Journal of Population Therapeutics & Clinical Pharmacology

RESEARCH ARTICLE
DOI: 10.53555/vaetr819

EXPLORING THE EFFECTS OF STRESS ON ACADEMIC PERFORMANCE IN ALLIED HEALTH SCIENCE STUDENTS RESIDING IN AND AROUND LUCKNOW

Dr. Sudhanshu Shekhar[1], Dr. Syed Tahseen Raza[2], Professor Abdusssalam[3], Professor Seema Singh[4*]

[1]Tutor, Physiology Department , Era's Lucknow Medical College and Hospital , Era University, LKO .Sudhanshushekhar3011@gmail.com,7240800898
[2]Assistant Professor, Physiology Department, Era's Lucknow Medical College and Hospital Era University, drtahseenraza1@gmail.com,9415584029
[3]Physiology Department, Era's Lucknow Medical College and Hospital. Era University, dr.abdussalam2006@gmail.com, 8090269713
[4*]Head, Physiology Department, Era's Lucknow Medical College and Hospital, Era University drseemasingh2013@gmail.com, 9451993425

***Corresponding author**- Professor Seema Singh
*Head, Physiology Department, Era's Lucknow Medical College and Hospital, Era University drseemasingh2013@gmail.com, 9451993425

ABSTRACT

Introduction: Stress is a normal reaction to everyday pressures, but can become unhealthy when it upsets your day- to-day functioning. Stress and Emotional disturbances at college are relatively common. Students face different kind of stress like pressure of academic, unpredictable future and difficulties of integrating in system which have impact on academic performance.

Material and Method: This was a cross-sectional study conducted on undergraduate Allied Health Science Students of age 18-25 years in and around Lucknow city in the month of January 2024. Data was collected with the help of self-administered questionnaire (PSS-10), one week before semester exam.

Aim and Objective: Aim of this study was to observe stress on Allied Health Sciences Students and its impact on Academic performance.

Objective of this study was to compare stress among males and females and to determine the relationship between Allied health science students academic performance with the stress.

Result: Out of 50 students 43 subjects completed the questionnaire in which 21 male and 22 female students were present. According to stress grading, 60.5% had moderate stress, Association of gender with stress showed p=0.974 i.e. no statically significant. Association of Attendance with stress shows p=0.282, Association of marks percentage with stress revealed p=0.034 and correlation of PSS with marks percentage and attendance among male and female showed negative correlation.

Conclusion: Distribution of subjects according to Stress Grading highlights that a significant portion of participants are dealing with moderate to severe stress levels. Stress grades and their impact on academic performance shows statistically significant difference across different stress levels

INTRODUCTION

Homeostasis is currently defined, as a self-regulating process by which biological system maintain stability while adjusting to changing external conditions. This concept explains how an organism can maintain more or less constant internal condition that allow it to adapt and to survive in the face of changing and often hostile external environment.[1]

According to WHO, Health is a state of complete physical, mental and social well-being and not merely absence of disease or infirmity.[2]

Effect on Mental health leads to different psychological disorders such as Stress.[3]

The term stress was employed by Hans Selye, 1936 as the how body react to any demand while "Stressors" are the demand and pressure which cause stress.[4]

WHO defined Stress as a state of worry or mental tension caused by a difficult situation. Stress is a natural human response that prompts us to address challenges and threats in our lives. Everyone experiences stress to some degree. The way we respond to stress however, makes a big difference to our overall well-being.[5]

According to UNICEF, Stress is a common feeling we get when we feel under pressure, overwhelmed or unable to cope. Small amount of stress is good for us and motivate us to achieve goals but too much of it, especially when it feels out of control can negatively impact our mood, physical and mental well-being and relationship.[6]

Stress is defined both as “cause”-a threat, real or implied, to the psychological or physiological integrity of an individual; and “effect”-a response of the body to any demand placed on it.[7]

According to American Psychological association Stress is a normal reaction to everyday pressures, but can become unhealthy when it upsets your day-to-day functioning. It affects nearly every system of the body, influencing how people feel and behave. By causing mind-body changes and it also reduces the quality of life.[8]

Everyone suffers from stress due to a shift from traditional to modern lifestyle. It is experienced as a negative emotional state, resulting from increase demand on body and due to this increase in demand, body reacts to the changes which requires a physical, mental or emotional adjustment to overcome it.[9,10]

Increase in prevalence of psychological problems like depression, anxiety, substance abuse and suicide ideation is seen when excessive stress overcome the body adjustment. The general characteristic of distress is being over aroused, tense or unable to relax, touchy, easily upset or annoyed and demonstrating intolerance of any interpretation or delay.[11]

As it is sum of physical mental and emotional strain or tension on a person. So, it may either increase or decrease one’s performance.[12,13]

When it is taken as positively, it enhances one’s performance known as Eustress, which triggers the body alarm and enhances attention, performance and creativity. It has temporary effect only. Whereas Distress has negative effect on body, impairing persons physical and mental well-being and leads to decrease in productivity.[14]

Distress related disorder is very common worldwide it is responsible for about one- third year lost due to disability caused by illness related to it. Therefore, consciousness alertness regarding mental health and health related disorder have increase worldwide.[15]

The majority of stressors can be categorized into three main areas including academic pressure, social issues, and financial problems.[16]

Therefore, it's necessary for educator and facilitator to know the prevalence of psychological distress and psychological well-being among students. If impact of stressors is taken as part of challenge in life and find a way to deal with it stress fades away and gone when he\she gets over it.[17,18] As it is unavoidable part of life having impact on wide range of group of people irrespective of age, gender, educational status and socio-economic status.[19]

The lifetime prevalence of depression, anxiety, and stress among adolescents and young adults

around the world is currently estimated to range from 5% to 70%.[20]
And this effect may from social, environmental, physical and family problem which affects their learning ability and academic performance.[21]
Academic stress may lead to reduced or compromised performance for students, previous research has found that greater academic stress is associated with lower grades and student burnout and is negatively associates with academic achievement.[22]
Academic stress is specifically related to the learning environment; therefore, the measurement scale with which to evaluate this stress is different from the evaluation of general stress.[23]
Few students are more likely to suffer from stress specially first year student because of sudden change in their life like academics changes as they enter in college and also many students stay away from family for first time.[24]
Educational and academic stress, pressure from parents, career concern at young age, uncertainty of future, bullying etc. are some factors leads to suicidal tendency in students.
According to the (NATIONAL CRIME RECORDS BUREAU) NCRB'S 8.2% students report death by suicide in India, and According to Lancet report, suicide rates in India are highest in 15–29-year age group population, Data from 2015 National youth risk behavior survey (YBRS) show that students with higher academic grade are less likely to consider or attempt suicide compared to students with lower grade.[25]
The Perceived stress scale is considered to be popular tools for measuring psychological stress. It's a self-reported questionnaire which was designed to measure the degree to which individual's appraise situations in their lives as stressful. There are 3 versions of PSS, that is 14-item scale (PSS-14), 10-item scale (PSS-10) rated on 5-point Likert scale and 4 item scale (PSS-4**).** [26]
The items designed in scale to tap how unpredictable, uncontrollable and overloaded respondents find their lives, the questions in the PSS ask about feelings and thoughts during last month.[27]
PSS evaluate the degree to which external demands appear to be higher than individual's perceived capability to handle the situation. Confirmatory factor analysis (CFA) suggest that PSS-10 had two-dimensional structure and Principal component analysis (PCA) approved the presence of two dimensions of PSS-10 and studied have approved the 2-factor model is most suitable to assess the perceived stress among students.[28]
PSS-10 Possess Superior Psychometric Properties, Therefore PSS-10 is used in this study to assess stress among allied health Science Students.[29,30]
As psychological disorders are thought to be among the top leading causes of disability in the future, research on its effects and association among those who are supposed to be future professional mental and health providers would be useful. Therefore the present study was conducted among Allied undergraduate students to asses the effect of stress on their academic performance.

AIM

To observe Stress on Allied Health Sciences Students and its impact on Academic performance.

OBJECTIVE

- To assess the level of stress among Allied health science students.
- To compare stress among males and females.
- To determine the relationship between allied health science students academic performance with the stress.

MATERIAL AND METHOD

Sample size calculation:

Sample size is calculated on the basis of variations in stress score using formula by using Mother article. (Ref.) Abhishek Singh et.al. 2013. A descriptive study of perceived stress among north Indian nursing undergratuate.[17]

METHODS

This was a cross-sectional study conducted on undergraduate Allied Health Science Students of age 18-25 years in and around Lucknow city in the month of January 2024. Duration of study was 6 months (August to January) and Simple random sampling technique was used to select students currently studying in college & was given Pretested self- administered questionnaire and requested to fill questionnaire one week before the semester exam. Stress among students was measured with the help of Perceived stress scale (PSS). The PSS-10 estimate useful components of stress by evaluating how uncontrollable, over-burdened and unpredictable individual find their life in last one month. The PSS-10 wants to know about thinking and attitude over the last month using a response scale from 0 (never) to 4 (very often). Scale yield low score indicates low stress level and high score indicates high level of stress. Interpretation of collected data was done by using appropriate statistical method and now the impact of Stress Score on academic performance of students is seen.

STUDY PARTICIPANTS

Inclusion criteria

- Age group 18-25 years.
- Included both the genders that is male and female.
- Those who were willing to participate and healthy.

Exclusion criteria

- Age below 18 and above 25 years.
- Subject diagnosed for mental disorders, Diabetes mellitus, Tuberculosis, Hypertension and any other chronic disease or on chronic medication.
- Pregnant females.
- Subject who underwent surgical procedure in recent past time.

Number of group to be studied: Single group, age matched male and female group

Scoring

PSS Scores are obtained by reversing response (e.g. 0=4, 1=3, 2=2, 3=1 & 4=0) of the Four Positively stated items (4,5,7 & 8) and then summing across all the scale items.

- 0-13 would be considered low stress.
- 14-26 would be considered moderate stress.
- 27-40 would be considered high stres

Results

Table 1. Distribution of Subjects according to Stress Grading (n=43)

Stress Grading	No.	%
Mild	13	30.2%
Moderate	26	60.5%
Severe	4	9.3%

The stress grading among the subjects indicates varying levels of stress experienced. Out of the total, 13 subjects, accounting for 30.2%, reported mild stress. A majority of 26 subjects, representing 60.5%, experienced moderate stress. Meanwhile, 4 subjects, or 9.3%, reported severe stress. This distribution highlights that a significant portion of the subjects are dealing with moderate to severe stress levels, suggesting the need for targeted stress management interventions.

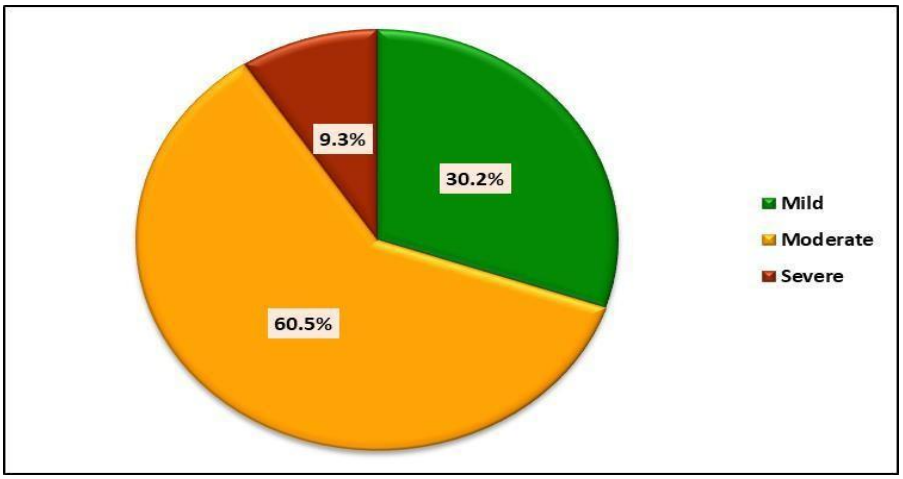


Table 2: Association of Gender with Stress (n=43)

Stress	Male		Female	
	No.	%	No.	%
Mild	6	28.6%	7	31.8%
Moderate	13	61.9%	13	59.1%
Severe	2	9.5%	2	9.1%
Significance	chi sq=0.05, p=0.974			

The distribution of stress levels among males and females was analyzed, revealing similar patterns. Among males, 6 individuals (28.6%) experienced mild stress, 13 individuals (61.9%) experienced moderate stress, and 2 individuals (9.5%) experienced severe stress. Similarly, among females, 7 individuals (31.8%) experienced mild stress, 13 individuals (59.1%) experienced moderate stress, and 2 individuals (9.1%) experienced severe stress. Statistical analysis using a chi-square test showed no significant difference in stress levels between males and females (chi-square = 0.05, p = 0.974), indicating that stress levels were comparably distributed across genders.

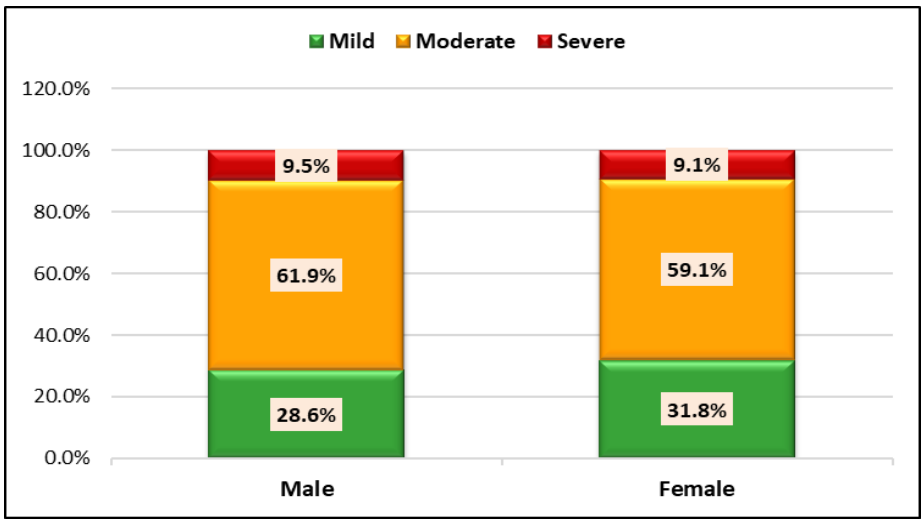


Table 3: Association of Attendance with Stress

Group	Stress Grade PSS	Attendance (%)	ANOVA	
Overall	Mild	81.5%	F-value	p-value
	Moderate	78.7%	1.31	0.282
	Severe	74%		

The analysis of stress grades and attendance percentages using ANOVA reveals that there is no statistically significant difference in attendance based on stress levels. The mean attendance for those with mild stress is 81.5% with a standard deviation of 7.7%, while those with moderate stress have a mean attendance of 78.7% with a standard deviation of 8.9%. Individuals experiencing severe stress show a mean attendance of 74.0% with a standard deviation of 6.7%. The F-value of 1.31 and a p-value of 0.282 indicate that the differences in attendance percentages across these stress levels are not statistically significant.

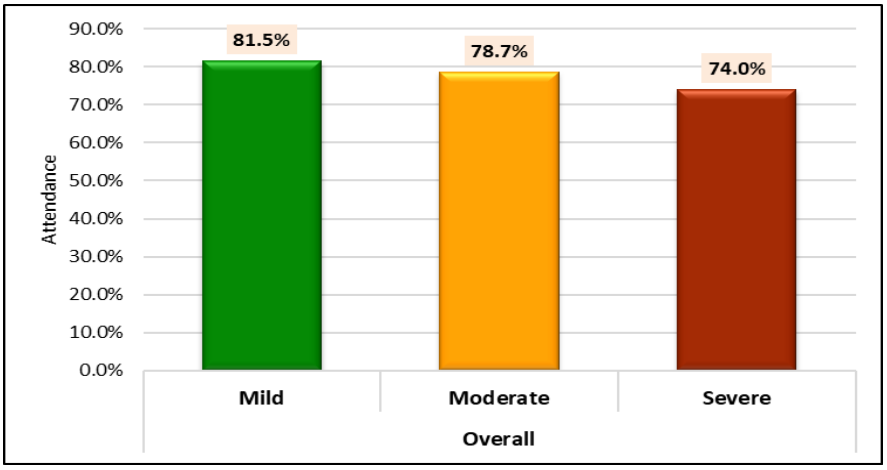


Table 4: Association of Marks (%) with Stress

Group	Stress grade	Marks%		ANOVA	
Overall		Mean	SD	F-value	P-value
	Mild	66.1	5.1	3.70	0.034
	Moderate	61.7	6.7		
	Severe	57.7	4.1		

The analysis of stress grades and their impact on academic performance, as measured by marks, reveals a statistically significant difference across different stress levels. The mean marks for those experiencing mild stress are 66.1% with a standard deviation of 5.1%. For those with moderate stress, the mean marks drop to 61.7% with a standard deviation of 6.7%. Individuals with severe stress have the lowest mean marks at 57.7%, with a standard deviation of 4.1%. The ANOVA results show an F-value of 3.70 and a p-value of 0.034, indicating that the differences in academic performance across these stress levels are statistically significant.

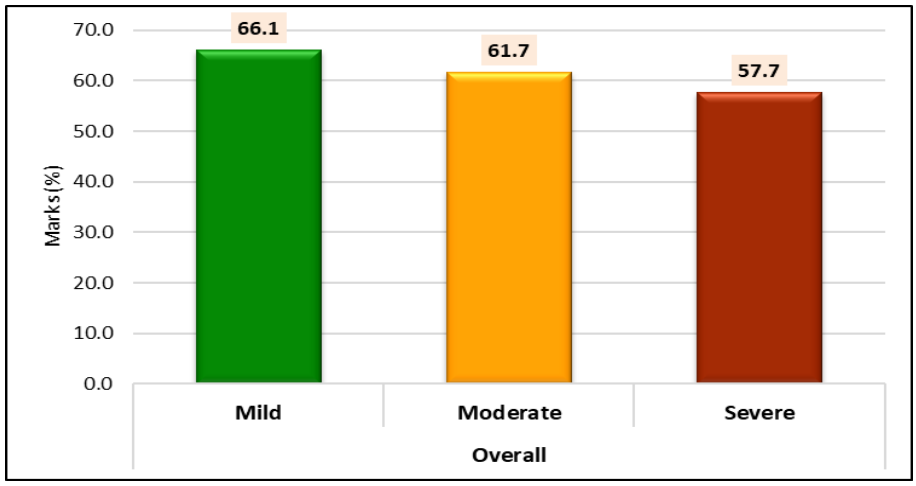
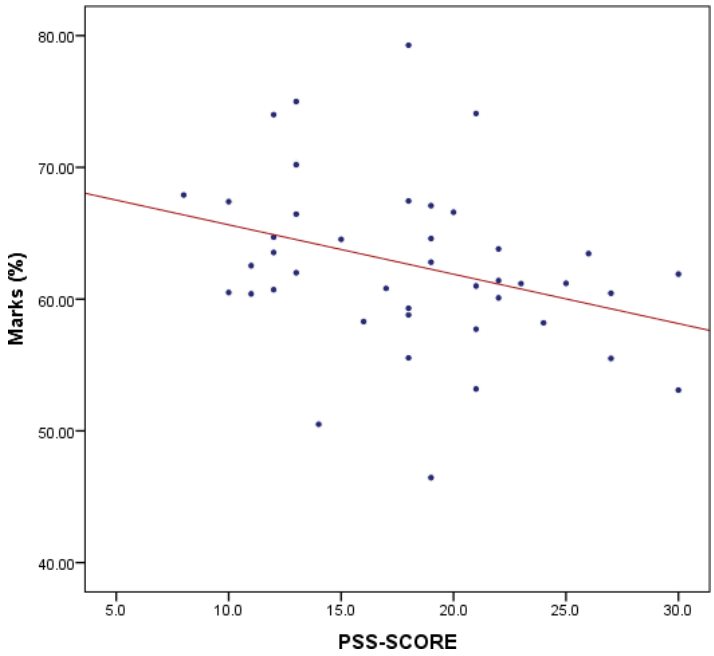


Table 5: Correlation of Attendance and Marks (%) with PSS Score

Correlation with PSS Score	overall		Male		Female		Course: Brit		Course: B.OPT	
	r-value	p-value	r-value	p-value	r-value	p-value	r-value	p-value	r-value	p-value
Attendance	-.291	.059	-.388	.082	-.208	.353	-.324	.106	-.082	.755
Marks (%)	-.327	**.032**	-.347	.123	-.307	.165	-.369	.064	-.361	.155

The correlation between Perceived Stress Scale (PSS) scores and various factors such as attendance and academic performance (marks %) was examined across different demographic groups and courses. For the overall group, a negative correlation was observed between PSS scores and both attendance ($r = -0.291$, $p = 0.059$) and marks % ($r = -0.327$, $p = 0.032$), indicating that higher stress levels were associated with lower attendance and academic performance.

When considering gender, similar negative correlations were found for both males and females between PSS scores and attendance, with r-values of -0.388 ($p = 0.082$) for males and -0.208 ($p = 0.353$) for females. Likewise, negative correlations were observed between PSS scores and marks %, with r-values of -0.347 ($p = 0.123$) for males and -0.307 ($p = 0.165$) for females, though the correlations were not statistically significant for females.



Discussion

The Stress grading among the subject indicates varying levels of stress experienced, out of total, 13 (30.2%) shows mild stress, 26 (60.5%) shows moderate stress and 4 (9.3%) shows severe stress, this pattern tells that significant portion have moderate to severe stress. **(Table1).** Similar findings were seen in study by Vivek B. et. al, in 2013 his study also had significant portion of students who were suffering from moderate to severe stress.[11] And In study of Maram M. Al-Shahrani et. al, in 2023, Reported prevalence of moderate to severe stress in medical students is 85.5%.[23]

The distribution of stress levels among male and female was analyzed, among male, 6 (28.6%) experienced mild stress, 13 (61.9%) experienced moderate stress and 2 (9.5%) experienced severe stress and in females 7 (31.8%) shows mild stress, 13 (59.1%) moderate stress and 2 (9.1) experienced severe stress. Statistical analysis using (chi-square = 0.05, p = 0.974) indicating that stress levels were comparably distributed across genders. **(Table 2).**

Similar findings were shown by study of Saurabh kumar sharma et.al, in 2024 that stress level of male and female students in the school of Allied health science were not significantly different.[24]

And another study conducted by Dr mohammad Haneef in 2018 found male had overall more stress as compared to female.[33] Contrary to study conducted by Adel-hady-EI- Gilay in 2010 that show female had higher level of stress than male.[21]

The analysis of stress grades and attendance percentages reveals that there is no statistically significant difference in attendance based on stress levels. The mean attendance for those with mild stress is 81.5% with a standard deviation of 7.7%, while those with moderate stress have a mean attendance of 78.7% with a standard deviation of 8.9%. Individuals experiencing severe stress show a mean attendance of 74.0% with a standard deviation of 6.7%, and results shows (F-value =1.31 and p-value = 0.282) indicate that the differences in attendance percentages across these stress levels are not statistically significant. **(Table 3).** Study conducted by Teanna Totten in year 2023 found 75% students said that they have experienced mental health issues such as stress, anxiety & depression which makes them to skip classes.[34]

Analysis of impact of stress on academic performance on students reveals a statistically significant difference across different stress levels, Mean marks (%) for Mild stress are 66.1% with a standard deviation of 5.1, for Moderate stress is 66.7 % with standard deviation of 6.7 and for Severe it is 57.7% with standard deviation of 4.1 with p-value of 0.034 shows difference in academic performance across these stress levels are statistically significant. **(Table 4).** Findings from the study of Dr. Smriti singh et. al, in 2017 also reveals that as stress increase there is decrease in academic performance.[15]

The correlation between Perceived stress scale (PSS) scores and various factors such as attendance and academic performance (marks %) shows a negative correlation between PSS scores and both attendance ($r = -0.291$, $p = 0.059$) and marks % ($r = -0.327$, $p = 0.032$), indicating higher stress levels were associated with lower attendance and academic performance**.**

When considering correlation between PSS score and academic performance (i.e, Attendance and Marks %), we get negative correlation with ($r = -0.388$, $p = 0.082$) for attendance & correlation between PSS score with marks % show ($r = -0.347$, $p= 0.123$) in case of males.

And when considering correlation between PSS score and academic performance (i.e, Attendance and Marks %). we get negative correlation with ($r = -0.208$, $p = 0.353$) for attendance & correlation between PSS score with marks % show ($r = -0.307$, $p= 0.165$) in case of females. **(Table 5).**

Study conducted by Racha vyas et.al, in year 2023 found high academic stress was correlated with lower academic performace.[34] And one more study by Balkishan sharma et.al, in 2011 shows that the prevalence of perceived stress seems to be higher in medical students which tends to affect their academic performance.[10]

CONCLUSION

The Preset study was conducted to assess impact of stress on academic performance among Allied health science students in Era Lucknow Medical College & Hospital. A total of 43 participants fulfilling's the inclusion criteria were enrolled in the study after obtaining an informed consent. Participants of age group 18-25 years, of which female were 22 (51.2%) and male were 21 (48.8%)

Following findings lead to conclusion of the study:

1. Distribution of subjects according to Stress Grading highlights that a significant portion of participants are dealing with moderate to severe stress levels.
2. Association of Gender with Stress shows on Statistical analysis using a chi-square test showed no significant difference in stress levels between males and females (chi-square = 0.05, $p = 0.974$), indicating that stress levels were comparably distributed across genders.
3. Association of Attendance with stress shows reveals that there is no statistically significant difference with F- value = 1.31 and p-value = 0.282
4. Analysis of stress grades and their impact on academic performance shows statistically significant difference across different stress levels with F-value = 3.70 and p-value = 0.034
5. Correlation between Perceived Stress Scale (PSS) score and various factors such as attendance and academic performance (marks%) for overall groups shows negative correlation, PSS score with

attendance shows (r = - 0.291, p = 0.059) and PSS score with marks % (r = - 0.327, p = 0.032)
6. When considering gender, similar negative correlation were found for both males and females between PSS score and attendance (r = - 0.388, p = 0.082) for males and (r = - 0.208, p = 0.353) for females. Likewise, negative correlation were seen between PSS score and marks % with (r= - 0.347, p = 0.123) for male and (r = - 0.307, p = 0.165) for females.

The findings of present study indicate that burden of stress affects the academic performance among Allied health science students. Therefore, understanding the academic stress in early stage and implementing help and support system might effective to mitigate the burden of stress and prevents the future illness in the students.

However, the studyhas limitation due to its small sample size and short duration; hence further reseacrh with a larger sample size and extended study period is reccommended to validate and expand upon these findings

References

1. George E billman. Homeostasis. The Unappreciated and far too often Ignored Central Organizing Principle of Physiology. Frontiers in Physiology.2020;11:1-4
2. Syed vaqar ahmad shah, Kadir alam, sarif rajbhat, Amit kumar Gupta, Deependra Parasd Sarraf. Academic Stress among the Paramedical Science Students: A descriptive Cross sectional study. Dental journal of Indira Gandhi Institute of Medical sciences.2022;1(1):1-4
3. Yuwei dang.et.al. Family and Academic Stress and their impact on Students Depression level and Academic performance. Journal Frontiers in Psychiatry. 2022;13:1-13
4. Ananda Kumar M, Sudha M, Aravind Kumar R, Rajkumar. Prevalence of Stress among Paramedical Students in Cuddalore District.IAIM.2018;5(11):28-31
5. WHO.Stress.World Health Organization;2023https://www.who.int//news- room/questions-and-answers/item/stress/
6. UNICEF. Stress. https://www.unicef.org/parenting/mental-health/what-is-stress/
7. John E. Hall, Michael E. Hall. Guyton and Hall: Physiology of Stress. 14th Edition.Elsevier;2021
8. American Psychological Association.Stress;2018.https://dictionary.apa.org/stress
9. Sasidharan k rajesh, Judu v IIvarasu, T.m. Srinivasan, H. Nagendra in year 2014; Stress and its Expression According to Contemporary Science and Ancient Indian Wisdom: Perseverative Cognition and the *Pañca kośas.* Mens Sana Mongr 2014 Jan- Dec; 12(1): 139–152
10. Balkishan Sharma, Rajshekhar Wavare, Ajit Deshpande, Richa Nigam and Ramkrishna chandorkar in year 2011; Conducted a Study that is Academic Stress and its effect on Vital Parameters in final year Medical Students at SAIMS Medical College, Indore, MadhyaPradesh. Biomedical Research 2011;22 (3):361-365
11. Vivek B. et al in 2013; Stress among Professional college from an urban area in India in which he conducted study on students of Engineering, Medical and Dental. Sultan Qaboos Univ Med J.2013;13(3)
12. Krutarth R Brahmbhatt, Nadeera V P, Prasanna K S, Jayram S in year 2013; Conducted a study, Perceived stress and sources of stress among medical undergraduate in Private Medical College in Mangalore. International Journal of Biomedical and Advance Research 2013;4(2):128-136
13. Mukesh Kumar, Sachin Sharma, Subhi Gupta, Supriya Vaish, Rajesh Mishra in year 2014; Performed a study on Effect of stress on academic performance in medical students – A Cross-sectional study. Indian J of Physiol Pharmacol.2014;58(1):81-86
14. Sateesh B. C., Renuka Prithviraj, Siva Prakasham. A Study of Perceived Stress among Undergrduate Medical Students of a Private Medical College in Medical college in Tamilnadu.IJSR.2015;4(1):994-997
15. Dr. Smriti Singh, Dr. Barsika Katwal, Mr. Prem Prasad Pant. Assessment of Stress among Medical Undergraduate Students of Nepal Medical College & Teachingqweqewe334 Hospital (NMCTH).International Journal of Science and Healthcare

Research.2017;2(3):15-18
16. Farah Moayedi, Mohammad Mohajer Bastami, Faszilat Pour Ashouri, Hosein, Hamadiyan and Sepehr rakeshi in year 2016; Done a study Comparison of sources and severity of perceived stress between paramedical and medical students.ijmrhs2016;5(6):183-190
17. Abhishek singh et al A descriptive Study of Perceived Stress among the North Indian nursing undergraduate students Iranian Journal of Nursing and Midwifery Research2013;18(4):340-342
18. Habibah Elias, Wong Siew Ping, Maria Chong Abdullah Stress and Academic Achievement among undergraduate Students in University Putra Malaysia. Social and Behavioral Sciences.2011;646 – 655
19. Rais Ahmad, Dr. Priyanka Chaudhary, Dr. Rajawant Kaur Randhawa. A Study to assess the level of Stress among college Students in a selected Govt. college of Nursing, Srinagar, J&K, India.IJCRT.2021;9(5):i295-i307
20. Veena N, Shailaja Shastri. Stress and Academic Performance.IJIP.2016;3(3):71-81
21. Abdel-Handy EI-Gilani, Mostafa Amr. Perceived Stress among tomorrow's attorneys In Mansoura, Egypt.International Journal of collabarative Research on Internal Medicine & Public Health.2010;2(2):20-30
22. Antonio Crego, Maria Carillo-Diaz, Armfeild, Martin Romero. Stress and academic performance in dental students: The Role of coping strategies and examination-related self-efficacy. Journal of Dental Education. 2016;80(2):165-172
23. Maram M Al-Shahrani, Bushra S Alasmri, Reham M Al-Shahrani, Najwa M Al- Moalwi, Amar A Al Qahtani and Aesha F. Siddiqui. The Prevalence and Associated Factors of Academic Stress among Medical Students of King Khalid University: An Analytical Cross-Sectional Study.Healthcare.2023;2-16
24. Saurabh kumar Sharma, Shilpa Singh, Saurabh Sharma. Evaluating Stress among Undergraduate Students. Irjmets.2024;6(1):1096-1102
25. Aniza kb. Students Suicide in India.ijplm2023;1(7) 12-21
26. Eun-Hyun Lee, RN. Review of the Psychometric Evidence of the Perceived Stress Scale. Asian Nursing Research.2012;6":121-127
27. Sheldon Cohen. Perceived Stress Scale. Mind Garden.1994
28. Shahnawaz Anwar, Md Dilshad Manzar, Ahmad Alghadir, Mohammed Salahuddin, Uaise Adul Hammed. Psychometric analysis of the perceived stress scale among healthy university students. Neuropsychiatric Disease and Treatment.2020;16:2389- 2396
29. Andrew Denovan, Neil Dagnall, Katie Dhingra & Sarah Grogan. Evaluating the Perceived Stress scale among UK University Students: implications for stress measurement and management.Studies in Higher Education.2017:1-14
30. Medha Mathur et.al. Assessment of perceived stress and stressors among medical and dental undergraduate students.MRIMS Journal of Health Sciences.2019;7(4):111-117
31. Kumaripalayam Murugesan Priyadharshini, Neethu George, Dharmaraj Rock Britto, Sikkathambur Raveendran Nirmal , Muniyapillai Tamilarasan, Karthikeyan Kulothungan. Assessment of stress, Resilience and coping style among Medical Students and Effectiveness of intervention A Non Randomized control trial.Indian Joural of Commuity Medicie. 2021;46(4):735-738
32. Anbumalr C, Dorathy Agines P, Jaswanti V.P. Priya Dhandapani.Gender Differences in Perceived Stress Levels and Coping strategies among college students.International Journal of Indian Psychology.2017;4(4):22-33
33. Dr. Mohd Haneef kumar. Stress among college students in Jammu division.Bhartiyam International Journal of Education & Research.2018;7(2):33-49
34. Teanna Totten.Mental health issues are hurting Attendance.coursekey.2023
35. Robert Wood Jhonson Foundation.The Relationship between School attendance and Health.Health policy snapshot.2016.www.rwjf.org/healthpolicy.x
36. Siti Fatimah, Norliana Ahmad shah and Rohaiza Mohammad Idaris.Stress and its Relationship

with the academic performance of higher institution students. International journal of advanced research in education and society.2020;2(1):61-73
37. Muhammad Saqib and Kaleem Rehman.Impact opf stress on Students academic performance at secondary school levelat district Vehari.International Journal of learning and development.2108;8(1):84-92
38. Santosh kumar jha, P.S. Kudachi and S.S. Goudar.Perceived stress and academic performance among Medical students-A Cross Sectional study. IJABP.2012;1(1):123- 126
39. Rachana vyas, Sabu K J, Dr. Bobinder singh.The study on the relationship between Perceived academic Stress and academic performance among high school students in Urban in India.IJSDR.2023;8(11):751-753