



STRESS FACTORS AND WAY OF COPING AMONGST THE STUDENTS OF MEDICAL COLLEGE

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ABSTRACT

Introduction: Medical profession, although a noble profession, is not spared from the stress and suicidal tendencies. Stress, if not dealt effectively, loneliness, nervousness, and sleeplessness is inevitable. The present study was undertaken to identify the stress factors and way of coping amongst medical student.

Methods: Cross-sectional study was done on 353 medical students using pretested, semi structured questionnaire. Information regarding Personal data, Stress inducing factors & ways of coping was collected from the participants.

Results: Medical students that reported stress factors were course material of MBBS by 71.7%, followed by economic problems 60.7%, academic factors 57.0%, competition in college 56.6%, college/hostel environmental factors 44.9% and social problems 39.5%. Individual stress factors in decreasing order were work overload in 80.5%, nervous breakdown before or during viva 79.3%, worry for Postgraduate seat 75.1%, fear of failure in exam in 72.8% students. Only 19.8% students had stress due to ragging. Talking to friends (79%), call at home or go to home or movie (50-53%) & using internet/ videogames (50%), were major way of coping.

Conclusions: The major stressors identified were academic factors and course material. The preferred method of coping was talking to friends and family members.

Key words: Stress factors, Medical Student, Way of coping

INTRODUCTION

Medical profession, although a noble profession, is not spared from the stress and suicidal tendencies. Stress, if not dealt effectively, loneliness, nervousness, and sleeplessness is inevitable. The pressure to excel and obtain the degree is highest. Continuous studies, home sickness, improper food habits and competition with fellow students add to the stress.

Stress is a natural reaction that everyone experiences at one time or the other. It is a part of human nature. Stress is the body's response to danger or perceived threat. Many things in life can be stress-

ful. Elevated levels of stress can put a toll on our system but we can develop ways to cope with stress or make attempts in our lives to avoid it ¹.

College students, especially fresher are a group particularly prone to stress due to the transitional nature of college life. The amount of stress experienced may be influenced by the individual's ability to effectively cope with stressful events and situations ². Coping is defined as the person's constantly changing cognitive and behavioral efforts to manage specific external and/-or internal demands that are appraised as taxing or exceeding the persons resources ³. Research shows that students with an active coping style (those who can

tackle problems in a positive and straight forward manner) have lower levels of psychological distress⁴. In view of the potential long term benefits of managing stress in a more effective way, it may be important for students to develop such skills early in their medical career. Hence the present study was undertaken with an objective to identify the stress factors and ways of coping amongst medical student.

METHODS

The present cross-sectional study was carried out in one of the private medical college in Pune, Maharashtra during September to November 2012. Prior permission and ethical clearance was taken from appropriate authorities. Out of total 499 medical students, 353 students gave consent for inclusion in the study. Basic personal information was collected from each participant regarding the stay, gender, medium of study in schooling, type of family and monthly family income. Stress inducing factors were divided into six categories as academic, social problems, economic problems, college/hostel environment, course material and competition. These categories had items to identify overall 24 stress factors. Each item was scored on a 5 point Likert scale⁵ from 0 as no stress to 4 as extreme stress. The various stress coping methods adopted by students were also noted which include talking with friends, call at home, personal hobbies, planning of studies, physical exercise and other co-curricular activities. The data was tabulated, coded and analysed as proportion.

RESULTS

Total 353 medical students were participated in the study. Socio-demographic characteristics of participants are shown in table 1. Stress factors in medical students identified by the study were course material of MBBS among 71.7 % students, economic problems by 60.7%, academic factors by 57.0 % followed by competition among 56.6 %. The least stress factors were hostel environment reported by 44.9 % and social problems by 39.5 % students. Further each category consisted of various stressors. The details are shown in table 2. Among the academic factors nervous breakdown before viva (79.3%), worry for PG seat (75.1) and fear for failure in exam (72.8) were the most commonly reported stress factors by medical students. The least reported academic stress factors were to get scholarship or freeship (37.1%) and change in the medium from school to medical college (35.4 %). The next stress factor category studied was

Table 1: Sociodemographic characteristics of medical student

Variable	Frequency (%)
Gender	
Male	180 (51)
Female	173 (49)
Residence	
Hostel	262 (74.2)
local area (home)	91 (25.8)
Permanent native	
Urban	259 (73.4)
Rural	94 (26.6)
Monthly family income	
>30000	219 (62)
20000 to 30000	60 (17)
10000 to 20000	49 (13.9)
<10000	25 (7.1)
Education (year of study)	
III MBBS(Major+Minor)	131 (37.1)
II MBBS	112 (31.7)
I MBBS	110 (31.2)
Medium of primary education	
English	218 (61.8)
Marathi	115 (32.5)
Hindi	7 (2)
Other (Gujrati, kannad)	13 (3.7)
Type of family	
Nuclear	284 (80.5)
Joint	69 (19.5)

social factors. Among the various social factors studied, the highest reported stress factor were residing away from home/ home sickness by 53.0 %, followed by own health problems or chronic health problem of a family member by 46.7%. The least reported social stress factor were death of a family member or close relative (35.5%) and separation of parents (24.1%).

Among the various economic factors studied, the highest reported stress factor was academic fee (64.9%) followed by monthly expenses (pocket money) 56.7%. Among the various college / hostel environmental factors studied, the highest reported stress factor was food 63.0% followed by distraction – noise pollution 51.6%. The least reported college/ hostel environmental factors stress factor was ragging by senior. The stress factors under course material category, the highest reported stress factor were overloading of work 80.5% followed by reading textbook 72.0%. The other commonly reported factors were length of course (68.0%) and understanding of course (66.6%). Competition resulted into higher stress during exam in 68.6 % students followed by competition during the course in 56.9 % students. The most preferred method of coping adopted by the students was talking to friends (79.3%) and sleeping (66.3 %). The least followed method of coping was

smoking or tobacco chewing as reported by 4.5 % students. The other methods of coping are shown in table 3.

Table 2: Stress factors in medical student

Category and Stressors	Yes *(%)
Academic	
Nervous breakdown before or during viva	280(79.3)
Worry for PG (Post Graduate) seat	265(75.1)
Fear of failure in exam	257(72.8)
To get certificate	150(42.5)
To get scholarship / free ship	131(37.1)
Change in the medium of education	125(35.4)
Social Problems	
Residing away from home / home sickness	187(53.0)
Own health problems / Chronic illness of a family member	165(46.7)
Death of family member / close relative	122(35.5)
Separation of parents	85(24.1)
Economic Problems	
Academic fee	229(64.9)
Monthly expenses (pocket money)	200(56.7)
College / Hostel Environment	
Food	223(63.2)
Distraction – noise pollution	182(51.6)
Friends – Tease / avoidance / broken friendship with (male/ female)	160(45.3)
Relation with teachers	159(45.0)
Seniors – Ragging by seniors	70(19.8)
Course Material	
Overloading of work	284(80.5)
Reading Textbooks	254(72.0)
Length of Course	240(68.0)
Understanding of Course	235(66.6)
Competition	
In exam	242(68.6)
During learning	201(56.9)
Pressure from the parents	157(36.0)

* 0 score-no stress, 1-4 score- Stress factor present

Table 3: Way of coping used by medical students for managing stress

Way of coping	Frequency (%)
Talking with friends	280 (79.3)
Go to sleep	234 (66.3)
Call at home	189 (53.5)
Internet videogames / cultural activities / hobbies	184 (52.1)
Go to movies	179 (50.7)
Go to home	159 (45)
Planning of study & searching for good material	159 (45)
Play or watching sports	158 (44.8)
Physical exercise	123 (34.8)
Seek help from seniors	101 (28.6)
Seek help from teachers /mentor	74 (21)
Others	67 (19.7)
Do yoga	37 (19)
Smoking /tobacco chewing	16 (4.5)

DISCUSSION

This study confirmed the general impression that there is considerable amount of various stress factors in medical students. This is similar to the other studies elsewhere which have reported such findings^{1,3}. As most of the students were from urban area, they belong to nuclear family and had done schooling from English medium.

Most frequent stressors in descending order were, overloading of work, nervous breakdown before or during viva, worry for PG (Post Graduate) seat, failure in exam, reading textbook, length of course and understanding of course. This shows that academic factors & course material of MBBS were greater perceived causes of stress among medical student. Previous studies have also shown that academics is the common stress element among medical students.^{6,7,8} Lengthy MBBS course, frequent exams and uncertainty about PG seat always keep medical students under stress. This was similar to the finding reported by other studies^{1,3,9,10}. There is need for greater attention to the psychological well being of medical students. This issue needs to be addressed and students should be encouraged to seek help along with provision of adequate facilities. Stress due to residing away from home (home sickness), nervous breakdown before or during viva and fear of failure in exam was more in girls as compared to boys; which is in contradiction with the findings of Shah C and Supe AN who did not find differences in the perceived stress on the basis of the gender^{1,3}. This shows that girls were more emotional than boys. Similar findings were reported by other authors.^{11,12} Only 20% students had stress due to ragging which was very less as compare to other factors. This may be the result of anti ragging committee in college and strict Government regulation related to ragging. Academic fee and monthly expenses were a major stress factor in this private college under economic category.

Talking to friends was the most common stress relieving factor in students. Similar findings were also reported by Mane AB et al and Nandi et al in their study on professional college students.^{13,14} Since adolescent age, students spent most of the time with friends and share their feeling with them. In hostel life, friends are playing role of family by providing social support. This was similar to the finding reported by other studies.^{15,16} 53.5 % students called at home and 45.0 % went to home to manage the stress. Going for movie is an all time stress relieving method for 50.7 %. Some students were playing or watching sport to manage the stress. Regular exercise can increase self-confidence, improve mood and lower the symptoms associated with mild depression and anxiety.

This can ease stress levels and give one a sense of command over one's body and your life. But the students in this study preferred physical exercise less as coping method which is in contrast to the findings of Shah C et al¹. The least preferred ways to manage the stress was addiction. This is good thing that students were not much addicted to tobacco or alcohol or they may not be revealed correct information. Very few students taking help from teacher or senior to manage stress. Individual as well as organizational interventions should be targeted to prevent excessive stress and burnout among medical students.

CONCLUSIONS

The present study has identified that a high level of perceived stress is present among the medical students. Academic factors and course material of MBBS are greater perceived cause of stress in students at this medical college. However stress is not stressor or trait specific. It is also dependent on personal ways of coping strategy and social support as noted in the study that they used several different mechanisms for coping with stress.

RECOMMENDATIONS

The college administration should incorporate stress management plans as a co-curricular activity since stress has detrimental effects both on the health as well as the academic performance of the students. The stressors at the campus should be identified, discussed with, and proper coping assistance should be provided to individual students.

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