

ROLE OF STRESS IN LIFESTYLE DISORDERS AND ITS MANAGEMENT

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ABSTRACT

The Ayurvedic classics have comprehensively discussed the phenomenon of life, health and disease, in their entire entirety with their subtle and gross relations/interactions with the environment, physical objects and cosmos on one hand and the social, interpersonal and behavioral on the other. Technological advancements, industrialization and excessive urbanization in 21st century have given rise to situation which produced dangerous emotional strain and stress. Sustained nervous tension is therefore a common phenomenon today, which stems directly from different kinds of frustration, worry and despondency. In addition, intake of unhealthy diet, smoking, drinking and addiction of drugs, rampant in today's society also results in different kinds of psychological stresses. In nutshell, it can be said that one is living today in a century of stress. All this leads to various kinds of Chronic diseases, which are termed as Lifestyle disorders, which require a comprehensive management, dietary habits, lifestyle changes and medical management. The present article presents an overview on the stress as one of the most important factor responsible for the present day lifestyle disorders and their management.

Key words: Lifestyle, Psychological stress, Atiyoga, Ayoga, Mithiyoga, Relaxation Techniques

INTRODUCTION

Technological advancements, industrialization and excessive urbanization in 21st century have given rise to situation which produced dangerous emotional strain and stress. Sustained nervous tension is therefore a common phenomenon today, which stems directly from different kinds of frustration, worry and despondency. One is bound to face various kinds of challenges in present era because of different kinds of occupational, social and environmental stressors in addition to ordinary demands, imposed by the process of living. All this results in stress, which reflects itself in the form of anxiety, anger and fear. In addition, intake of unhealthy diet, smoking, drinking and addiction of drugs, rampant in today's society also results in different kinds of psychological stresses. In nutshell, it can be said that one is living today in a century of stress. Cardiovascular problems under lifestyle diseases include hypertension and atherosclerosis. There may be angina pectoris, cardiac failure in middle aged individuals. Myocardial infarction and thrombo-embolism may also develop. Diabetes mellitus, atherosclerosis, hyper-lipidemia can develop as metabolic complications. Different psychosomatic problems may also develop. Obesity as lifestyle disorder increases the vulnerability to various types of injuries and accidents due to slow movements and mechanical difficulty. It is important to note that the most important lifestyle related diseases like Diabetes mellitus, hypertension, coronary artery disease (CAD), thrombo-embolism, cerebro-vascular accidents (CVA's) etc. have been included under the umbrella of psychosomatic disorders as stress and psychosocial factors are important as causative, precipitative or exacerbative factors in this disorders. These are the same factors which if tackled properly has the potential to modify the entire course of these disorders.

Stress and lifestyle diseases

Stress has been defined as the non specific response of the body to any demand made on it, which can be psychologically defined as a perceptual phenomenon arising from a comparison between the demand on the person and his ability to cope. An imbalance between the two gives rise to stress and to the stress response¹. The emphasis has been given to subjective nature of stress and on its psychological dimension. The stress can arise from a multitude of sources. Broadly speaking, this sources can be categorized as those in the environment including work environment (occupational), social environment on one hand and those within the individual on the other.

In relation to work environment, the individual may be suffering from work over load in the form of unrealistic deadlines, long hours as a feeling that the job is beyond his competence. The job may lack stimulation causing him to feel bored or it may lack opportunity for him to demonstrate his ability. Uncertainties regarding boundaries of one's responsibility and inadequately defined work objectives may cause persistent stress. Relationship with colleagues and superiors may be strained. Social environment seem to play a major part in determining the way in which we cope with negative events. It may include partners, relatives, friends and acquaintances; it may have positive impact, in that they act as buffer between the event itself and the individual's reaction to it. Psychosomatic disorders, a term coined by Heinroth (1918) are those disorders in which psychosocial factors are very important. Broadly applied this term can encompass all physical illnesses. The definition includes those disorders which are either initiated or exacerbated by the presence of a meaningful psychosocial environmental stressors². W.H.O. international classification of diseases (ICD-10) includes these disorders under the category of psychological or behavioral factors associated with disorders. Franz Alexander, the father of psychosomatic medicine, initially described the seven classical psychosomatic illnesses - Essential hypertension, Bronchial asthma, Ulcerative colitis, Peptic ulcer, Neuro-dermatitis, Thyro-toxicosis and Rheumatoid arthritis. Beginning from these seven classical illnesses of Alexander, the number of these illnesses has continued to increase by leaps and bounds, as the evidence for their psychosocial causation became more evident. At present, the list of psychosomatic illnesses is virtually endless. The Alexander gave his specificity hypothesis, which states that if a specific environmental stressor or emotional conflict occurs, it results in a specific illness in a genetically predetermined organ³. George Engel (1977) gave a bio-psychosocial model to explain the complex interaction between biological, psychological and social spheres resulting in a psychosomatic illness. This view point has become very popular. It has been found that certain type of personality traits are very common in the patients of coronary artery disease (CAD), which are collectively known as coronary prone type A behaviour (Friedman and Rosenman). The type "A" behaviour is characterized by Time urgency and excessive competitiveness and hostility. There is always a hurry to finish the task in hand and there is need to win always, with a mistrust for other people's motives. Rage ensues, if the person is interrupted from achieving objective.

All the above outcomes are due to increasing stress, which is in response of body to various environmental, physical and social situations. Stress related complications affect not only the industry, economy and education but the complete human life. Although one can not quantitatively assess but stress seems to be involved in much of unhappiness in humans. Ayurveda describes that aetiological factors of diseases are mainly of three kinds⁴ -

1. Indriyarth Atiyoga, Ayoga and Mithyayoga.
2. Karma Atiyoga, Ayoga and Mithyagoga
3. Kala Atiyoga Ayoga and mithya yoga.

Indriyarth Atiyoga, Ayoga and Mithyayoga is a kind of unhealthy act caused by the association of unsuitable objects of senses to five sense organs. Similarly, abnormal karma refers to the indulgence in the activities of vak (speech), Manas (mind) and Sharira (body) is excessive, inadequate and perverse activities. The kala, refers to time and seasonal factors. Acharya Charaka has said that the Parinam i.e. Transformation is the quality of the time. It is one of the basic substance and transforms all deeds of creatures in to good and bad results as and when to be enforced. It is pertinent to state that all these causative factors ultimately results in a stress diathesis and produce illnesses^{4,5}.

Life -style modification therapy

The purpose of life style modification therapy is to help patients change behaviour that contribute to stress and initiate new dietary and physical activity & behaviours needed to change lifestyle. Behaviour therapy for lifestyle should involve :

- Developing specific and realistic goals that can be easily measured e.g. walking for 20 minutes.
- Developing a reasonable plan for reaching these goals and prevent relapse.
- Making incremental changes rather than large changes, so patients can have successful experiences that can be used as a foundation for additional lifestyle alterations.

The above goals for the treatment of these disorders usually include the following components -

- **Self monitoring** is the most important component which involves keeping daily records of food intake and physical activity and checking weight regularly.
- **Self monitoring records** can provide information needed to identify links in the behaviour chain that can be targeted for intervention. In addition, records keeping enhances compliance with dietary and physical activity interventions.
- **Problem solving** is a systematic method of analyzing problems and identifying possible solutions.
- **Contingency management** involves developing methods to help recovery from episodes.
- **Stimulus control** is the process of avoiding triggers that prompt eating.
- **Stress management** is used to decrease the negative impact of stress on positive behaviour patterns.
- **Social support** from family members and friends is important for modifying lifestyle behaviours.
- **Cognitive restructuring** teaches patients to think in a positive manner and to correct thought that undermine lifestyle management efforts. Cognitive techniques also help patients accept realistic, but less than desired changes. Inappropriate feelings of failure after achieving modest but clinically important changes can lead to relapse.

Relaxation Techniques

- Jacobson's progressive relaxation technique.
- Yoga.
- Autohypnosis.
- Transcendental meditation.
- Bio-feed back.
- Individual psychotherapy.

Yogic Relaxation Techniques

- Asanas (Physical postures).
- Pranayama (Breath control)
Nadi Shodhana
Ujjayi Pranayama
- Yoga Nidra (Technique of Yogic Relaxation)
- Dhyana (Meditation)⁶

Yoga Nidra

Yoga Nidra is a systematic method of inducing complete physical, mental and emotional relaxation which has been derived from Tantric classics⁶. It has been developed and brought into practical form by Swami Satyananda of Bihar School of Yoga, Munger. It is practiced into following four phases

- Samkalpa (Resolution)
- Rotation of consciousness
- Awareness of Breath
- Feelings and sensation
- Visualization.

It has been found extremely effective technique for the prevention and management of hypertension, Diabetes Mellitus, Coronary Artery Disease and other lifestyle disorders and is being practiced in the various clinical set ups with fruitful results.

CONCLUSION

Rapid changes in globalizing world associated with urbanization in the new millennium have resulted in newer type of stressors. Negative lifestyle factors reduce the ability to cope with these adverse stresses. Most common negative factors that are becoming part of modern life style are-Abusing drugs and alcohol, Overwork, poor diet including excess caffeine or sugar, Lack of exercise, Poor sleep, lack of leisure time as well as fun and recreational activities. Physical illnesses resulting from unhealthy life style are - Ischemic heart disease, Diabetes-mellitus, Hypertension, Acid peptic disease, Obesity, Alcoholic liver disease etc. The effect of stress over these diseases can be taken care by variety of relaxation and stress reduction activities. They include: Meditation – Yoga asana & Pranayama, Prayer, listening to music, looking at pleasant scenes or art, body scan exercises, guided imagery.

These exercises need to be practiced regularly to be effective. Yoga Nidra is a very useful procedure for taking care of the variety of stressors. Its effectively can be enhanced by combining it with Life style modification techniques.

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