

## **STRESS AND ILLNESS RELATIONSHIPS**

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### **ABSTRACT**

Stress originally a concept of the physical sciences has come into common usage in the biological & the human sciences to describe a state in which the vital functioning of the organism is threatened. The links between stress, health and disease are complex and need to be examined carefully. Stress is usually used to depict situations in which individuals are faced with demands that exceed their immediate ability to cope. The expression of Stress may be even but unconscious like the noise of a city or the daily chore of driving the car. Stress is involved in an environmental situation that perceived as presenting demand which threatens to exceed the person's capabilities and resources for meeting it. Stress is a contributing factor in causing most diseases and numerous emotional and behavioral difficulties. Certain daily life stressors can play a role in our health status, we have to deal with stress to promote health. Coping is a set of techniques to buffer the bad effect of stress on health. Scientific studies provide a solid foundation of undeniable scientific evidence explaining the connection between the stress and health. We can use this information not only to prevent disease, but also to buffer stress from our life and promote optimal health.

**Keywords:** Stress, Illness, Health, Stressor, Coping

### **Objectives**

The purpose of this paper is to understand stress and illness relationship by keeping the following objectives in mind.

- Defining Stress and identify the major stressors in society responsible ill-health in Indian.
- Considerate the psychological well-being and mental illness caused by stress.
- Elaborating the causes and consequences of stress.

## **Introduction**

Over 300 years later, Locke's insight into stress and health still has relevance for us.

*"A sound mind in a sound body is a short but full description of a happy state in this world" - John Locke, philosopher (1693)*

It is clear that stress affects your body, your physiology. When people are faced with demands from others or demands from the physical or psycho-social environment to which they feel unable to adequately respond, a reaction of the organism is activated to cope with the situation. The nature of this response depends upon a mixture of different elements, including the extent of the demand, the personal characteristics and coping resources of the person, the constraints on the person in trying to cope and the support received from others. Stress may be even but unconscious like the noise of a city or the daily chore of driving the car. Perhaps the one incontestable statement that can be made about stress is that it belongs to everyone - businessmen and professors, to mother and their children, to factory workers. Stress is a part of fabric of life. Nothing can isolate stress from human beings as is evident from various researches and studies. Stress can be managed but not simply done away with.

## **Stress**

Stress is involved in an environmental situation that perceived as presenting demand which threatens to exceed the person's capabilities and resources for meeting it, under conditions where he or she expects a substantial difference in the rewards and costs from meeting the demand versus not meeting it.

Stress originally a concept of the physical sciences has come into common usage in the biological & the human sciences to describe a state in which the vital functioning of the organism is threatened. Stress involves a sufficiently potent danger to psychological or physical well-being as to require extra ordinary measures for the maintenance of organized behavior or these failing, stress may lead to disordered behavior, anxiety or other emotional disturbance. Stress as a negative feeling or unpleasant emotional state resulting from work as a teacher. The hypothetical concept of stress can be illuminated for any individual not only by reference to stressors but also by measurement of the strain of the actual responses or consequences exhibited (physically or psychologically). Thus the concept can be tied at both ends to antecedents and responses, leading some investigators to state that the investigation of stressors and strains in the study of stress. Stress has been defined as,

“The state manifested by the specific syndrome which consists of all the nonspecific induced changes within a biological system” (Stephan, 1971).

“A systemic response induced by the wave of cellular alterations identical to those which initiate inflammation in body.” (Beckwith, 1996)

“The physical or mental effect of disturbance of, or interference with, any of the body’s automatic biological processes” (Lazarus and Folkman, 1984)

Stress is “the demands including the appraisal of threat, placed on an organism rather than the response of the organism to those demands” (Pithers and Forgarty, 1995)

The ancient Greek physician, Hippocrates of Cos (circa 460-377 B.C.) is often called the "father of medicine" who initially proposed that bodily fluids or humours were responsible for certain personality or temperament types, as well as for physical and mental illness, also highlights the potential negative impact of stress. Greek physician Hippocrates’ contributions to medicine include detailed observations of disease and its effects, and an understanding of how health is often influenced by diet, breakdowns in bodily processes, and the environment.

### **Stress and Illness**

The links between stress, health and disease are complex and need to be examined carefully. Stress is usually used to describe situations in which individuals are faced with demands that exceed their immediate ability to cope. Psychological factors linked to stress include high anxiety, depression, irritability and hostility, emotional exhaustion and burnout.

Stress is a contributing factor in causing most diseases. These illness include heart attacks, hypertension, angina, arrhythmias, migraine headaches, tension, headaches, ulcers, clots, constipation, diarrhea, diabetes, infections, allergies, flu, colds, cancer, arthritis backaches, hay fever, enuresis, hyperthyroidism, insomnia, bronchitis, Reynaud’s disease and alcoholism. Stress is a contributing factor in causing numerous emotional and behavioral difficulties including depression, anxiety, temper tantrums, suicide attempts, child abuse, spouse abuse, physical assault, destructive expressions of anger, feeling of inadequacy or failure, feelings of bitterness and resentment irritability, impatience and stuttering.

The symptoms of stress are believed to stress from primitive fight or flight response to perceived danger. This response produces surges of chemical reactions in the blood stream which can cause

psychological problem such as Post Traumatic Stress Disorder or Cumulative Stress Disorder for example high blood pressure, migraine , asthma etc.

Hypertension : high blood pressure	Menstrual difficulties
Coronary thrombosis : heart attack	Nervous dyspepsia flatulence & indigestion
Migraine	Depression
Hay fever and allergies	Hyperthyroidism : Overactive thyroid gland
Asthma	Diabetes Mellitus
Pruritis: Intense itching	Skin disorders
Peptic ulcers	Tuberculosis
Constipation	Colitis
Rheumatoid Arthritis	Indigestion

Stress can cause a long list of problems:-

- Headaches and backaches.
- Inability to fight illness.
- Skin, heart and digestive problems.
- Tiredness, depression, difficulty sleeping.
- Eating a lot more or a lot less than usual.
- Feeling short tempered and / or worried all the time.

### **Physiological Effects of Stress**

- eating disorders, indigestion and nausea
- nervous, muscle ache and pain
- Palpitations and upper body discomfort.
- and choking fainting
- strain headaches
- diarrhea and frequent urination
- tremors and twitching
- breathlessness and hyperventilating

- reduced memory and increased errors
- lack of conc to think rationally entration/ability
- easily distracted and less enthusiasm
- organization & planning deteriorate /burnout
- tension with change in personality
- irritable/aggressive/depression/isolation
- reduced self-esteem leading to speech problems
- absenteeism
- lower energy levels /sleeplessness

Cardiovascular disease, gastrointestinal disorders, respiratory problems, cancer, arthritis, headaches, bodily injuries, skin disorders, physical strain or fatigue and death are some of the purported physiological responses.

Research results support the following generalizations regarding linkage between various stressful person-job interactions and coronary heart disease.

- Job problems and dissatisfaction are associated with Coronary Heart Disease and related risk factors.
- Job - pressures (such as heavy workloads) are associated with Coronary Heart Disease and related factors.
- Type A behavior pattern is associated with Coronary Heart Disease and related risk factors. Properties of the Type A behavior pattern include hard-driving attitudes, emphasizing competitiveness, effort and responsibility, job involvement, dealing with the challenge arising from everyday life and the habit of keeping very active and busy ; and speed and impatience, reflecting a style of life marked by haste and impulsiveness.

The body manifests the stress reaction by a rise in blood pressure , increased adrenaline, changed heart beat, more red blood cells, slower digestion, ulcers and heart attacks; as changes in body chemistry (such as in uric acid level and blood pressures) and as depression, anxiety, alcoholism and even death.

### **Key Points**

- Psycho-physiological conditions have a mind and body component and are supported by science.

- Chronic stress is a contributing factor for a large number of illnesses and diseases.
- Medium-term stress results in an array of unhealthy signs and symptoms including muscle pain, headaches, fatigue, and sleep disturbances.
- Long-term stress results in serious health problems including cardiovascular disease, compromised immune function, and digestive disorders.
- Psycho-neuro-immunology seeks to understand the complex communications between the nervous system, the psyche, and the immune system, and their implications for health.
- Certain daily life stressors can play a role in our health status, we have to deal with stress to promote health.
- Coping is a set of techniques to buffer the bad effect of stress on health.

### **Conclusion**

In this paper we explored the fascinating relationship between the stress and health to better understand the role of mind and body in both disease and health. Stress is a contributing factor in causing most diseases and numerous emotional and behavioral difficulties. The links between stress, health and disease are complex and need to be examined carefully. Scientific studies provide a solid foundation of undeniable scientific evidence explaining the connection between the stress and health. We can use this information not only to prevent disease, but also to buffer stress from our life and promote optimal health.

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