A Study of Etiology and Presentation of Stress among Medical Students

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Stress is recognized as a significant health problem. Although we normally expect doctors and other professionals to have periods of stress, we normally do not recognize that students whether in schools or in a college can also have anxiety and stress. Various studies have been conducted throughout the world to assess the perceived level of stress among medical students^{1,2,3,4,5} The purpose of this study was to identify symptoms of stress amongst medical students including an insight in its etiology and measures taken by the affected to combat with it. Key words: Stress, medical students, psychological symptoms, physical symptoms

A questionnaire was distributed among medical students of King Edward Medical College, Lahore. This was done on a random basis and a total of one hundred questionnaires were handed over. Mainly it contained questions with a choice of answers but a few questions gave the respondents an opportunity to express themselves subjectively. Most students returned the questionnaires within an hour of distribution(63 out of 90). Others responded within one day(10 out of 90) and two days(17 out of 90) respectively. Ten questionnaires were never returned.

Results

A total of 90 responses were studied. Out of these 43% students were 20 years old and 36% were 21 years old. Although in King Edward Medical College 60% students are females, during the study 58.4% responses were from male students while 45.1% responses were from female students.

Doctor	17	18.20%
Banker	2	2.10%
Pharmacist	1	1%
Lawyer	5	5.30%
Contractor	1	1%
Businessmen	12	12.90%
Architect	15	16.10%
Forces	3	3.20%
White Collar	5	5.30%
Agriculture	5	5.30%
Scientist	2	2.10%
Teacher	7 .	7.50%
Government Service	10	10.70%
Writer	1	1%
Auditor	2	2.00%
Jeweler	1	1%
Died	1	1%
NOS	3	3.20%

Looking at the family background it was discovered that students came from a wide spectrum of society. Mostly fathers were doctors (18.2%), architects (16.10%),

government employees (10%) and businessmen (12%).(Table-1) It was also discovered that 25% of mothers were working women, which is a significantly higher proportion than the average community.(Table-2)

Table-2 Mother's Occup	ation	
Working	26.30%	
Housewives	73.10%	



approximately 53.2 students admitted having psychological symptoms (Table-3) like mood changes, loss of interest and loss if concentration. 3% of students had suicidal thoughts. 35% students agreed that symptoms are present on at least weekly basis. 32% students experienced somatic symptoms like headache(26%), diarrhoea(15%), palpitations(13%) and epigastric dis comfort(13%)(Table-4)

Psychological Symptoms	%age
Feeling Of Worthlessness	8.9
Loss Of Interest	17.0
Appetite Changes	6.8
Suicidal Thoughts	3.1
Loss Of Energy	7.4
Mood Change	23.2
Decreased Concentration	12.4
Psychomotor Agitation	3.4
Sleep Disturbances	10.5
Aches & Pains	6.5
None	0.8%

Table-4

Physical Symptoms	%age
Palpitations	13.5
Diarrhoea	15.3
Hypertension	2.6
Irritation	11.7
Muscle spasms	9.1
Headache	26.2
Epigastric Discomfort	13.1
Sweating	8.2

The results also show that in most students (37%), the stressful symptoms started before they reached their 20th year. A significant finding was the stress of being a boarder as 47% experienced stress as they moved into the hostel.

Regarding the aetiology it was found that assessment and examinations were the most common cause (39.4%). Other main causes included stress induced by teachers (8.6%), friends/colleagues (8%) and college atmosphere (7.5%).(Table-5)

Table-5

Sources Of Stress	%age
Exams	39.4
Teachers	8.6
College Atmosphere	7.5
Career Apprehensions	6.5
Friends	8.0
Opposite Sex	6.5
Family	5.1
Pakistan's Future	6.8
Moving to Lahore	6.5
Economic Factors	4.1
In-laws	0.3
After life	0.3

On experiencing the symptoms of stress, 8.4% tried to avoid the stress inducing situation or used delaying tactics (6.2%), 32% resorted to religion and prayers, 21% tended to fall back on parents for support, 18% sought help from friends and 12.4% took medicines to get better. 90% of the students were not satisfied with the student-teacher relationship(Table-6) and agreed that they do need a counseling service to support them when under stress.

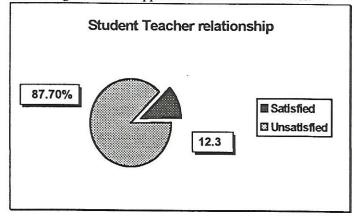


Table-6		
Satisfied	12.30%	
Unsatisfied	87.70%	

Discussion

As doctors we are trained to identify symptoms which lead us to diagnosis. Unfortunately, in psychiatry, symptoms of the mind, are not so easy to identify as in other branches of medicine. Different people come out with their feelings in different ways.

This study was primarily conducted to confirm that stress and anxiety effect medical students too. We were also keen to know about the reasons of the stress and the ways in which it is handled by medical students ..

Results suggest, as anticipated, that stress is very common among the medical students and it is appropriate to have some counseling service rather than denial and discouragement currently practiced by seniors and teachers4

Anticipating the need, we have already started counseling services for the students of King Edward Medical College, Lahore at the Academic Department of Psychiatry & Behavioural Science for the last one year. Adequately trained doctors provide this service and they are already seeing many students regularly. We hope to review the situation and the effect of this service once we have enough data collection.

We admit that the number of students in our study is rather small but even then we have significant results. In a way this can be a preliminary study and we welcome further work on the issue by other Medical Colleges of Pakistan.

The results confirm that the main cause indeed is the examination but at the same time it tells us that studentteacher relationship is a major aggravating factor and every effort should be made to improve it. These results were similar to some earlier studies1

Many students believe and it is probably true that teachers pressurize students to increase their work performance and also show more authoritarian attitude, which still is deep rooted in our culture.

We need to remember that times are changing and with increasing pressures and competition of the ending millennium, suicidal tendencies are rising among the population in general. In 1997, a total of 313 patients presented to Mayo Hospital's causality department alone with suicidal attempts. In our study 3% students had suicidal thoughts and every effort should be put in to help the future healers in understanding the symptoms of stress and ways to deal with it effectively and safely.

References

Stress in medical students; Gaughran F; Dineen S; Dineen M; Cole M; Daly RJ: Ir Med J, 90(5):184-5 1997 Aug-Sep.

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- A preliminary study of stress levels among first year medical students at the University of Zimbabwe. Vaz RF; Mbajiorgu EF; Acuda SW ;Cent Afr J Med, 44(9):214-9 1998
- Predicting stress in first year medical students: a longitudinal study.Stewart SM; Betson C; Lam TH; Marshall IB; Lee PW; Wong CM ; Med Educ, 31(3):163-8 1997 May
- Analysis of stress levels among medical students, residents, and graduate students at four Canadian schools of medicine. Toews JA; Lockyer JM; Dobson DJ; Simpson E; Brownell AK; Brenneis F; MacPherson KM; Cohen GS; Acad Med, 72(11):997-1002 1997 Nov
- A longitudinal study of students' depression at one medical school.Rosal MC; Ockene IS; Ockene JK; Barrett SV; Ma Y; Hebert JR; Acad Med, 72(6):542-6 1997 Jun