

# A DEMOGRAPHIC ANALYSIS OF PERCEIVED STRESS AMONG MIDDLE AGED POPULATION IN THRISSUR DISTRICT KERALA

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## Abstract

This study is aimed to analyze the level of stress among the productive middle aged population based on demographic data. Stress is a major cause of disability and psychological morbidity in the modern era. Perceived stress scale is used as a tool to assess the level of stress. Majority of the population had some level of stress. The low socioeconomic living status, female gender, education, occupation all play a major role in the development, manifestation and perception of stress. Identification, early detection and diagnosis are essential in treatment and prevention of complications of stress and to improve the quality of life.

Index terms: Stress, Perceived stress, Demographic data

## Introduction

Stress is defined as the response of the mind or body to real or imagined threats, changes or events. Human body responds to stress by two mechanisms – 1) Activating the sympathetic nervous system 2) Activating the hypothalamic pituitary adrenal axis. Both these affect the cardiovascular, metabolic and immune system of human body. The main two classification of stress includes, Distress which is defined as stress due to excess of adaptive demands on a person and Eustress which is the optimal amount of stress which can promote health, wellbeing and growth of an individual. Perceived stress is a dynamic multidimensional concept of the degree to which the various situations in life are considered stressful, that is measured as the degree of confidence in an individual to cope with stressful events in life.

Perceived stress is influenced by various personal characteristics like life style, social support, life events, and other demographic factors. Socio economic status plays a vital role in determining the impact of stress and psychological health. Educational creates difference in perception of stressful events due to a wider access to information and knowledge. Gender is another factor which also affects the health aspects relating to stress. Occupational stress, insecurity, social, family and marital disharmony all can be considered as chronic stressors which may ultimately lead to psychological morbidity.

## Rationale of study

The modern world is termed as the Age of anxiety and stress, which clearly points to the various stressful conditions that an individual is exposed right from birth till the time of last breath. A higher degree of perceived stress is always associated with a lower degree of occupational productivity, wellbeing and life satisfaction. Prolonged periods of stress release a hormone, Cortisol which produces numerous physical and immune system disturbance. Current epidemiological and clinical studies points to the role of perceived stress as a major risk factor for both physical and mental disorders. They affect the basic economy of developing nations and also increase the burden of disability among the productive population. An awareness of the extent of stress among the working middle aged population of developing countries is always essential for the understanding, prevention, diagnosis and treatment of stress.

In extreme cases, this leads to burnouts which are defined as conditions of cumulative stress from the demands of daily life. It leads to a state of physical, mental and emotional exhaustion caused by depletion of ability to cope with one's environment. This leads to decreased productivity, employers leaving work, alcohol abuse, suicidal ideation all affecting the nation's economy and indeed the quality of human life. This study is aimed to access the level of stress among the middle aged productive population in Thaikkattussery area, Thrissur district, Kerala with an aim to recognize and provide treatment before major consequences.

## Objective

The main objective of this study is to investigate the level of stress among middle aged population in Thaikkattussery area, Thrissur district, Kerala

## Methodology

The study design is a descriptive cross sectional survey to access the level of stress in middle aged study sample. The outpatient department of Vaidyaratnam Ayurveda College, Thaikkattussery is taken as the study setting. The study sample consists of fifty five middle aged patients, randomly selected, fulfilling the inclusion criteria, who attended the outpatient department of Vaidyaratnam Ayurveda College, Thaikkattussery in the month of January 2020. The inclusion criteria include patients between thirty and sixty years of age of either sex who were residing at Thrissur for the past six months and were willing to participate in the survey. The exclusion criteria include pregnant and lactating mothers, patients with previous history of mental disorders or any other major disability. Data was collected by interview of personal data and perceived stress scale.

Study tool

Perceived stress scale – One of the most widely used method of assessing psychological stress is Perceived Stress Scale. This is a 10 point scale (Cohen and Williamson, 1988). PSS scores are obtained by reversing the scores of four items 4, 5, 7 and 8 and then summing across all scale items.

#### Procedure

The middle aged subjects coming to the outpatient section of Vaidyaratnam Ayurveda College, Thakkattussery, in the month of January 2020 willing to participate in the study were selected. They were directly given the perceived stress scale questionnaire and asked to fill in the details as per their perception of stress the previous one month. The scores of items 4, 5, 7 and 8 were reversed and the total score was noted for each subject.

## Results

Out of fifty-five participants 32 participants had a high perceived stress, 17 participants had a moderate amount of perceived stress while 6 participants had low stress.

### i) BASED ON AGE

Table: 1 Demographic distribution based on age

	30 – 40 years	40 – 50 years	50 – 60 years
HIGH STRESS	5	17	10
MODERATE STRESS	4	7	6
LOW STRESS	1	5	-

Out of the fifty five participants, 5 having high stress were in the age group of 30-40 years, 17 were in the age of 40-50 years while 10 were in the age group of 50-60 years. Among moderate stressed participants, 4 were in the age group of 30-40 years, 7 were in the age of 40-50 years while 6 were in the age group of 50-60 years. Among low stressed, 1 participant was in the age group of 30-40 years and 5 were in the age of 40-50 years. Majority of the subjects above 40 years had a high to moderate level of stress. Above 50 years, none had a low stress level.

### ii) BASED ON GENDER

Table: 2 Demographic distribution based on gender

	MALES	FEMALES
HIGH STRESS	10	22
MODERATE STRESS	6	11
LOW STRESS	1	5

Out of fifty participants, 22 females and 10 males were highly stressed, 11 females and 6 males were moderately stressed and 5 females and 1 male were low stressed. Among females, majority were highly stressed and most were moderately stressed. Among males also high level of stress was predominant.

### iii) BASED ON EDUCATION

Table: 3 Demographic data based on education

	UNEDUCATED	PRIMARY	HIGH SCHOOL	HIGHER SECONDARY	DEGREE
HIGH STRESS	3	4	16	2	7
MODERATE STRESS	1	6	4	-	6
LOW STRESS	-	1	2	-	3

Out of fifty-five participants, among highly stressed 3 were uneducated, 4 had primary education, 16 had high school, 2 had higher secondary and 7 participants had a degree qualification. Among moderately stressed 1 was uneducated, 6 had primary education, 4 had high school and 6 participants had a degree qualification. Among low stressed, 1 had primary, 2 had high school and 3 had degree qualification.

### iv) BASED ON EMPLOYMENT

Table: 4 Demographic data based on employment

	UNEMPLOYED	UNSKILLED	SKILLED JOB	BUSINESS
HIGH STRESS	19	10	1	2
MODERATE STRESS	7	5	4	1
LOW STRESS	2	3	1	-

Among the high stressed, 19 were unemployed, 10 had unskilled jobs. among moderate stressed, 7 were unemployed while 5 had unskilled jobs. Among low stressed, 2 were unemployed while 3 had unskilled jobs. Among the highly stressed, majority were unemployed or had only unskilled jobs.

## v) BASED ON SOCIOECONOMIC STATUS

Table: 5 Demographic data based on socioeconomic status

	LOWER CLASS	MIDDLE CLASS	UPPER CLASS
HIGH STRESS	27	3	2
MODERATE STRESS	9	6	2
LOW STRESS	3	2	1

Among the high stressed participants, 27 belonged to the lower class, 3 to the middle class and 2 to the upper class. Among moderately stressed 9 belonged to the lower class, 6 to the middle class and 2 to the upper class. Among the low stressed, 3 belonged to the lower class, 2 to the middle class and 1 to the upper class. Majority of highly stressed and moderately stressed were from the lower class.

### Analysis and discussion

Among the fifty-five participants, majority (58.18% -32 participants) had a higher level of stress perception. And among them, majority (53.13%) belonged to the age group of 40-50 years. Majority were females (68.75%), were unemployed (59.38%) and belonged to the lower economic class (84.38 %). This signifies the higher impact of stress on women and especially on the unemployed and lower class. Among the participants, 30.9% (17 participants) had a moderate level of stress, and among them majority were again in the age group 40-50 years (41.18%), were unemployed, were females (64.7%) and belonged to the lower economic class (52.94%). Among the participants, 10.9% (6 participants) had low stress.

Middle aged population are expected to deal with various unavoidable stressful life events like occupational demands, caring for elderly parents and parenting which interfere with their productivity and quality of life. Female gender has an increased susceptibility to develop stress due to hypothalamic pituitary adrenal axis response (a higher adrenocorticotrophic hormone and corticosterone levels) and sympathetic nervous system activities. Education plays an important role in enabling to provide better coping strategies, ways and methods and improves the sustainability of the patient to long term stress. Unemployment creates a low self-esteem which results in increased levels of depression and anxiety among the unemployed. Lower socioeconomic status is a major contributor of distress and prevalence of other mental health issues.

The results of this study should help to give a better understanding on the response of the middle aged population to perceived stress and enable to plan, develop and initiate strategies that will assist them to handle stress in a more efficient manner. The strategies should enable the population to face the stressful situations competently, develop new and improved stress coping mechanism like recreation, recognize self-limitations, self-care, social support, cognitive behavioral therapy, deep breathing techniques, promote yoga, transcendental meditation, physical exercise, prayer, self-hypnosis, guided imagery, emotional freedom techniques, autogenic training, relaxation response, mindfulness based stress reduction and also reduce the triggering factors like unemployment, reduced income in the society. Reducing stress in the society will bring about life satisfaction, quality performance, improve efficiency, healthy and positive relationships and overall benefit the economic status of the nation.

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