

## A Study of Stress and Sources of Stress among First Year Medical Students of Rangaraya Medical College, Kakinada

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### Abstract:

**Background:** Stress is an epidemic of 21st century.

Medical school environments in India are extremely stressful leading to suicidal attempts by the students. Most common sources of stress among medical students are fear of failure, vast amount of subject that has to be learnt and inability to cope up with high expectations of parents. It can lead to physical and psychological problems as well as poor academic performance.

**Aim:** The main aim of the present study is to know the prevalence of stress in first year MBBS students of Rangaraya medical college and to explore the sources of stress in these students.

**Study design and setting:** Cross sectional study on first year MBBS students of Rangaraya Medical College, Kakinada, AP.

**Methods & Materials:** Study included 130 first year MBBS students (53 males, 77 females) who were administered a Standardized Stress Questionnaire developed by ministry of social security, National solidarity and Reform institutions to identify the sources of stress which includes both academic and non academic problems.

**Statistical Analysis:** Data was analyzed manually by summing the scores and expressed as percentages and proportions.

**Results:** Our analysis showed that all males in the study group are having low level of stress whereas among females, 30(88.2%) are having low level of stress and 4 (11.8%) are having medium level of stress.

**Conclusion:** The results from our study showed that academic problems were greater sources of stress than non academic problems among the first year MBBS students of Rangaraya Medical College, Kakinada, AP.

**Keywords:** Stress, Medical Students, Academic, Non Academic problems;

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### I. Introduction

Stress is the body's reaction to any change that requires an adjustment or response. The body react to this changes with physical mental and emotional responses medical school environment are extremely stress leading to suicidal tendencies by the students an individual personality characteristics genetics and childhood experiences and trauma may also dictate there response to stress factors that is any environmental or personal event that causes stress chronic stress and lack of coping resources available or used by an individual often lead to development of psychological issues such as depression and suicidal tendencies. The autonomic nervous system and Hypothalamic-Pituitary-Adrenal Axis (HPA) are two major systems that respond to stress. Through this mechanism stress can alter memory functions, reward, Immune function and metabolism.

Taking this to consideration we have conducted this study among medical students to assess the stress and sources of stress. Research indicates the type of stressor whether it is acute or chronic and individual characteristics such as age and physical well being, before the onset stressor can combine to determine the effect of stress on an individual.

## II. Methodology

**Study Design** : Descriptive cross sectional study

**Study Period** : Month of April 2019

**Study Area** : First year MBBS students of Rangaraya Medical College. Kakinada, AP.

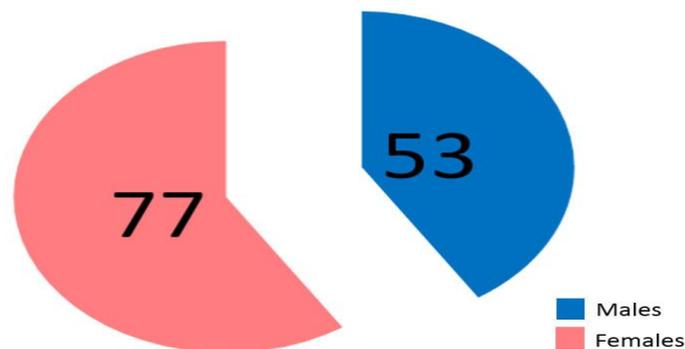
**Sample Size** : 130

**Study Tools** : A Standardised Stress Questionnaire for Students, developed by ministry of social security, National solidarity and Reform institutions is administered to first year MBBS students. Sources of stress were identified by asking the students to respond to individual statements which consist of items related to academic problems.

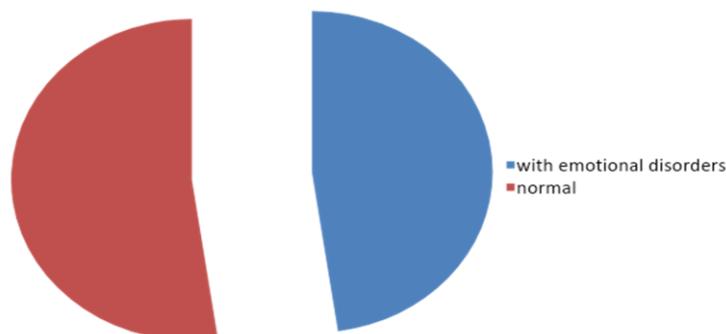
**Study Variables** : Stress, Medical Students, Academic, Non Academic problems. Data was analyzed manually by summing the scores and expressed as percentages and proportions. Students who were willing to participate were taken in this study

## III. Results

### Distribution of Students for Present study

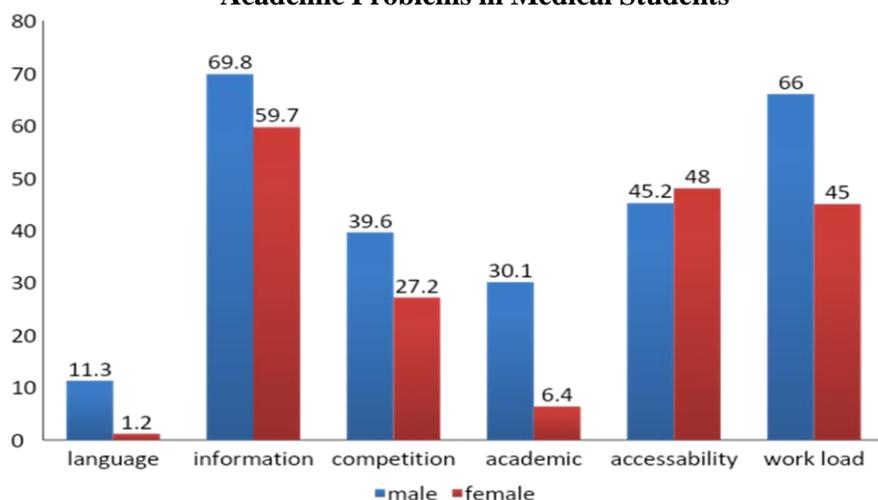


### proportion of students with emotional disorders

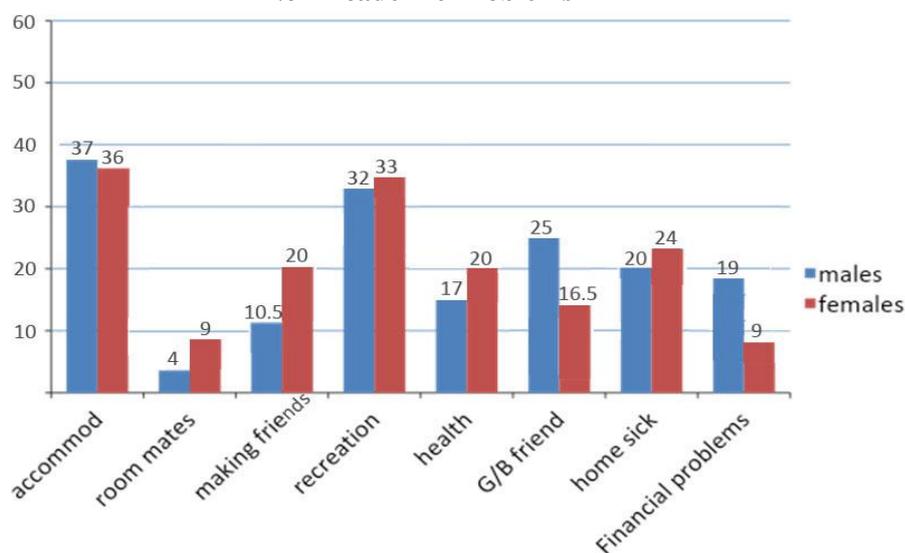


	With emotional disorders	Normal
Males	28(45%)	25(55%)
Females	34 (55%)	43(45%)
Total	62	68

**Academic Problems in Medical Students**



**Non Academic Problems**



#### IV. Discussion

As stress is inevitable in medical profession several studies have been done to know the prevalence and remedies to overcome the stress in medical students. In spite of this, incidences of suicide have been taking place in various medical colleges till today. Identifying the stress elements in medical students right from the first year of medical profession and imparting in them the ability to cope up the stress in the crucial period, right from the beginning is of utmost importance. Studies done by sani etal found that > 90% were stressed during their study period. Shahida etal, Supe and Sani etal also found high prevalence of stress in medical students 85%, 76.1% and 71.9% respectively. Sani etal noted female were more stressed 77% than males 64%, similarly Shahida etal found that females 55% more stressed then male students 45%, like wise Chauhan etal studies

showed that all students felt stress during exam time. Vast and difficult academic syllabus was most common stressor in 80% of students.

Our study included 77 females and 53 male students among them 28 (45%) of males had emotional stress and 25(55%) were normal. Females 34(55%) were with emotional disorders and 43(45%) were normal.

Among the academic problems work load which included vast syllabus and exams conducted in the class, compiling the information were major stressors. Non academic problems like accommodation, home sickness, friend ship between girls and boys and related problems were found to be significant.

Our study was consistent with the above mentioned studies.

**OTHER SOURCES OF STRESS:** Other sources are Difficulty in Time management, Difficulty in achieving their daily goals, High family expectations, Peer Pressure, Setting Priorities, Food Problems, Feeling Lonely, and Slow in understanding.

## V. Conclusion

The present study shows the prevalence of emotional disorders and sources of stress in first year MBBS students of First Year Medical Students, Academic problems were greater sources of stress than non academic problems. Some of the strategies that can be adopted to reduce students stress are

1. Modification of exam schedules and academic curriculum.
2. Interactive sessions should be conducted regularly.
3. Parents should be aware of their child activities.
4. Counselling of the stressful students by Mentors
5. Encouraging playing outdoor games regularly/to encourage physical fitness.
6. Recreational Activities.

The Newly introduced competency Based Medical Education (CBME), AETCOM (Attitude, Ethics and Communication) module, all over India by the MCI in the Under Graduate curriculum is being implemented for 1<sup>st</sup> year medical students from August 1<sup>st</sup> for 2019 – 20 batch.

The Revised teaching learning strategies if implemented properly would definitely help the student in developing healthy personality and would make learning easy and better and relieve the stress as much as possible. Further studies have to be done with the advent of newly introduced CBME under Graduate curriculum, hoping that the revised learning methods would stand the Test of time and reduce stress in Medical Students.

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