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A LITERARY REVIEW ON CONCEPT OF STRESS AS A HETU IN VARIOUS DISEASES

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ABSTRACT

A healthy mind breeds a healthy body and vice versa. An unhealthy mind even in a healthy body, will ultimately destroys health. The body and mind in equilibrium state creates happiness while its imbalance causes the unhappiness, uneasiness i.e. Disease- which may be somatic or psychosomatic in nature. According to WHO, "Health is a state of complete physical, mental, social, and spiritual well being and not merely the absence of disease or infirmity." Healthy balance of mind and body is given most importance in Ayurveda. This balance is disturbed now-a-days by change in lifestyle of humans, which is causing a lot of stress. Stress is a psycho- physiological response within the body to some physical, emotional or environmental stimulus. Stress is the origin for all mental and physical disorders. Stress plays an important role in the etiopathogenesis of several diseases ranging from psychiatric disorders like anxiety, depression etc. to endocrine disorders including diabetes mellitus, peptic ulcers, hypertension and ulcerative colitis. Changing lifestyle makes us more prone to stress and in turn to stress induced disorders. Ayurveda is the science of life which is highlighted as a holistic system with its concern for prevention of stress and look forward for mental health.

KEYWORDS –

Stress, Psychosomatic, Psychiatric, Endocrine disorders.

INTRODUCTION –

Stress is a psycho-physiological response within the body to some physical, emotional or environmental stimulus¹.

The Ayurvedic approach to stress and most health concerns is based on an imbalance in our energetic properties or body building units- three doshas vata, pitta and kapha¹. Stress in Ayurveda is seen predominantly as a disturbance to our vata dosha the energy of movement. The vata dosha is intrinsically related to the nervous system¹. Stress can be positive or negative². Stress is good when the situation offers an opportunity to a person to achieve something. It acts as a motivator for outstanding performance or achievement². Stress is negative when a person faces social, physical and emotional problems. In today's lifestyle due to excessive urbanization, industrialization and advance technology have given rise to situation which give rise to dangerous emotional strain and stress². Each and every one has to suffer various challenges because of the increasing occupations, competition in every field, increasing demands and lifestyle changes². Due to all this conditions stress arises, which leads to anxiety, anger, depression, etc. In addition to this intake of unhealthy diet, improper eating habits, smoking, drinking and addiction to drugs etc. also results in different kinds of psychological stresses². Various lifestyle related diseases like diabetes mellitus, hypertension, coronary artery disease etc. are considered to be psychosomatic disorders as stress and psychosocial factors are important as causative, precipitative factors in this disorders².

In Ayurveda three main etiological factors are responsible for all

diseases of manovaha strotas- Asatmyindriyarthasamyoga, Prandyaparadha & Parinama².

There is a close connection between our body and mind³. Charakacharya quoted chinta (stress) -atichintan (overthinking) are the causative factors of the vitiation of rasavaha strotas³. Along with this gurusheeta-atishnigdha-atimatra- samshantam are also causative factors of rasavaha strotas dushti (Ch.Vi.5/12) which leads to accumulation of extra fat in the body causing dislipidemia which contributes in etiopathogenesis of ischemia⁶. The mental stress due to excessive worrying and thinking affects functioning of heart and blood vessels. Anxiety may give rise to heart palpitations⁶. Along with other symptoms such as ashraaddha, aruchi, tandra, jwara, pandu, early ageing, grey hairs, etc.(Ch. Su. 28/9-10). Now-a-days infertility problems are also increasing rapidly and the main cause is the stress in the working fields which has influence on agni which leads to gastrointestinal disorders and also affects on production of rasadi sapta dhatus. Wholesome food taken even in proper quantity, donot get properly digested when the individual is in trouble with grief, fear, anger, sorrow, stress, etc².

Thus stress is a profound risk for almost all non-communicable diseases including cardiovascular disease, cancer, diabetes, neurological diseases³. Thus, stress as a hetu in various diseases must be studied and nidanparivarjan must be suggested in order to lead healthy and stress free life¹³.

AIM- To study concept of stress as a hetu in various diseases.

OBJECTIVES- 1) To study concept of stress according to Modern view.

2) To study concept of stress according to Ayurvedic view.

3) To study stress as a hetu in various diseases.

MATERIAL AND METHODS –

As we are doing literary review on concept of stress, all modern and ayurvedic texts were scrutinized for collecting the information. Along with this various research articles, google scholar, pubmed articles ,etc. were referred to fulfill the aims and objectives of the study.

LITERATURE REVIEW –

STRESS – MODERN VIEW

Stress is any physical, physiological or psychological force that disturbs equilibrium⁸. Stress is a condition of mental or emotional strain or tension, which can lead to under performance and adverse clinical conditions⁹. Stress is a condition arising from external physical or mental overload⁹. Stress is a psychosomatic disorder because the initial cause of such a disorder focuses on the psyche and the manifestations are obviously somatic². Stress has been defined as the nonspecific response of the body for any demand, which can be psychologically defined as a perceptual phenomenon arising from a comparison between the demand on the person and his ability to cope with it². An imbalance between these may cause stress. Prolonged exposure to stress can unbalance the mental and physiological state of a person thereby leading to other illnesses like depression, hypertension, cardiac diseases and metabolic disorders. Such conditions rooted in mental or emotional factors are rapidly increasing in prevalence and emerging as major global diseases⁹. Stress may be generated through work overload at home and workplace, within

relationships, as a result of internal emotional matters, frustration, lack of social support, ill health and financial instability as well as through major conditions such as unsatisfied marriage, death, divorce, etc². In day-to-day life every human faces number of problems which leads to mental stress.

STRESS – AYURVEDIC VIEW

Stress is nothing but chinta. Charaka defined chinta-atichintan are the causative factors of vitiation of rasavaha strotas ³. Chinta aggravates vata, the vitiated vata adversely affects the heart and destabilize the buddhi and smriti³.

Chinta as an anxiety for a thing which is not yet obtained. Chinta is also explained as mental suffering. Chinta is defined as excessive thinking about particular matter¹⁰.

In Ayurveda , stress is referred as sahasa. Charaka advises to avoid sahasa as it adversely affects the body. (Ch. Ni. 6/5) Sahasa as it causes ojahkhsaya – loss of immunity (Ch. Su. 17/76-77) increases the chances of the body to face various infectious diseases¹¹. Therefore, sahasa should be avoided as far as possible and body should be well protected by taking care of three pillars of life -trayoupastambhas – aahar, swapna, brahmacharya (Ch. Su. 11/35) ⁴.Sleep here indicates adequate rest essential for body. Stress inducing factors also called stressors recognized in Ayurveda can be classified as – physical stress like excessive physical exercise, vigils, fasting, injury, exhaustion, uneven body postures or psychological like anger, fear, grief, anxiety ,etc.¹¹(Ch. Ni. 1/19-22). The judgement capacity of a stressed person is generally affected and faulty decision known as

pradnyaparadha occurs which is another important etiological factor for large number of diseases. Thus a vicious cycle is formed caused lot of stress to an already stressed person¹¹.

STRESS – AS A HETU IN VARIOUS DISEASES

Stress has been seen to be involved in the etiopathogenesis of a variety of diseases including psychiatric disorders (depression, anxiety, etc.), immunosuppression, endocrine dysfunction, peptic ulcers, hypertension and ulcerative colitis¹¹. Modern lifestyle makes us more prone to stress and in turn to stress induced disorders¹¹.

***Stress induced diseases according to Ayurveda -**

In Charaka Samhita stress is described as one of the hetu for vitiation of rasavaha strotas (Ch.Vi.5/12). If rasavaha strotas gets vitiated various dushti lakshanas are observed such as ashraaddha, aruchi, asyavairasya, hrullas, gaurav, tandra, jawara, pandu, klaibyam, premature ageing, etc.⁴(Ch.Su.28/9-10)

***Klaibyam =**

Klaibyam here means impotence i.e. a man who is unable to perform sexual intercourse¹². It leads to infertility problems. Stress has influence on agni¹⁰ which leads to improper digestion of food which in turn produces apachit ahara rasa and apachit rasadi sapta dhatus i.e. shukra dhatu is also affected which gives rise to infertility problems in male and females.

***Premature ageing=**

Premature ageing is a commonly seen disorder due to improper diet as well as lifestyle factors which leads to stress. Stress can also cause many types of physical and emotional symptoms such as diarrhea or constipation, forgetfulness,

frequent aches, headaches, sexual problems, infertility, tiredness, nidranash, weight loss or gain etc¹².

So important thing is Nidanparivarjana i.e. avoid the nidans/hetus which are responsible for etiopathogenesis of disease. Sushrutacharya explained nidanparivarjana is the best treatment for any disease it may be physical or mental¹³.(Su. Ut. 1/25)

***Stress induced diseases according to Modern Science -**

The experience of too much stress over long time can have adverse effects on the physiological system and give rise to conditions like increase heart rate and blood pressure, tension, migraine and it can also affect brain gut communication, may trigger pain, bloating and other gut discomfort too¹⁴. Many studies are carried out which concludes that short term stress can boost immune system, whereas chronic stress has negative effect on the immune system¹⁴. Stress seems to worsen or increase the risk of conditions like obesity, heart disease, Alzheimer's disease, diabetes, depression, gastrointestinal problems, asthma¹².

***Heart disease =**

Stress can directly increase heart rate and blood flow and causes the release of triglycerides into blood stream. High triglycerides combined with high cholesterol raise risk of heart attack, strokes and pancreatitis¹².

***Diabetes =**

It is known that stress enhances the activity of the hypothalamus-pituitary-adrenal (HPA) axis and results in increased secretion of corticosteroids¹⁵. Cortisol is one of the main factors mediating the effect of stress on metabolism in general and on glucose metabolism in particular. Cortisol raises blood glucose levels by

stimulating hepatic gluconeogenesis and inhibiting the action of insulin and contribute to insulin resistance¹⁶.

*Headaches =

Stress is considered one of the most common triggers for headaches as well as migraine¹².

*Depression and anxiety =

Chronic stress leads to depression and anxiety in most persons which gives rise to number of mental disorders.

Stage of chronic stress leads to health problems such as high blood pressure, cardiac diseases, diabetes, obesity, depression or anxiety, skin problems, menstrual problems etc¹². Thus stress acts as a causative factor for etiopathogenesis of various diseases.

DISCUSSION AND CONCLUSION-

Excessive thinking about particular matter is called as stress. In day to day life people come across one or other form of anxiety or stress. Cortisol is the glucocorticoid hormone called as 'stress hormone' which is secreted by the adrenal glands during stress¹⁷. Cortisol secretion is controlled by the hypothalamus, pituitary gland and adrenal gland commonly referred to as the HPA axis. HPA axis activates the sympathetic nervous system which can be correlated with vatavruddhi in chinta/stress¹⁰. Fast changes in today's globalizing world associated with urbanization have resulted in new type of stressors. Negative things in our daily routine reduces the ability to cope with these stresses and that are becoming part of modern lifestyle. Today's lifestyle have many negative factors as use of drugs and alcohol, workload, poor diet, lack of exercise, poor sleep habits, fast and junk food consumption, etc. Somatic

diseases resulting from unhealthy lifestyle are IHD, DM, hypertension, acid peptic disorder, obesity, etc. The effect of stress over these conditions can be prevented by variety of relaxation and stress reducing activities.

Ayurveda believes in prevention is better than cure. Various types of therapeutic methods are explained in Ayurveda for reducing stress in day-to-day life as-

- 1) Rasayana therapy
- 2) Sadvritta and achar rasayana
- 3) Satwavajaya chikitsa
- 4) Panchakarma - like nasya, shirodhara helps to balance tridosha and relieves the stress.
- 5) Nidanparivarjana- avoid causative factors of stress.

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