



Stress management: Causes and techniques

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Abstract

Stress is the physical and mental response of the body to demands made upon it. It is the result of our reaction to outside events, not necessarily the events themselves. Not all stress is bad. Every individual functions best and feels best at one's own optimal level of physiological arousal. Certain level of stress is needed to get everyday's things done. Too little of it can lead to boredom and "rust out" - but too much of it can produce the feeling of being "burned out". Adaptive stress helps one to rise to life's challenges. As such, sometimes, negative stress occurs when an individual's ability to cope with life's demands crumbles. This is a time or moment to break down the stress chemicals (e.g. through physical activity etc.) in the blood. Otherwise, it will prevent human beings from relaxing. Eventually this results in a permanent state of stress. That initial buzz turns to worry, irritability or panic. Then various challenges of life become threats leading to create a harmful sense of doubt about one's ability to do even simple things. Thus, even small problems appear insurmountable. Stress must therefore be managed well in time before it goes out of hand.

Keywords: stress, physical, mental response

Introduction

Stress is generally difficult to manage once it overpowers a person. It creeps into a human system from within or without – and quite quietly and unknowingly. Then it keeps on building up upon an individual's nerves, heart and mind leading to so many other things including depression as well. It often results in high or low blood pressure, diabetes and endocrinal disorders. Clear relationship between these diseases is not easy to explain but it is very much there for it happens. Several type of stresses are there in the modern technological and mechanically oriented world today. They are negative and positive both. For Hans Selye:

...stress is not necessarily something bad – it all depends on how you take it. The stress of exhilarating, creative successful work is beneficial, while that of failure, humiliation or infection is detrimental (Selye, 1956) ^[11].

Defining Stress

Selye believed that the biochemical effects of stress would be experienced irrespective of whether the situation was positive or negative.

Selye was an Austrian-born, Canadian physician who conducted hundreds of laboratory studies on animals and humans during the 1920's and 1930's. He was the first person to document the chemical and hormonal changes that occur with stress. He was also the first to introduce the term to the scientific community.

Selye believed that stress results whenever we are faced with external changes or demands. Such demands include variations in environmental temperature, overcrowding, painful stimuli, and loud noises. In fact, Selye believed most of life was "stressful." In the preface to his 1956 book *The Stress of Life* he commented:

No one can live without experiencing some degree of stress all the time. You may think that only serious disease or intensive physical or mental injury can cause stress. This is false. Crossing a busy intersection, exposure to a draft, or even sheer joy are enough to activate the body's stress-mechanism to some extent. Stress is not even necessarily bad for you; it is also the spice of life, for any emotion, any activity causes stress. (p. vii)

Selye conceived of external demands as stressors and the internal body changes they produced as the stress response. He also reasoned that the stress response occurs whether the demands we experience are positive or negative. In other words, if you inherit a large sum of money or lose a large sum of money, your body would respond in exactly the same way. According to Selye, what matters most is how well you adapt to each new demand. He coined the term "eustress" (pronounced u-stress) to stand for good or healthy stress--i.e., to times when the adaptation process resolved itself quickly--and he chose the term "distress" to stand for bad or unhealthy stress--i.e., to times when the adaptation response was excessive or prolonged. Thus, Selye not only gave us the "external demand model" of human stress, but he also gave us the idea that two types of stress occur for human beings--1) a "good" or "healthy" type, and 2) a "bad" or "unhealthy" type.

Causal Aspects of Stress

As such, for Selye, stress is the non-specific response of the body to any demand, whether is caused by, or results in, pleasant or unpleasant conditions. Stress as such, like temperature, is all-inclusive, embodying both the positive and the negative aspects of these concepts.

Walter Cannon and Hans Selye used animal studies to

establish the earliest scientific basis for the study of stress. They measured the physiological responses of animals to external pressures, such as heat and cold, prolonged restraint, and surgical procedures. Then they extrapolated from these studies to human beings (Cannon, 1939 and Selye, 1950) ^[2,10]. Subsequent studies of stress in humans by Richard Rahe and others established the view that stress is caused by distinct, measurable life stressors, and further, that these life stressors can be ranked by the median degree of stress they produce. Thus, stress was traditionally conceptualized to be a result of external insults beyond the control of those experiencing the stress. More recently, however, it has been argued that external circumstances do not have any intrinsic capacity to produce stress, but instead their effect is mediated by the individual's perceptions, capacities, and understanding (Holmes and Rahe, 1967) ^[3]. To measure stress according to the Holmes and Rahe Stress Scale, the number of "Life Change Units" that apply to events in the past year of an individual's life are added and the final score provides a rough estimate of how stress affects health. This scale is applied to both adults and non-adults. According to this scale Score of 300+ shows high risk of illness. Score of 150-299+ shows that risk of illness is moderate. While the Score of 150 shows slight risk of illness.

Two Causal Models

Transactional model: Richard Lazarus and Susan Folkman suggested in 1984 ^[4] that stress can be thought of as resulting from an "imbalance between demands and resources" or as occurring when "pressure exceeds one's perceived ability to cope". Stress management was developed and premised on the idea that stress is not a direct response to a stressor but rather one's resources and ability to cope mediate the stress response and are amenable to change, thus allowing stress to be controllable (Lazarus and Folkman, 1984) ^[4].

In order to develop an effective stress management programme it is first necessary to identify the factors that are central to a person controlling his/her stress, and to identify the intervention methods which effectively target these factors. Lazarus and Folkman's interpretation of stress focuses on the transaction between people and their external environment (known as the Transactional Model). The model conceptualizes stress as a result of how a stressor is appraised and how a person appraises his/her resources to cope with the stressor. The model breaks the stressor-stress link by proposing that if stressors are perceived as positive or challenging rather than a threat, and if the stressed person is confident that he/she possesses adequate rather than deficient coping strategies, stress may not necessarily follow the presence of a potential stressor. The model proposes that stress can be reduced by helping stressed people change their perceptions of stressors, providing them with strategies to help them cope and improving their confidence in their ability to do so.

Health realization/innate health model

The health realization/innate health model of stress is also founded on the idea that stress does not necessarily follow the presence of a potential stressor. Instead of focusing on the individual's appraisal of so-called stressors in relation to his or

her own coping skills (as the transactional model does), the health realization model focuses on the nature of thought, stating that it is ultimately a person's thought processes that determine the response to potentially stressful external circumstances. In this model, stress results from appraising oneself and one's circumstances through a mental filter of insecurity and negativity, whereas a feeling of well-being results from approaching the world with a "quiet mind," "inner wisdom," and "common sense" (Mills, 1995 and Sedgeman, 2005) ^[6,8].

This model proposes that helping stressed individuals helps understand the nature of thought process while providing them especially with the ability to recognize when they are in the grip of insecure thinking in order to disengage from it, and access natural positive feelings. This will reduce their stress.

Techniques of Stress Management

There are several ways of coping with stress. Some techniques of time management may help a person to control stress. In the face of high demands, effective stress management involves learning to set limits and to say "No" to some demands that others make. The following techniques have been recently dubbed "Destressitizers" by *The Journal of the Canadian Medical Association*. A destressitizer is any process by which an individual can relieve stress. Techniques of stress management will vary according to the theoretical paradigm adhered to, but may include some of the following (Spence et. al., 1999) ^[9]: Autogenic training, Cognitive therapy, Conflict resolution, Exercise, Getting a hobby, Meditation, Deep breathing, Relaxation techniques, Artistic Expression, Creative writing, Listening to music and Time management etcetera.

Conclusion

It is generally found that stress management is more effective through non-drug intervention. Drugs may preferably be used mainly in emergencies alongwith non-drug interventions (Bower et. al., 2004; Lehrer et. al., 2007; Wolfgang et. al., 2001 and <http://www.naturalproductsassoc.org>) ^[1,5].

Stress management as such has come a long way from Cannon's 1939 ^[2] fundamental analysis to the Lehrer's 2007 ^[5] stress management techniques. It is, indeed, a long process of evolution and success of medical practitioners and psychologists.

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