

A STUDY ON EFFECT OF STRESS ON ACADEMICS AMONG MEDICAL UNDERGRADUATES

Dr. Vundinty Sadanandham¹, Dr. Vundinty Vennela², Dr. V. Vignesh³

¹ Associate Professor, Department of Physiology, Government Medical College, Khammam, Telangana

² Assistant Professor, Department of General Medicine, Bhaarith Medical College and Hospital, Selaiyur, Chennai

³ Assistant Professor, Department of General Medicine, Bhaarith Medical College and Hospital, Selaiyur, Chennai

Corresponding Author

Dr. V. Vignesh

Assistant Professor, Department
of General Medicine, Bhaarith
Medical College and Hospital,
Selaiyur, Chennai

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ABSTRACT

Stress is understood as a state of physiological and psychological imbalance that results from the difference between an individual's capabilities and the demands of their situation. For young people, college is often regarded as the most enjoyable time of life. During their college years, students relish a healthy phase characterized by a lively environment, friendships, and preparation for adulthood. This period is marked by rapid changes in both physical and mental development. A cross-sectional study was carried out in January-February 2025 among 200 medical students at Government Medical College, Khammam, to investigate the impact of stress on medical students. The study revealed that academic stress was the leading cause of stress, followed by other stressors such as emotional stress, social stressors, intrapersonal and interpersonal stressors, and financial stressors. The majority of students in the study were found to experience mild to moderate stress.

KEYWORDS: Medical undergraduates, stressors, stress.

INTRODUCTION

Stress is characterized as a condition of mental or emotional strain or tension that arises from challenging or demanding situations. The medical curriculum is recognized as one of the most stressful and rigorous academic programs globally. In recent years, there have been significant revolutionary changes in the medical curriculum, including teaching and learning methods, alterations in the syllabus, such as the extensive amount of material to be mastered in a limited timeframe, anxiety over failure, the introduction of new examination formats like the EXIT exam, a lack of leisure time, financial difficulties, and intense competition among peers. All these factors may directly or indirectly influence the stress levels experienced by medical students. These changes are likely to have detrimental effects on the mental health of undergraduate students, which in turn can affect their academic performance. Recently, it has been noted that there is a rising trend of suicides among medical students in India. Numerous studies have been conducted in India to assess the levels of stress and the stressors affecting medical students. The present study aims to gather information regarding the sources of stress among medical students.

AIM AND OBJECTIVES

- To evaluate the extent of stress experienced by them.
- To propose strategies for alleviating stress.

- To identify the origins of stress.
- To analyse the differences in stress levels between boys and girls has been examined.

MATERIALS AND METHODS

Type of study: - Cross sectional observational study

Duration of study:- 1 month (January 1st to February 1st, 2025).

Study setting:- Government Medical College, Khammam.

Study population:- Undergraduate Medical students.

Inclusion criteria: Medical undergraduates who were willing to participate in the study and who gave informed consent.

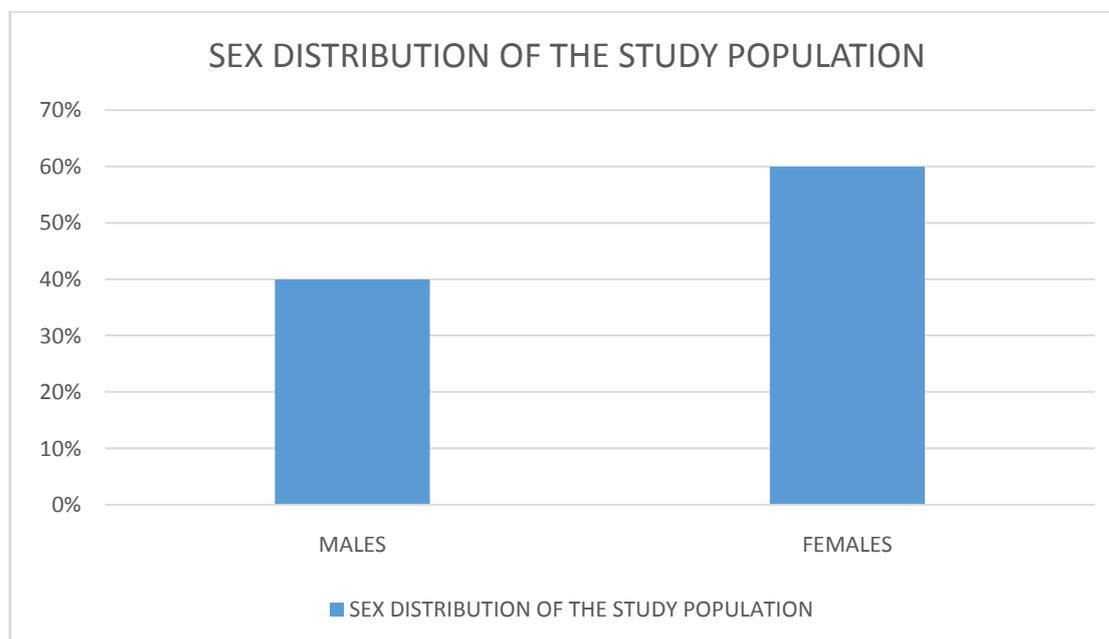
Exclusion criteria:- Students who haven't given their concern were excluded.

RESULTS:

TABLE 1: SEX DISTRIBUTION OF THE STUDY POPULATION

SEX	NUMBER	PERCENTAGE
MALES	80	40%
FEMALES	120	60%

The basic data analysis of selected samples revealed that 40% are males and 60% are females. The mean age of students in the study was 20.35 years.

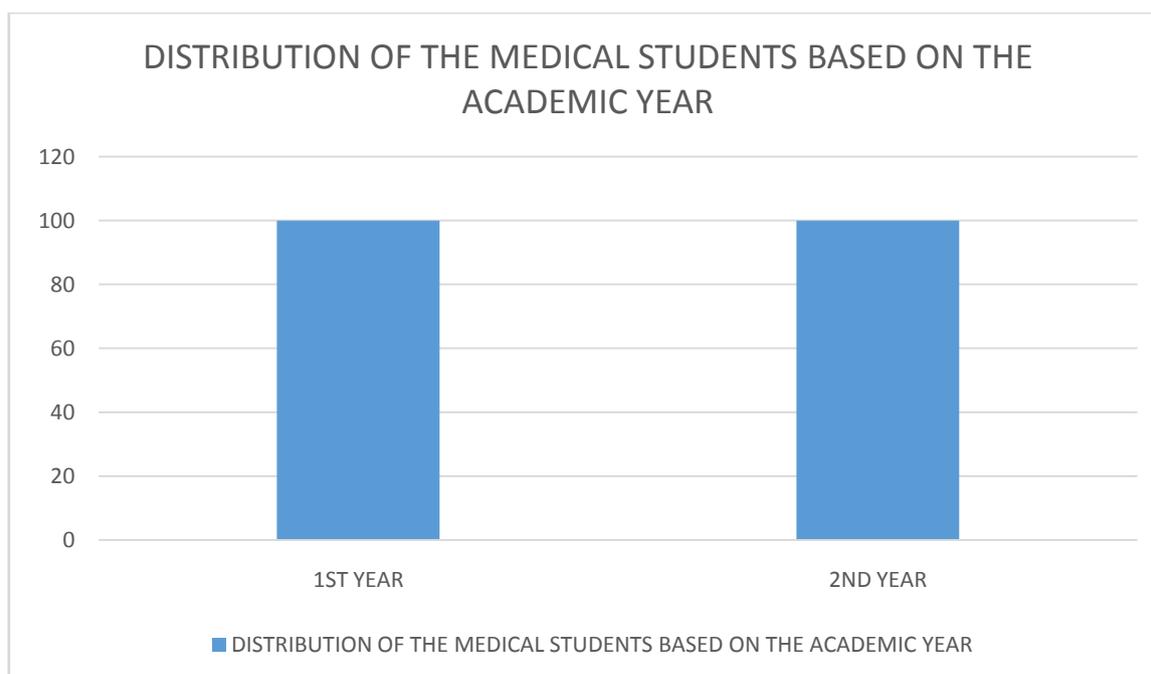


GRAPH 1 SEX DISTRIBUTION OF THE STUDY POPULATION

TABLE 2: DISTRIBUTION OF MEDICAL STUDENTS BASED ON ACADEMIC YEAR

ACADEMIC YEAR	NUMBER	PERCENTAGE
1 ST YEAR	100	50%
2 ND YEAR	100	50%

There was no significant distribution of students based on the academic year.



GRAPH 2: DISTRIBUTION OF MEDICAL STUDENTS BASED ON ACADEMIC YEAR

TABLE 3: DISTRIBUTION OF THE MEDICAL UNDERGRADUATES BASED ON SOURCES OF THE STRESS

SOURCE OF STRESS	FEMALES	MALES
ACADEMIC STRESS	82.5%	72.45
SOCIAL STRESS	16%	20%
FAMILY STRESS	63%	55%
EMOTIONAL STRESS	45%	24%
INTRA&INTERPERSONAL STRESS	10.52%	7.65%
TEACHING AND LEARNIMNG RELAYTED STRESS	72.5%	67%
FINANCIAL STRESS	34%	22.71%

DISCUSSION

ACADEMIC STRESSORS: 82.51 % (table-3) of female students responded that main cause of stress as academic activities. Only 72.45 % (table-3) of male students stated that the main cause of stress as academic factors. Vast subject, high expectations from parent's professors and self as the main cause of stress for students studying in medical colleges. Exams, burden of learning, lack of time for revision, big range of syllabus are the contributing factors for academic related stress in medical students. **SOCIAL STRESSORS:** Stress occurs depending on the social environment of individual. High competition among peers is one of the cause. Only 20 % (table-3) of males and 16% (table-3) females considered social factors as one of the causes for stress among them. **FAMILY FACTORS :** Most of the students come from background where family members are not in field of medicine, therefore the lack of support from family members is considered as one of the causes of stress in 55% males and 63% females (table-3) **EMOTIONAL FACTORS:** Emotional factors is considered to be one of the major cause of stress among students . Lack of confidence about oneself, anxious and having no one to share with is considered as a cause of stress in 24% (table-3) male and 45% (table-3) female students. **INTRA AND INTERPERSONAL STRESS:** This is least contributing factor for stress because the interaction among students after college hours was less. Of the total participants in the study only 7.65% (table-3) male students and 10.52% (table-3) female students reported of having intra and interpersonal stress. **TEACHING AND LEARNING RELATED STRESS:** Changed curriculum by MCI, introduction of

new teaching learning methods, increased burden on student centered learning, lack of recognition of work done by students, lack of skilled teacher to teach the subject in effective way were considered as important factors 72.5% (table-3) female and 67% (table-3) male students reported to have teaching and learning related stress accounting for second most common cause of stress among medical students. FINANCIAL FACTORS: No proper financial support for students from their families, parents control on money spent, lack of sufficient funds for personal expenses. About only 22.71% (table-3) of males and 34% (table-3) of females were not having a good financial background to support their studies. DISCUSSION: In a study conducted by Navas et al; the female students had reported higher stress compared with their male peers [2], in my present study also female medicos has higher stress levels than males showing consistency in between both studies. But this is in contrary to a study conducted by Johari et al; on Malaysian medical students revealed that academic stress were more common in male medical students compared to females, [5]. Inter personal and intrapersonal stress ranked second after academic related stress in a study conducted by Panchu et al; [3], but in our study a very less percentage of students suffered from interpersonal and intrapersonal stress. In our present study teaching and learning related stress ranked second after academic stress. This is similar to observations in the study conducted by Garg et al; [2]. Family factors, financial factors, social factors were similar to studies conducted by other factors [1-8].

CONCLUSION

Most medical undergraduates experience moderate to high levels of stress. The increasing expectations, extensive subject matter, lack of organized revision, inadequate skills, and heavy workloads contribute significantly to the academic stress faced by medical students, which in turn affects their overall stress scores. Females tend to experience higher stress levels than their male counterparts. Once stress levels are recognized, appropriate stress management strategies should be implemented to alleviate academic stress, and other contributing factors should also be identified and addressed to a manageable extent to prevent stress-related issues. When an individual's stress is alleviated, both their mental and physical health improve, leading to an enhanced quality of life. This can be achieved by identifying stress levels through counseling sessions for students, monitoring their academic activities, fostering positive relationships among students, teachers, and parents, developing confidence and communication skills, and creating a supportive environment with strong student-teacher relationships for better classroom adjustment. Medical students should be introduced to various strategies such as spiritual development, diversity management, and decision-making in challenging situations to ensure a stress-free future for practitioners. Students are encouraged to seek support from family, friends, faculty, and seniors to effectively manage stress-related challenges.

CONFLICT OF INTEREST: NIL

FINANCIAL SUPPORT: NIL

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