistically significant differences amongst them (Table 3).

Fig 1: Comparison of feelings of medical students

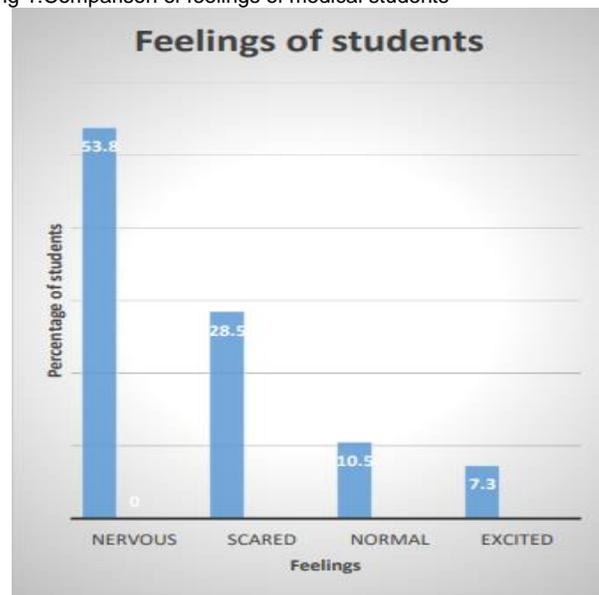


Table 1: Comparison of exam feelings between genders and between students of private and public medical colleges

		Exam feelings				Total	P value
		Nervous	Scared	Normal	Excited		
Gender	Female	96	57	15	9	177	0.048
	Male	52	21	14	11	98	
	Total	148	78	29	20		
Type of College	Government	98	49	18	10	175	0.55
	Private	50	29	11	10	100	
Total		148	78	29	20		

Table 2 Comparison to show exam feelings between day scholars and hostelites

Residence	Exam feelings				Total
	Nervous	Scared	Normal	Excited	
Day scholar	34	27	12	6	79
Hostelite	114	51	17	14	196
Total	148	78	29	20	

P value=0.012

3: Comparison to show preparation of student to first substage amongst public and private medical college student

Type of College	Preparation of substage				Total
	Superficial	Detailed	Selective	Didn't study	
Government	39	100	34	2	175
Private	36	32	23	9	100
Total	75	132	56	11	

Chi square: 0.00

DISCUSSION

First year medical students vs Senior year MBBS students:

The results of our study showed more nervousness amongst first year MBBS students. These findings were consistent with findings of Salgar¹³ who reported more stress among students in First year MBBS. He reported the likely cause of stress to be high parental expectation and increase burden of studies. Rotenstein et al also reported higher levels of stress among MBBS students. The study showed that likely cause of depression maybe the environment experienced by a medical student¹⁴ However these findings were contrary to the findings of previous studies where no statistically significant difference was reported in stress among students of First year MBBS and final year MBBS students¹⁵ The reason could be ethnic and racial variations

Female Vs Male: The results of our study showed that female students were more nervous as compared to male counter parts and showed a statistically significant difference. Our findings were in accordance with previous studies performed locally and abroad showed that female students were reported to be more stressed and anxious.¹⁶ These findings were also in agreement with previous findings of Shaikh et al who reported exams to be more stress triggering factor for females as compared to males.¹⁷ Moreover, the results of previous studies done by Hill et al documented that female in their later years of medical education experienced more difficulty in handling pressure of academic work and were more emotionally fragile when handling human misery as compared to their male counterparts.¹⁸ One of the previous studies had shown that one of the reasons for depression amongst female students were financial¹⁹ However, this is contrary to the previous studies done on gender difference of nervousness amongst male and female where no statistically significant difference was observed¹⁵. Previous study done by Patil et al showed male medical students to be more stressed as compared to females²⁰.

Hostelite vs Day Scholars: Result of our study showed statistically significant difference of more nervousness among hostelites as compared to day scholars. These findings are in agreement with work done by Jawed et al who reported more anxiety among hostelites than day scholars in first year and second year He used a valid hospital anxiety dependent scale to demonstrate this.²¹ This is contrary to the work done by Iqbal et al²² who

reported no statistically significant difference of nervousness among day scholars and hostelites.

Public sector vs Private: Results of our study showed that students from public medical colleges were better prepared than peers from private medical college for the first substage. This finding is consistent with findings of Costa et al²³ who reported better preparation of students of public medical schools for learning than then private medical school students.

CONCLUSION

First year MBBS students are facing increase level of stress during their first sub stage. This stress level is more amongst hostelites suggesting unfavorable and unfriendly environment of the hostels for the students; these students are probably facing not only physical but emotional and psychological problems. Moreover results of study showed that females are more nervous implying that they are less likely to cope well with the same levels of stress as their male counterparts and need more counselling. Further studies should be done to find out trigger out factors for increase stress especially among hostelites and ways to alleviate it. More studies need to be done to find better ways to make environment friendly and conducive for our new medical students.

Study benefits: The study will benefit medical students as it will identify the factors that causes stress amongst medical students at the start of their medical education and in future will develop mentoring techniques to facilitate students.

Conflict of interest: Nil

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