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JCHR (2024) 14(3), 2036-2040 | ISSN:2251-6727



Stress Among College Students: A Survey Study in an Urban Municipality of Pune, Maharashtra, India.

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(Received: 04 February 2024 Revised: 11 March 2024 Accepted: 08 April 2024)

KEYWORDS

stress, psychological well-being,

academic vitality.

ABSTRACT:

Introduction: Stress, depression and anxiety are the most widely recognized mental issues affecting youth. It is necessary to investigate the burden and associated risk factors of these common mental disorders to combat them. Stress is the body's reaction changes with physical, mental, and emotional responses. The educational system becomes more specialized and tough in college and higher studies, and students become more likely to experience stress at this level. This might put them at risk of developing mental disorders such as stress, anxiety and depression. A cross-sectional study was conducted among 275 students in Pune.

Objectives: This study was carried out with the objective of estimating factors associated with stress among college students in an urban municipality of Pune, India.

Methods: A cross-sectional study was conducted among 275 students in Pune.

Results: The study involved 275 individuals with a mean age of 21.5. The results suggest that stress among students could serve as a basis for implementing preventive measures to minimize stress. The present study was designed considering the aforementioned stressors and potential difficult situations students are exposed to in their college life.

Conclusions: By addressing stress, we can potentially enhance both psychological and physical well-being among students.

Introduction

The World Health Organization focused on the key fact on mental health of adolescent that, globally, one in seven 10 to 19 year experiences a mental disorder, accounting for 13% of the global burden of disease in this age group. Depression, anxiety, and behavioral disorders are among the leading causes of disease and disability among adolescents. Suicide is the fourth leading cause of death among 15 to 29 year olds. The consequences of failing to address adolescents' mental health conditions extend to adulthood, affecting both physical and mental health and limiting opportunities to lead fulfilling lives as adults. Also According to a survey conducted in India in 2021, Published by A.

Minhas, 12 July 2023, about 86% of male respondents reported experiencing stress. This was significantly higher compared to women. About 14% of the female respondents reported experiencing stress in the same survey. And about 22% of the respondents reported financial stability as the main factor affecting their stress levels. Work and other uncertainties of the times were other important causes of stress for Indians [1],[2].

Stress is one of the main causes of disturbed mental health. Some people feel it once, and some feel it continuously. Stress is emotional or physical tension; several incidents in a person's life give negative emotions like anger, frustration, and nervousness, therefore developing stress. There is much more talk

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JCHR (2024) 14(3), 2036-2040 | ISSN:2251-6727



about tension and feeling stressed ^{[3],[4],[5]}.From puberty to mature social roles, such as employment and child rearing, there are physiological changes occurring. Biological changes occurred in the musculoskeletal, nervous, endocrine, integumentary, cardiovascular, respiratory, digestive, reproductive system of the body and also associated biochemical and hormonal processes. There is increased exposure to addiction such as alcohol consumption and smoking.

Stress affects metabolism, immune reaction, respiration, and other internal organs and behavioral changes [6].

Teens are Feels themselves always under pressure, afraid of face large changes in life, do not have much or any control, cannot control the outcome of a situation, do not have enough work activities, how many have expectations from the family and the competitive environment^[7].

There are different types of stress. a) Acute stress b) Episodic acute trace c) Chronic stress [8],[9],[10],[11].

Acute stress: It is the body's reaction to new or challenging situations in this field that you get from approaching deadlines. It is a short-term emotion, usually and the body returns to its normal state relatively soon.

Episodic acute stress: This stress is frequent. They are under continually tight work deadlines. These are experienced by some professional and workers. People don't have to take time to relax and calm down.

Chronic stress: This trace is the result of stress that shows for a long period. The stress feels never ending. They are difficult for patients to overcome.

College-going in between 17 and 24 years of the commonly experienced stress due to lack of time, good time management, increased responsibility, changes in daily schedule suck as sleeping habits and eating habits, and not taking enough breaks for self-care. Some tracer faithful time includes study for exam, completion of academic work as well as admission or internship, training to master degree^[12].

Apart from expectations from family, competition among classmates, relationships, and addiction are also two causes of depression. Breakup is difficult, especially when it comes as a shock. It is natural to go through many painful emotions. Chest pain is a sign of this. Romantic love can be like a drug, students are like each other because of hormonal changes in the body. Students are addicted to their romantic person, but after the problem in their life, they leave to each other and cause emotional and physical problem, such as anxiety. Emotional stress can also send out the rush of stress hormones that make you feel like having a heart attack, this is called broken heart syndrome. Therefore, they are most common among college students [13].

Teens may find some unhealthy way to manage stress. It is smoking, drinking alcohol, putting stress on others (physical violence, angry outbursts). To many pills are drugs to relax, withdraw from friends, family, and activities, over thinking, going to the Bathroom, eating unhealthy, nutrition, frustration, sleeping too much. Zoning out for some hours in front of the computer and TV, performing academic and personal competitions, subside [14],[15],[16],[17].

To fully understand stress for the college student and the physiology of the center nervous system, a complete understanding is needed. It is important to understand how stress affects the body. One central component is that as part of the body response, the stress comes down to the nervous system. The sympathetic parasympathetic nerve system work in conjugation or at the same time under life conditions therefore sympathetic and parasympathetic both have a balance between each other. That helps us function properly, however, under stressful conditions, they act differently and sympathetic which control how our body reacts, treat or behave it. This activates the 'fight or flight' response and shuts down the rest and digests function of the body. For those who have experienced chronic stress, the parasympathetic nervous system had a hard time reactivating and returning to normal. They go to the 'flight or fight' mode. The chemical glucocorticoid, epinephrine, and nor-epinephrine continued to be secreted, in the adrenal gland. They are chemicals present in our bodies. The body produces the chemical for too long and it can be damaging. High levels of stress have been associated with hippocampal atrophy and decreased hippocampus functioning. They also decrease memory and cognition. Adulteration of this type of brain matter and brain function is especially dangerous to young adults. Therefore, it is made to

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JCHR (2024) 14(3), 2036-2040 | ISSN:2251-6727



ensure that the student has a coping mechanism and then needs to process and manage the effect of their stress [17].

COVID-19 affected everyone at the global level. Previously, 100 years ago, this lockdown was implemented to fight with Spanish Flu. Now in this COVID-19 people are also feeling tired and anxious due to lockdown. Students face loss in their studies. All this things lead to a disturbance in their mental state. The conclusion of the study is that the students have a high stress level and that the stress level increased on days. Students are also using coping strategies like yoga, exercise and , diversion therapy such as spending time with family and watching television [18].

The hypothesis study of stress in teens may result in such a significant difference between the future stress of school and college students. Even their no significant difference exists in the academic pressure of teenagers in relation to the gender. There may also be some difference in the average stress related to home life and peer pressure. In some cases there is no difference between academic performance stress of school students and college students. The hypothesis of stress in the relationship between academic pressure and anxiety related to examination may have a degree of positive relationship. Even there may be no significant difference between financial stress of school and college students. There may be no significant difference in the parental pressure of adolescents in relation to gender.

The majority of hypothesis studies related to stress of students have a strong stress due to "Academic Pressure" mostly these stress are due to anxiety related to exams, teachers expectation from students ,parental pressure for study ,concern about career future ,pressure to make money ,not having enough time for fun. Some cases lack of freedom is also a reason for stress in teenagers [19][20].

Methods

This study used a cross-sectional survey design using a quantitative approach. It was an online survey conducted under the Pharmacology department of Abhinav Education society's college of pharmacy, Pune, Maharashtra. Using the Google Survey platform, a questionnaire link was distributed using the email id

and the app. The survey questionnaire included perceived stress—related questions. The target populations were the students aged 19 to 24 years in Pune district. All were college students with different educational background. 275responses were collected within one day of the survey. Statistical analyses were performed using one-way analysis of variance and Student's parametric t-test., including: mean (M), standard deviation (SD), numbers (n) and percentage (%).

Results

The survey was conducted to understand, factors which influence stress generation in students. A large check of 275 responding, 78.5% said that there was reduction in stress by yoga but they were unable to do it regular. 27.7% are stress due to relationship trouble. 32.1% are stressed due to growing competition. Many students are varied about their future prospects, which will lead to lots of anxiety and stress. This survey was conducted on the Google platform and has a positive result in terms of mental health and college going students. 35.8% responded treated nervousness in their life, lots of interest, lack of concentration, and performance also decreases. 32.1% of the responses feel sad unhappy & numb for no reason. 27% said they feel anxiety about life today. 53.3% clearly said they are happy in their life. This survey has certain limitations. The response rate for the survey was low, only 275 students. Students participated within a one day time period. All participants were undergraduate students, the survey was limited to those who had access to a smart phone device . However, considering the situation, and this was the best possible methodology to reach the students to understand the psychological impact. These limitations suggest that the findings may not be generalizable to all strata of society.

Discussion

According to the survey, students knew the risk of stress. Relationship issues are not a stressor for students. Our study indicates that students feel stressful, unable to overcome or tackle the problems in their life. The emotional situations, life-style change, new adaptations are becoming a major mental health problem in teenagers. Unhealthy foods, change in sleep cycle, and converted condition that can determine stress. The

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JCHR (2024) 14(3), 2036-2040 | ISSN:2251-6727



report shows that the probabilities of developing depression are associated with an unhealthy diet, sleep pattern, social networks, habit, lack of exercise, leading to stress. This survey, conclude that living healthy lifestyle is important than managing relationship with someone.

Data Availability

The quantitative data used to support the findings of this study are available upon request from the corresponding author.

Conflicts Of Interest

The authors declare that they have no competing interests.

Authors' Contributions

The first author designed the study and analyzed and interpreted data. The second author collected data, drafted the original manuscript. The 3rdand 4th author revised the manuscript. All authors read and approved the final manuscript.

Acknowledgments

The authors are very grateful to all college -age children who responded to the questionnaire. To all the students who participated in our study, we are very grateful to have worked with you.

Refrences

- Pearlin, L.I., Menaghan, E. G., Lieberman, M. A., & Mullan, J. T. The Stress Process. Journal of Health and Social Behavior, 1981; 22(4), 337–356.
- Yaribeygi H, Panahi Y, Sahraei H, Johnston TP, Sahebkar A. The Impact of Stress on body function: A review. EXCLI J. 2017;16:1057-1072.
- 3. Das J., Do Q.T Friedman J., McKenzie D., Scott K. Mental health and poverty in developing countries: revisiting the relationship. Soc. Sci. Med. 2007;65:467–480. doi: 10.1016/j.socscimed.2007.02.037. [PubMed] [CrossRef] [Google Scholar]
- de Kloet E.R., Jols M., Holmberg F. Stress and the brain: From adaptation to disease. Nat. Rev. Neurosci. 2005;6:463–475. doi: 10.1038/nrn1683. [PubMed] [CrossRef] [Google Scholar]

- Dedovic K., Renwick R., Mahani N.K., Engert V., Lupien S.J., Pruessner J.C. The montreal imaging stress task: using functional imaging to investigate the effects of perceiving and processing psychosocial stress in the human brain. J.Neurosci. 2005;30:319–325. [PMC free article] [PubMed] [Google Scholar]
- Colodro-Conde L., Couvy-Duchesne B., Zhu G., Coventry W.L., Byrne E.M., Gordon S., Wright M.J., Montgomery G.W., Madden P.A.F., Ripke S., Eaves L.J., Heath A.C., Wray N.R., Medland SE Martin N.G. A direct test of the diethesis stress model for depression. Mol. Psychiatry. 2018;23:1590–1596. doi: 10.1038/mp.2017.130. [PMC free article] [PubMed] [CrossRef] [Google Scholar]
- Bridgland, V.M.E., Moeck E.K., Green D.M., Swain T.L., Navda, D.M., Matson, L.A., Hutchison N.P., Takaranji M.K.T. Why the COVID-19 pandemic is a traumatic stressor. PLoS One. 2021;16 doi: 10.1371/journal.pone.0240146. [PMC free article] [PubMed] [CrossRef] [Google Scholar
- Dhabhar FS. The short-term stress response -Mother nature's mechanism for enhancing protection and performance under conditions of threat, challenge, and opportunity. Front Neuroendocrinol. 2018;49: 175-192.
- Ranabir S, Reetu K. Stress and hormones. Indian J Endocrinol Metab. 2011;15(1):18-22.
- Pettinger, Richard. Stress management. New York: Capstone, 2002
- 11. Farhang M, Miranda-Castillo C, Rubio M, Furtado G. Impact of mind-body interventions in older adults with mild cognitive impairment: a systematic review. Int Paychogr. 2019 May;31(5):643-666. [PubMed]
- 12. Chi X, Bo A, Liu T, Zhang P, Chi I. Effects of Mindfulness-Based Stress Reduction on Depression in Adolescents and Young Adults: A systematic review and meta-analysis Front Psychol. 2018;9:1034. [PMC free article] [PubMed]
- 13. Lloyd A, White R, Eames C, Crane R. The Utility of Home practice in Mindfulness-Based Group Interventions: A systematic review Mindfulness (N Y). 2018;9(3):673-692. [PMC free article] [PubMed]
- 14. Ludwig DS, Kabat-Zinn J. Mindfulness in medicine. JAMA. 2008 Sep 17;300(11):1350

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- 15. Kabat-Zinn, J. An outpatient program in behavioral medicine for patients with chronic pain based on the practice of mindfulness meditation: theoretical considerations and preliminary results. Gen Hosp Psychiatry. 1982 Apr;4(1):33-47.
- 16. Khalatbari, J., Azizzadesh-Haqiqi, F. Impact of life skills training and stress management strategies on the mental health of female university students. Knowledge and research in applied psychology. 2011;2(12) [Google Scholar]
- 17. Purabdul S, Subhi-Gharamaleki N, Abbasi M. Comparing academic procrastination and academic vitality in students with and without specific learning disorder. Journal of Learning Disabilities. 2015;4(3) [Google Scholar]
- 18. Dehqanizadeh MH, Hosseinchari M. Academic vitality and perception of family communication patterns; the intermediary role of -self-efficacy. Journal of Teaching and Learning Studies. 2012;4(2)
- 19. Vazquez C, Hervas G, Rahona JJ, Gomez D. Psychological well-being and health. Contributions of positive psychology. Ann Clin Health Psychol. 2009;5:15–27.
- 20. Ryff CD, Singer BH. Know yoreself and become what you are: a eudemonic approach to psychological well-being. J Happiness Stud. 2009;9(1):13–39.
- 21. Hagger, M.S., Keech, J.J., Hamilton K. Managing stress during the coronavirus disease 2019 pandemic and beyond:Reappraisal and mindset approaches. Stress health 2020;36:396–401. doi: 10.1002/smi.2969. [PMC free article] [PubMed] [CrossRef] [Google Scholar]
- 22. Hallam, R.S., and Hafner R.J. Fears of phobic patients: factor analyses of self-report data. Behav. Res. Ther. 1978;16:1–6. doi: 10.1016/0005-7967(78)90084-0. [PubMed] [CrossRef] [Google Scholar]
- 23. Hall-Kenyon, K.M., Bullough R.V., MacKay K.L., Marshall E.E. Preschool teacher well-being: A review of the literature. Early Childhood Edu. J. 2014;42:153–162. doi: 10.1007/s10643-013-0595-4. [CrossRef] [Google Scholar]
- 24. Everly Jr, G. S., Flannery Jr, R. B., & Mitchell, J. T. (2000). Critical incident stress management (CISM): A review of the literature. Aggression and Violent Behavior, 5(1), 23-40.
- 25. Fatima, S., Bukhari, S., & Pacella, J. (2020). The cardiovascular implications of COVID-19: A

- Comprehensive Review. Medical Research Archives, 8(5).
- 26. Luo, M., Guo, L., Yu, M., & Wang, H. (2020). The Psychological and Mental Impact of Coronavirus Disease 2019 (COVID-19) on Medical Staff and all General Public: A Systematic Review and Metaanalysis. Psychiatry Research, 113190.
- 27. Luzzi, V., Ierardo, G., Bossù, M., & Polimeni, A. (2020). COVID-19: Pediatric oral health during and after the pandemics.
- 28. Liu, X., Liu, J., & Zhong, X. (2020). Psychological State of college students during the COVID-19 epidemics. Available at SSRN 3552814
- 29. Achdut N., Refaeli T. Unemployment and psychological distress among young people during the COVID-19 pandemic: psychological resources and risk factors. Int. J. Environ. Res. Public health 2020;17 doi: 10.3390/ijerph17197163. [PMC free article] [PubMed] [CrossRef] [Google Scholar]
- 30. Adam, EK, Kumari, M. Assessing salivary cortisol in large-scale epidemiological research. Psychoneuroendocrinology. 2009;34:1423–1436. doi: 10.1016/j.psyneuen.2009.06.011. [PubMed] [CrossRef] [Google Scholar].