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An Assessment on Stress Among Females Age Group 18-25 Years: A Study from Tamil Nadu, India

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Abstract: Stressors have a significant impact on our behavior, emotions, and general health. In young, healthy people, acute stress reactions are usually adaptive and do not negatively impact health. On the other hand, long-term stressors can harm health if the threat is constant, especially in older or sicker people. Despite this, stress reactions have developed as adaptive mechanisms. Prolonged, severe stress reactions may cause illness and tissue damage. Integrated coping responses, as opposed to discrete, single response modifications, are often produced by our central nervous system. In Tamil Nadu, India, at the Sree Ramakrishna Medical College of Naturopathy and Yogic Sciences and Hospital Kulasekharam, this study was carried out.The female participants in this study range in age from 18 to 25. Thirty people responded to this survey. There are thirty questions in the survey. The questionnaire asked questions regarding emotional imbalance, pain, sleep, and focus. It has been found that women are more likely than men to experience stress. The degree of awareness about appropriate sleep patterns, emotional equilibrium, food and water intake, and digestion is atypical. They also require further education on mental and emotional equilibrium. They also require greater self-motivation and education regarding the significance of getting enough sleep. To improve the general health and well-being of young women, these areas should be the focus of future healthcare programs.

Keywords: *Stress, Emotional Imbalance, Concentration, Sleep.*

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I. INTRODUCTION

The kind, quantity, and duration of the stressors, as well as the person's biological susceptibility, all influence the association between psycho-social stresses and illness. Even though stress reactions are adaptive processes that have evolved over time, severe and protracted stress reactions can cause disease and tissue damage. Integrated coping responses, as opposed to discrete, single response modifications, are often produced by our central nervous system. Therefore, they typically exhibit enhanced autonomic and hormonal activity that optimize the potential for physical exertion when an urgent fight-or-flight response seems possible. The central glucocorticoid receptor gene is expressed more frequently as a result of elevated serotonin activity. As a result, the limbic system has more glucocorticoid receptors and the CNS receives better glucocorticoid feedback.

II. PATHOPHYSIOLOGY

Even though stress reactions are adaptive processes that have evolved over time, severe and protracted stress reactions can cause disease and tissue damage. The stress reaction is adaptive in part because of two characteristics. Stress hormones are first released to open up the body's energy reserves for instant utilization. Secondly, a novel distribution pattern of energy has surfaced. The hypothalamic-pituitary-adrenocortical axis and the sympathetic nervous system both produce stress hormones. The adrenal medulla is stimulated to create catecholamines by the sympathetic nervous system. Simultaneously, the hypothalamic paraventricular nucleus generates a corticotropin-releasing factor, which prompts the pituitary to release an adrenocorticotropin. The adrenal cortex is then stimulated to release cortisol by adrenalocorticotropin. Catecholamines and cortisol work together to promote lipolysis, which is the process that turns glycogen into glucose, which increases the amount of energy that is accessible. The process of converting fats into useful energy sources is called lipolysis. Then, energy is sent to the organs that require it most, causing blood pressure to rise and some blood vessels to constrict while others dilate. One of two hemodynamic processes raises blood pressure. Through increased cardiac output, or heart rate and stroke volume, the myocardial mechanism raises blood pressure. Blood pressure rises as a result of vasculature constriction caused by the vascular mechanism. By directly influencing cytokine profiles, the raised basal levels of stress hormones linked to chronic stress also reduce immunity. The main source of communication molecules called cytokines is the immune system. Cytokines are divided into three classes. Acute inflammatory responses are mediated by proinflammatory cytokines. By promoting natural killer cells and cytotoxic T cells, immune cells that go after intracellular infections, T helper 1 cytokines facilitate cellular immunity. Ultimately, humoral immunity is mediated by T helper 2 cytokines, which induce B cells to generate antibodies. T helper 1 and T helper 2 cytokines dysregulate in response to more persistent stresses, which inhibits humoral immunity as well as cellular immunity. Chronic and intermediate stressors have been linked to decreased antibody responses to vaccinations, slowed wound healing, and elevated susceptibility to viral infections due to antiviral deficiencies.

III. MATERIALS AND METHOD

This research was carried out at Sree Ramakrishna Medical College of Naturopathy and Yogic Sciences and Hospital Kulasekharam, Tamil Nadu, India. Participants in this study are female and range in age from 18 to 25. Vocal agreement was achieved once the purpose of the study was explained. There were 30 responses to this survey. 30 questions make up the survey. Dehydration, pain, sleep, emotional instability, and concentration were among the factors included in the questionnaire. Study participants who were unwilling or obstinate were not allowed to participate.

IV. RESULT

The female responders ranged in age from 18 to 25. In all, thirty women were present. Table 1.1 lists those who experience headaches frequently 66.67% and 33.33% do not have headaches often. 66.66% of respondents report feeling disturbed while 33.34% report not being disturbed at all. 60% have increased appetite and 40% of people do not have this symptom. There is a 63.33% drop in appetite and a 36.67% not drop in appetite. 73.33% of people are irritated at everything, whilst 26.67% are not. 13.34% have a lack of concentration and 86.66% of the sample do not exhibit a lack of concentration. Emotional imbalance 83.33% and 16.67% of the population do not exhibit any emotional instability. Of those who shudder under stress, 46.66% do so whereas 53.34% do not. 60% of those with physical pain and 40% without these symptoms.30% have night sweats, while 70% do not.

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Table: 1 Evolution on Stress Among Females Age Group 18 -25 Years.

Sl. No	CONTENTS	Yes%	No%
1	Do you have frequent headaches	33.33%	66.67%
2	Do you feel any disturbance in sleep	66.66%	33.34%
3	Is your appetite increases	60%	40%
4	Is your appetite decreases	63.33%	36.67%
5	Do you feel irritated toward everything	73.33%	26.67%
6	Do you have lack of concentration	86.66%	13.34%
7	Do you face any emotional imbalance	83.33%	16.67%
8	Do you experience shivering while stress	46.66%	53.34%
9	Do you have body pain	60%	40%
10	Do you have night sweat	30%	70%
11	Do you damage things around you	40%	60%
12	Do you damage yourself	46.66%	53.34%
13	Do you have any suicide tendency	83.33%	16.67%
14	Do you have any homicidal tendency	6.66%	93.33%
15	Do you feel sweating in the extremities	43.33%	56.67%
16	Do you blade acne in your face	43.33%	56.67%
17	Do you have any disturbance in your digestion	70%	30%
18	Do you have the symptom of constipation	43.33%	56.67%
19	Do you frustrated while stressed	76.66%	23.34%
20	Do you have dehydration	73.33%	26.67%
21	Do you have mouth ulcer	46.66%	53.34%
22	Do you experience increase heartbeat	70%	30%
23	Do you notice changes in blood pressure	40%	60%
24	Do you consume any medication for Stress	3.33%	96.67%
25	Thoughts of attack	10%	90%
26	Do you follow any activities to reduce stress	40%	60%
27	Do you have hair fall	80%	20%
28	Do you demotivated when you are in stress	86.66%	13.34%
29	Do you over think while stress	93.33%	6.67%
30	Do you have the symptoms of anaemia	40%	60%

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Break items when under stress, 40% and 60% of people do not harm items when under stress. When under stress, harm yourself, 53.34% and 46.66% did not have this problem. Suicidal inclination 83.33% of people and 16.67% of people stressed out do not have a suicidal tendency. Persistent perspiration in the limbs 56.67% and 43.33% did not exhibit this symptom. 43.33% of people have facial blade acne, whereas 56.67% do not have facial blade acne. 30% do not experience digestive disturbances, and 70% do so when under stress. Experience constipation 56.67% and 43.33% are constipated-free. Of those under stress, 23.34% report not being frustrated, whereas 76.66% report being frustrated. 73.33% of them have been dehydrated, whereas 26.67% do not. 46.66% of people have mouth ulcers, whereas 53.34% do not have mouth ulcers. The heart rate raised by 70% and decreased by 30%. Reduce blood pressure between 40% and 60% while experiencing these symptoms-free. Take any kind of medication to relieve stress 3.33% of the remaining 96.67% do not take any medication. Thoughts of attack 10% and 90% of people do not have these kinds of thoughts. Engage in whatever activity to help you de-stress 40% and 60% don't engage in any stress-relieving activities. 80% of people have a hair fall, and 20% do not have a hair fall.86.66% of people feel demotivated, whereas 13.34% do not. 93.33% of people overthink under stress, but only 6.67% do not overthink under stress. Experiencing anemia symptoms as a result of stress, 40% and 60% do not exhibit anemia symptoms.

V. DISCUSSION

The majority of women experience frequent headaches, 33.33%, and also sleep disturbances, 66.66%. Appetite changes 60%. The majority of females, 86.66%, exhibit emotional imbalance and 83.33% have a lack of attention. Women experience shivering at a higher rate than men, 46.66%. 60% have body discomfort and 30% of women experience nocturnal sweats. Fewer people break things under stress 40% and have an 83.33% chance of committing suicide. More people experience 43.33% of the symptoms of sweating in their extremities and 43.33% of facial acne damage. 70% of people experience disturbed digestion when they are anxious. 43.33% of people have constipation symptoms. Frustration is experienced by 76.66% of women and 73.33% feel dehydrated. 46.66% have a mouth ulcer and experience fluctuations in blood pressure of 40%. An elevated heart rate of 70% when under stress. The majority of people follow the different actions to cut their stress by 40% and 80% of their hair has fallen off. 86.66% of them demotivated themselves, and 93.33% overanalyzed. Because of stress, 40% of people exhibit anemia symptoms.

VI. CONCLUSION

It has been found that women are more likely than men to be affected by stress. They don't consume a balanced, healthful diet. Their degree of awareness about appropriate sleep patterns, emotional equilibrium, food and water intake, and digestion is atypical. Women therefore need to be better educated on the importance of maintaining good cleanliness, eating a balanced diet, and getting enough water. They also require emotional equilibrium and increased mental knowledge. They also require greater self-motivation and education regarding the significance of getting enough sleep. To improve the general health and well-being of young women, these areas should be the focus of future healthcare programs.

REFERENCES

[1]. Stress and Health: Psychological, Behavioral, and Biological Determinants Neil Schneiderman, Gail Ironson, and Scott D. Siegel.2008.
[2]. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders IV-TR. 4th ed. Washington, DC: Am. Psychiatr. Assoc.; 2000.
[3]. Angst J, Vollrath M. The natural history of anxiety disorders. Acta Psychiatr. Scand. 1991.
[4]. Beck AT. Cognitive Therapy and the Emotional Disorders. New York: Int. Univ. Press; 1976.
[5]. Classen C, Sephton SE, Diamond S, Spiegel D. Studies of life-extending psychosocial interventions. In: Holland J, editor. Textbook of Psycho-Oncology. New York: Oxford Univ. Press; 1998.
[6]. The Construct of Resilience: A Critical Evaluation and Guidelines for Future Work Suniya S. Luthar,Bronwyn Becker, 2007.
[7]. Glanz MD, Johnson JL. Resilience and Development: Positive Life Adaptations. New York: Kluwer Acad./Plenum; 1999.
[8]. Interpersonal Psychotherapy: Past, Present and Future,John C. Markowitz and Myrna M. Weissman,2013.
[9]. Stress and Coping with Discrimination and Stigmatization Sophie Berjot, Nicolas Gillet, 2011.
[10]. Stress and Health: Psychological, Behavioral, and Biological DeterminantsNeil Schneiderman.Scott D Siegel, Gail Ironson,2005.