

A CRITICAL REVIEW ON PATHOPHYSIOLOGY OF MANASIK VIKARA WRT STRESS

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ABSTRACT

Life is the complex union of Satva, Atma and Sharira. The presence of alpa Satva, vitiation of both sharirik dosha (vata, pitta and kapha) and manasa dosha (rajo and tama) and also vitiation of manovaha srotas are root causes of many diseases. Vitiated vata hampers the happiness of Manas and provokes bhaya, shoka, moha, dinata etc. These Mansika bhavas play a vital role in the etiopathogenesis and exacerbation of the diseases. The disturbance in Manasika bhavas like Kama, Krodha, Lobha, Moha, etc. vitiates Manasa dosha & Sharirika dosha along with Agni and thus disturbs the homeostasis of both body and mind resulting in the root cause of many diseases. Stress is now becoming more accepted as being crucially related to our total – physical, mental & spiritual health. Stress has the meanings like: difficulty that causes worry or emotional tension, a state of mental or emotional strain or suspense, anxiety, feeling uptight, tension, jitters, apprehension etc. The present article shows the importance of manas, their gunas as well as doshas, aetiology, pathophysiology, symptoms in the shelter of various diseases in which Manas hetus are discussed.

KEYWORDS: Sharirik Dosha, Manas dosha, Manasika bhavas, Manas Vikar, Stress.

INTRODUCTION

According to the latest health reports, Stress is said to be one of the largest killers of man today. Stress is now becoming more accepted as being crucially related to our total – physical, mental & spiritual health. Increased suicidal attempts, divorces, break in families and higher crime rate are continuously pointing towards the need to understand stress. Epidemiological findings on prevalence of mental disorders in India.^[1] In the light of modern or current science, evidence has surfaced connecting the concepts of tridosha and prakriti with stress disorders. The concept of Prakriti can be applied for manifestation and prognosis of diseases. Lust (Kama), anger (Krodha), greed (Lobha), delusion (Moha), jealousy (Irsya), grief (Shoka), anxiety (Chinta), fear (Bhaya) etc. are the root cause of many diseases.^[2] The disturbance in these Manasika bhavas, vitiates Manasa dosha & Sharirika dosha along with Agni and thus disturbs the homeostasis of both body and mind. Stress has the meanings like: Difficulty that causes worry or emotional tension, a state of mental or emotional strain or suspense, anxiety, feeling uptight, tension, jitters, apprehension etc. Stress is now becoming more accepted as being crucially related to our total – physical, mental & spiritual health.

AIMS AND OBJECTIVES

- (1) To elaborate the concept of mana and manovaha srotas in ayurveda and its modern correlation.
- (2) To explain the pathophysiological aspect of Stress as Mansik Bhava in Ayurveda and modern science in detail.

Desire – Root Cause for Psychic Imbalance

Acharya Charaka has mentioned when an individual's desires are not fulfilled, Psychic disease happens.^[3] In Ashtanga Hridaya, Sutra sthana Acharya mentioned a word Ragadi, here Raga means is fearsome and Ragadi means a group of disease like Kama (Lust), Lobha (greed), Moha (in fluctuation), Krodha (anger), Mada (egotism), Matsarya (jealousy)etc. These disease causes intense excitement, unconsciousness and restlessness too^[2]. According to all Acharyas these emotional urges must be controlled otherwise it can lead to mental disease or fluctuation of mind and that can harm an individual or society.

Stress & Dosha

Stress has relations with the Tridosa as described by Charakacharya.^[4]

As far as Triguna (Manasik Dosa and Sattva) are concerned Sushrutacharya explains that all the Manasika

Vikaras are produced due to various types of Iccha i.e. desire and Dvesa i.e. hate.^[5]

Stress & Prakriti

Stress also has relations with various Prakriti as the Prakriti has relations with the Mansik Bhavas. Both Deha Prakriti and Manasa Prakriti are described to have relations with Mansika Bhavas.

The Deha Prakriti has been described in relation to the fundamental theory of Tridosha.^[6] It is of seven types i.e. Vataja, Pittaja, Kaphaja, Vatapittaja, Vatakaphaja, Pittakaphaja and Sama Prakriti.

Ayurveda scriptures have mentioned numerous classification of human personality in the form of Manasa Prakriti on the basis of different types of pure psychic features.^[7,8]

They are based on the predominance of three Manasa Gunas i.e. Sattva, Raja and Tama.^[9,10] Accordingly, three Manasa Prakriti are: Sattvika, Rajasika and Tamasic.

Sattvika Prakriti: Sattvika person is kind, truthful, religious, intelligent, valiant, self controller, stable cognition, good in memory, fearless, virtuous, tolerant

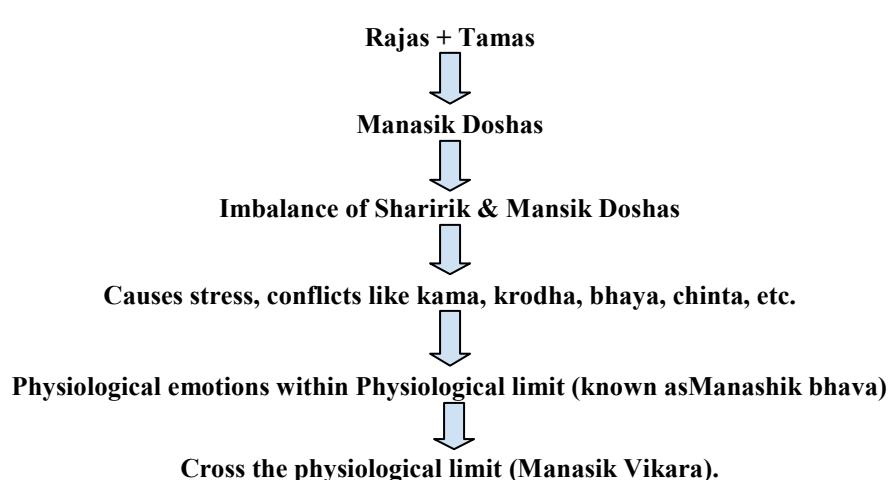
etc.^[7,8] It is further sub-classified into following seven types: Brahma Sattva, Arsyta Sattva, Aindra Sattva, Yama Sattva, Varuna Sattva, Kaubera Sattva and Gandharva Sattva.

Rajasika Prakriti: Rajasika Prakrti persons are generally valiant, proudish, in grief, angry, egoistic, interested in traveling, excessive desirous etc.^[11,8] It is further subdivided into the following six types: Asura Sattva, Raksasa Sattva, Paisaca Sattva, Sarpa Sattva, Preta Sattva and Sakuna Sattva.

Tamasa Prakriti: These people are temper-less, ignorant, lazy, unreligious, unstable minded etc^[12, 8]. It is sub classified into three types: Pasu Sattva, Matsya Sattva and Vanaspatya Sattva.

Pathophysiology (Samprapti) of Mansika Vikaras

Nidan Sevana Dosha gets vitiated (Manas, Sharira Dosha) takes shelter in Hridaya (Seat of intellect), manovaha Srotodusti, Utpapati of Manasik bhava. The manasik bhava are nothing but the physiological limit which when crossed then it leads to Manasika Vikaras because when these Bhavas are not fulfilled by an individual then there will be vitiated vata mainly.



Bhaya (Fear)

It is a condition precipitated by dreadful act. It develops due to facing unwanted situations. Rajo dosha is mainly involved. Bhaya is a human emotion which makes a person incapable of doing anything as a result of which the mana of a person becomes restless. Increase in bhaya further leads to increase in vata dosha which ultimately leads to anidra. The victim of Bhaya can suffer from Diarrhoea. Acharya Charaka has mentioned Bhayaja Atisara among its 6 types. Its intensity is examined by Vishada.^[13] In fear the punishment centre of the limbic system is activated. It turns on the autonomic response of fight-or-flight response. Stimulation of a thin zone of periventricular nuclei of thalamus, located immediately adjacent to the third ventricle usually leads to fear. Tremors in the body parts, dryness of mouth sweating, giddiness, moha are the symptoms of bhaya. A sudden

exposure to bhaya may lead to many physical and mental diseases.^[14]

Chinta (Worry)

There is an increase in sukshma guna of vata due to atiyoga of chinta which causes increase in mental vibrations. Hence the mind becomes restless leading to lack of nidra. Sometimes individuals suffer from an emotional disorder, which is psychologically just as disabling as the more extreme forms of fear but in which the individual really does not know, of what he is afraid, this is known as Chinta. Neurotic anxiety is perhaps the most important of all the symptoms in the sphere of emotions of psychopathology. The physiological concomitants which characterise anxiety are increased blood pressure, tachycardia, increased respiration, tremors and sweating.

Krodha (Anger)

One of the evils found within the human mind. Krodha originates from the rajo guna and the main feature is to do harm to others. It vitiates vata and pitta and produces symptoms accordingly. This causes daha in the whole body and stimulation of mana, further causing anidra. The degree of anger can be measured on the basis of intensity of Droha found in a person.^[13] Some people, when they are angry, have stomach trouble at the same time or grow red in the face. Their circulation is altered to such a degree that a headache ensues. This condition affects one's body organ like heart by several psychosomatic mechanisms. So that heart beat, blood circulations etc. are found to be increased due to excessive activation of sympathetic nerves. Symptoms of anger include teeth grinding, fist clenching, flushing, paling, prickly sensation, numbness, sweating, muscle tensions and temperature changes. Here the punishment centre of the hypothalamus is stimulated from the external stimuli. As a result, there will be a surge of catecholamines. The release of catecholamines triggers the fight-or-flight response in the individual through activating the autonomic system. Stimulation of the lateral hypothalamus, sometimes leads to overt rage and fighting.

Shoka (Grief)

It is a mental state precipitated by the loss of objects which are more beloved and in it rajo dosha is mainly involved. Vata dosha aggravates first then pitta dosha aggravation. The distress caused by shoka can lead to many ill effects. Continuous exposure to shoka for a longer period can cause different physical diseases, emaciation and agni vikriti. The victim suffering from grief is seen with weeping, feeling of self-insult, with dry mouth and throat, anemic and flaccid body having regular and long expirations. The degree of Shoka can be measured on the basis of intensity of Dainya.^[13] The victim of Shoka can suffer from diarrhoea, diabetes mellitus, insomnia and pyrexia etc. A man of "Hina Sattva" can pass into "Murchha" or even death due to the acuteness of Shoka persisting for a long time. Manasika vikara as repressed negative thoughts and emotions vitiate tridosha as a result these doshas aggravate in their places called sanchaya after this if causative factors are not prevented these doshas start to affect brain and nervous system called prakopa. This causes improper secretion and flowing of neuro-hormone (prasara) to immune cells (sthanasamsraya) affecting body organs (vyakta) and ultimately leading to physical diseases (bheda). That is Psychic phase – Sanchaya, Psychoneurotic phase - Prakopa and Prasara, Psychosomatic phase - Sthana Samsraya and Vyakti and Advanced organic phase – Bhedavastha.

Insomnia has to do with something called the Stress Cycle. Whenever one feels threatened in any way the body has a mechanism called the fight or flight response that helps deal with the threat by increasing or decreasing the supply of various neurotransmitters which in turn

produces dramatic changes in his physical and mental state especially emotional state, how he feels. Anger and fear, excitement and anxiety trigger the body's 'fight or flight and fright response. The adrenal glands flood the body with stress hormones, such as adrenaline and cortisol. The brain shunts blood away from the gut and towards the muscles, in preparation for physical exertion. Heart rate, blood pressure and respiration increase, the body temperature rises and the skin perspires. The mind is sharpened and focused. Constant flood of stress chemicals and associated metabolic changes can eventually cause harm to many different systems of the body causing short and long-term health problems like insomnia. Mental tension, stress and strain, emotional instabilities like fear complexes (Phobias), etc. have tremendous somatic impact in bringing down the digestive power.^[15]

Manasa Bhavas^[13]

Charaka has given brief explanation of Manasa Bhavas in Vimana sthana 4/8, which are 22 in number and can be explained as follows:

1. Mano-Artha (Avyabhicharena) - By perception of specific objects even in the presence of all other senses along with their respective objects.
2. Vijnana - (Vyavasayena) - By proper reaction to activities.
3. Rajah - (Sangena) - By attachment.
4. Moha - (Avijyanena) - By lack of understanding.
5. Krodha (Abhidrohena) - By revengeful disposition.
6. Shoka (Dainya) - By sorrowful disposition.
7. Harsha (Amodena) - By happiness or celebrativeness.
8. Priti (Toshena) - By satisfaction which is reflected by joyful appearance of the face etc.
9. Bhaya (Vishadena) - By apprehension.
10. Dhairyra (Avishadena) - By fearlessness.
11. Virya (Utthanena) - By initiation of action.
12. Avasthana (Avibramena) - By stability of mind.
13. Shraddha (Abhiprayena) - By request or quests.
14. Medha (Grahena) - By the power of comprehension.
15. Sanjna (Nama grahena) - By recollection of names.
16. Smriti (Smaranena) - By the power of retrieval.
17. Hriyam (Apatrapanena) - By bashfulness.
18. Shila (Anushilena) - By habitual intake or following.
19. Dvesha (Pratishedhena) - By disinclination.
20. Upadhi (Anubandhena) - By subsequent manifestations.
21. Dhriti (Alaulyena) - By firmness.
22. Vashyata (Vidheyata) - By compliance with others.

These Bhavas are also described by Acharya Bharata in "Natya Shastra". These Bhavas are also known as "Sthayi Bhavas" there. With these Bhavas other short term Bhavas also originate and they are known as "Vyabhichari Bhavas". They also affect our body and produce some changes. We find that in ancient Indian literature these Bhavas have been greatly stressed. The Gita lays great stress on overcoming these human weaknesses.

Manasik Vikaras

Some Manasik Vikaras describes in Ayurveda are

Unmada (Psychosis), Apasmara (Epilepsy), Bhrama (Illusion), Vibhrama(Delusion), Vyamoh (Paranoia), Avyavasthit chitata (Mood disorders), Prajnparadha (Lack of harmonization between dhi, dhriti and smriti), Bhranti Manograsita (Obsession), Apatantrakam (Hysteria), Avasada (Depression), Citta Udvega (Anxiety disorder).

Role of Hridaya in Manovah Srotas

Hridaya is related to emotions, elementary emotional drives and egoism. In Ayurveda, Sadhaka pitta is deemed to be essentially responsible for the higher mental faculties and emotional states of the human being. Sushruta, Vaghbata, Chakrapani, Dalhana etc. have clearly mentioned that Sadhaka pitta is responsible for emotional activities. All the acharyas have unanimously described that Sadhaka pitta is located at Hridaya and it is responsible for Bhaya, Shaurya, Krodha and Harsha. Sushruta has observed that Pitta, located in Hridaya, is known as the Sadhakagni, whose function is to enable one to achieve one's aspiration.^[16] While commenting upon this, Dalhana has further elaborated the functional aspect that it (Sadhaka pitta) does its functions by dispelling the Kapha and Tamas of the Hridaya and thus enables the Manasa to perceive things clearly. Dalhana has clearly correlated Manasa and Hridaya with the functioning of Sadhaka pitta. Vaghbata has also located Sadhaka pitta in Hridaya and attributed to it Buddhi (intelligence), Medha (memory and intellect), Abhimana (self-esteem and ego factor) and the capacity that enables one to achieve one's aspiration. While describing the etiology of mental disease, Charaka has described the close relation of the emotions that are shown to be deeply related and dependent upon Hridaya.

Stress^[17]

Stress plays a part in everyone's life. Stress is the "wear and tear", it is an individual's body's experience as one adjust to the continually changing environment. The human body reacts to stress with fight or flight or fright response. It has physical and emotional effects on individuals and can create positive or negative feelings. As a positive influence, stress can help to compel one to action; it can result in a new awareness and an exciting new perspective. As a negative influence it can result in feelings of distrust, ejection, anger and depression, which in turn can lead to health problems such as headache, upset stomach, rashes, insomnia, ulcers, heart disease and stroke. Stress happens when one is worried or uncomfortable about something, which can then make his body feel bad. One may feel angry, frustrated, scared or afraid which can then give him a bellyache or a headache or he may not feel like sleeping or eating.

In conclusion, psychological stress does have a significant effect on the immune system. It raises catecholamine and CD8 levels, which suppresses the immune system. This suppression, in turn, raises the risk

of viral infection. Stress also leads to release of histamine, which can trigger severe bronchoconstriction in asthmatics. It increases the risk for diabetes mellitus, especially in overweight individuals, since psychological stress alters insulin needs. Psychological stress also alters the acid concentration in the stomach, which can lead to peptic ulcers, stress ulcers and ulcerative colitis. It can lead to increased muscle tension, in turn, leading to muscle cramps. Due to which, there may be tight neck, shoulder and upper back muscles leading to headache. Chronic stress also leads to plaque buildup in the arteries, especially, if combined with a high fat diet leading to atherosclerosis, which is often responsible for angina or heart attacks, which are usually brought on by acute stress themselves. Emotionally, stress may lead to feelings of expression, anxiety and anger.

Pathophysiology of stress diseases

Stressor: Any stimulus that produces a stress response is called a stressor.

A stressor may be almost any disturbance like:

1. Heat or cold
2. Environmental poison
3. Toxins given off by bacteria during a raging infection.
4. Heavy bleeding from a wound or surgery.
5. Strong emotional reaction.

Following any physical or mental stress there occur two types of reactions

1. Homeostatic Mechanism

Homeostatic mechanisms attempt to counteract the everyday stress of living. If they are successful, the internal environment maintains normal physiological limits of chemistry, temperature and pressure.

2. General Adaptation Syndrome (GAS)

If a stress is extreme, unusual or long lasting, however, the normal mechanisms may not be sufficient. Then, the stress triggers a wide-ranging set of bodily changes called the stress, introducing the concept of the GAS. Unlike homeostatic mechanisms the GAS does not maintain the normal internal environment. It resets the levels of controlled conditions to prepare the body to meet an emergency. For instance, blood pressure and blood sugar level are raised above normal.

Symptoms of stress

Stress usually first affects the inner emotions.

- Initial symptoms may include the following feelings:
- Anxiousness, Nervousness, Distraction, Excessive worry, Internal pressure.
- Stress is often accompanied by physical symptoms, including

Twitching or trembling, Muscle tension, headaches, Sweating, Dry mouth, difficulty swallowing, Abdominal pain (may be the only symptom of stress, especially in a child).

Sometimes other symptoms accompany anxiety

Dizziness, Rapid or irregular heart rate, Rapid breathing, Diarrhea or frequent need to urinate, Fatigue, Irritability, including loss of your temper, Sleeping difficulties and nightmares, Decreased concentration, Sexual problems.

DISCUSSION

Mansika bhava adversely affects not only the mind but also almost all the systems of the body, and may sometimes endanger the life of the individual. The root cause of impaired atma-indriya- artha samyoga is the prajnaparadha. Due to the lack of intelligence, memory and will power, man is prone to commit intellectual errors. It will vitiate all the doshas, especially vata, which in turn vitiates trigunas. Vitiation of tridoshas and trigunas causes impairment of all the mental and physical function. All these effects result in the development of diseases. Hypertension, fever, diabetes mellitus, insanity, insomnia, diarrhoea, hysteria, apatanaka and so many other diseases are found originated by these emotional factors. A mental tension affects both the voluntary system and the vegetative nerve system. By means of vegetative system the tension is communicated to the whole body, and so, with every emotion, the whole body is itself in tension. The manifestations of this tension, however, are not as clear at every point and we speak of symptoms only in those points where the results are discoverable. If we examine more closely we shall find that every part of the body is involved in an emotional expression and that these physical expressions are the consequences of the actions of the mind and the body.

CONCLUSION

Mansikabhava like atibhaya, atichinta, atikrodha, manastaap etc. plays a vital role in the etiopathogenesis and exacerbation of the disease. To correct the deranged psychosomatic setup these Mansika bhava acting as a stressor should be pacified through meditation, and adopting sadvritta in daily life. These pacified mansika bhavas, by correcting the vitiated state of vata, corrects the whole process of Manasik Vikaras and results in proper functioning of the Manas. Ayurveda is essentially preventive in approach. Primary goal of treatment for the disease is associated with restoration of the underlying physiology. Quality of the mind is unbalanced by manasik vikaras, it has to be treated by controlling particular diet or habits, which play an important role in controlling rajas activity of mind and establishing a tama predominant state which is essential. Sometimes a person looks perfect but when observed, the irritable and changed behaviour such as way of talking and reaction, activities- then that time we can conclude that this person is affected by some mental disorders. And that disorder is nothing but the Manashika Vikaras and the field which deals with that is called as manas roga vigyan in Ayurveda. Manas roga vigyan deals with the dosha related to the manas i.e rajas, tamas if any imbalance the three then they are called as Mansika doshas but when manashika and sharirika doshas vitiates then they takes shelter in Hridaya i.e is the site of Atma, Manas, Buddhi

and Srotas (Sangyawah, manovaha, chetanawaha srotas). These Srotas originate from the Hridaya. Vitiated doshas, do the avarana (cover) of manovaha srotas and cause Manasik Vikaras leading to Manasik vyadhis. Hence the present article shows the importance of manas, their gunas, aetiology, symptoms and their treatment in the shelter of Manas Roga Vigyan.

REFERENCES

1. H.C.Ganguli, Indian Journal of Psychiatry, 2000 Jan-Mar; 42(1): 14-20.
2. Vagbhata, Paradkar HS. Ashtanga Hridaya with Sarvanganasundara teeka of Arunadatta and ayurveda rasayana of Hemadri. Varanasi: Chaukhamba Surabharati Prakashan, 2010; Su-1/1.
3. Acharya Y.T., Charak Samhita with Ayurveda Deepika commentary of Chakra pani, Edition-Chaukhamba Surabharati Prakashana, 2011; Su-11/45.
4. Acharya Y.T., Charak Samhita with Ayurveda Deepika commentary of Chakra pani, Edition-Chaukhamba Surabharati Prakashana, 2011; Chi-3/115.
5. Acharya J.T., Sushruta Samhita of Sushruta, Chaukhamba Surbharati Prakashan, Varanasi, Reprint ed., sutrasthan, 2008; 1/33.
6. Acharya Y.T., Charak Samhita with Ayurveda Deepika commentary of Chakra pani, Edition-Chaukhamba Surabharati Prakashana, 2011; Vi-8/95.
7. Acharya Y.T., Charak Samhita with Ayurveda Deepika commentary of Chakra pani, Edition-Chaukhamba Surabharati Prakashana, 2011; Sha-4/37.
8. Acharya J.T., Sushruta Samhita of Sushruta, Chaukhamba Surbharati Prakashan, Varanasi, Reprint ed., Sha, 2008; 4/80-96.
9. Acharya Y.T., Charak Samhita with Ayurveda Deepika commentary of Chakra pani, Edition-Chaukhamba Surabharati Prakashana, 2011; Su-8/5.
10. Acharya J.T., Sushruta Samhita of Sushruta, Chaukhamba Surbharati Prakashan, Varanasi, Reprint ed., Sha, 2008; 4/97.
11. Acharya Y.T., Charak Samhita with Ayurveda Deepika commentary of Chakra pani, Edition-Chaukhamba Surabharati Prakashana; Sha, 2011; 4/38.
12. Acharya Y.T., Charak Samhita with Ayurveda Deepika commentary of Chakra pani, Edition-Chaukhamba Surabharati Prakashana; Sharirsthan, 2011; 4/39.
13. Charak Samhita, by Agnivesha with Ayurveda dipika commentary of Chakradatta Edited by Vaidya Yadav ji Trikamji Chaukhamba Sanskrit Sansthan, Varanasi, edition 5 th Vimanasthana, 2001; 4/8.
14. Guyton C.Arthur, Hall.E.John. Textbook of Medical Physiology. 9th ed. America. Elsevier Saunders, 1999.
15. Saini Neera: Role Of Manas Vikara In Development of Psychosomatic Disorders, IAMJ, 2015; 3(7).

16. Acharya J.T., Sushruta Samhita of Sushruta, Chaukhamba Surbharati Prakashan, Varanasi, Reprint ed., 2008; 21/10.
17. McEwen BS, Stellar E. Stress and the individual: mechanisms leading to disease. Arch Intern Med, 1993; 153: 2093-101.