

## (8) STRESS AUDIT OF STUDENTS OF DIFFERENT MEDICAL COLLEGES

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### ABSTRACT :

**INTRODUCTION :** Since Hans Seyle first described stress, physicians and scientists have been studying stress and various manifestations of it. In pursuit of happiness, man has tried to eliminate stress from his life, but in vain!!

**MATERIAL AND METHODS :** Based on symptoms and signs of stress, we devised a questionnaire to assess stress levels in participants. In present study we carried out stress audit of students of 1 MBBS (225 students) of a government medical college, located in a metropolitan city and 1 MBBS (150 students) of a government medical college located in a small city.

**RESULTS :** Comparative study of these gen y persons of a metropolis and a small city was done. It was found that metro medical students had higher stress levels.

**KEY WORDS :** Stress, Stress Audit, Stress Relief, Yog, metropolis.

**Our thanks** to Directorate Medical Education and Research, Government of Gujarat, Gandhinagar, for funding this research project. (2008 – 09). We thank Dean, B J Medical College, Ahmedabad and Dean, P D U Medical College, Rajkot; for permitting us to take up this study.

### INTRODUCTION

Stress is known to human being in different ways. Stress is defined as the feeling of being worried because of difficulties in ones life. (3). Stress is a state of mental or emotional strain. (4).

Stress in Physiology, is a state of physical, mental or emotional disturbance, in homeostasis. (1). Generally level of cortisol in blood is controlled by negative feed back mechanism or circadian rhythm. However plasma cortisol level rises sharply during stress and overcomes negative feed back mechanism. (2). Some persons respond more violently to stressors than others.

## MATERIAL AND METHODS

The study was carried out at Metropolitan Medical College, Ahmedabad and City Medical College. (in short Metro College and City College).

We made a questionnaire and asked the young students of I MBBS to reply the same. Their answers formed the basis of stress audit, we carried out. Students were taught about homeostasis and stress, as part of their syllabus. Prevalence of stress, methods of audit and the purpose, were explained to the students.

Frequency of getting angry, feeling tired, having quarrels, getting bored, losing belongings and eagerness to learn new skills: were assessed on grades 0 – 6. Stress related symptoms during examinations, prevalence of psycho somatic diseases in the family and death due to stress related events; each positive response was given score of 2. 'At ease with self' activities were given negative rating of -2 each. (Thus the highest score was  $6 \times 6 + 8 \times 3 - 2 \times 0 = 60$ .)

Data were entered in excel sheet and standard methods of statistics were used. The range of stress score was from -8 to +60.

The scores of more than 30 and less than 0, were considered extremes on higher and lower sides of the score. Since these scores were seen in a very few persons, these were excluded from the present study. Participants were divided into having scores of 0 – 6 (lower score = no stress), 8 – 14 (lower average = minimum stress), 16 – 22 (higher average = borderline stress) and 24 – 30 (higher score = more stress, in need of help).

## RESULTS

Students of metro medical college had stress score of 13.19 compared to 12.49 of city medical college. Girls of metro medical college had significantly high stress score (14.10) compared to (11.29) of girls of city medical college. (Table 1)

**Table 1 : Gender and stress score**

Gender	MBBS 1 metro MC	MBBS 1 City M C
Male no(%) st score	146 (065%) 12.86	088 (059%) 13.34
Female no(%) stress	079 (035%) 14.10	062 (041%) 11.29
Total no(%) stress	225 (100%) 13.19	150 (100%) 12.49

Students having highest and lowest score, in percentage terms were double in city medical college. (Table 2)

**Table 2 : Place of study and stress score**

Stress score	MBBS 1 metro MC	MBBS 1 City M C
Group Average	13.19	12.49
Highest Score	30 03 (01%)	30 03 (02%)
Lowest Score	00 03 (01%)	00 03 (02%)

Among different headings of stress score, metro medical students had higher stress scores on sub headings viz. getting tired, learning new skills, forgetfulness and psycho somatic disease in family. City medical college students scored high on anger, quarrel, boredom, exam related stress, stress relief activities and family-member's death due to psycho somatic ailments. (Table 3)

**Table 3 : Different and total stress score, in different cities**

Different scores	MBBS 1 metro MC	MBBS 1 City M C
Anger score	01.97	<b>02.07</b>
Tiredness score	<b>02.84</b>	02.28
Quarrel score	02.23	<b>02.47</b>
Boredom score	01.51	<b>01.53</b>
Skill set learn sc	<b>01.52</b>	00.84
Forgetfulness sc	<b>02.38</b>	<b>02.24</b>
Exam symptoms	01.42	<b>01.68</b>
Family Disease	<b>01.57</b>	01.40
Family Death	00.64	<b>00.81</b>
At Ease Activity	-02.90	<b>- 02.83</b>
<b>Total strs score</b>	<b>13.19</b>	12.49

(Dark figures show highest score, amongst different groups under study.)

Score range 08 – 14, was seen in 46 – 52 % of participants. This perhaps is the optimum score, viz. eu stress, which gives highest work efficiency. In the dis stress / de stress range of score 24 – 30, we had 07 – 09 % of participants in both the colleges. (Table 4)

**Table 4 : Stress score as per gender and city.**

stress score	<i>MBBS 1 metro total</i>	<i>MBBS 1 city total</i>
00 – 06	038(17%)	027(18%)
08 – 14	104(46%)	078(52%)
16 - 22	068(30%)	032(21%)
24 – 30	015(07%)	013(09%)
No (100%)	225	150
avg score	<b>13.19</b>	12.49

23% of city college girls, highest in the subgroups, occupied birth of stress score range 0 – 6(lower score = no stress). 42 – 52 % of youth had stress range 8 – 14(lower average = minimum stress). 17% of city college boys, lowest in the subgroups, had stress score range 16 – 22(higher average = borderline stress). City college girls had lowest stress score of 11.29, whereas metro college girls had highest stress score of 14.10, among the subgroups studied. (Table 5)

Table 5 : Stress levels as per gender and city.

stress score	<i>MBBS 1 metro male</i>	<i>MBBS 1 city male</i>	<i>MBBS 1 metro female</i>	<i>MBBS 1 city female</i>
00 – 06	27 ( 19%)	13 ( 15%)	11 ( 14%)	14 ( 23%)
08 – 14	71 ( 49%)	47 ( 53%)	33 ( 42%)	31 ( 50%)
16 - 22	40 ( 27%)	15 ( 17%)	28 ( 35%)	17 ( 27%)
24 – 30	08 ( 05%)	13 ( 15%)	07 ( 09%)	00
No (100%)	146	88	79	62
avg score	12.86	13.34	14.10	11.29

## DISCUSSION

Metro college students had higher stress score, compared to city college students. Metro college girls had highest stress score, amongst boys and girls of metro and city medical college.

Around 30 – 37 % students had stress higher than 16 and they needed training in de stress measures. The students were given guidance about various de stress measures.

## CONCLUSION

Medical students at metro medical college had higher stress than other students. This may be reflecting the life at megapolis and loneliness, in the ocean of people.

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