

A REVIEW OF AYURVEDIC CONCEPT OF PSYCHOLOGICAL RELATIONSHIPS OF HEART

Kumari Monika¹, Meena K L², Vardhan Prabhakar³

¹Ph. D. Scholar, Basic Principles Dept. National Institute of Ayurveda Jaipur, Rajasthan, India

²Ph.D.(Ayu), Associate Prof & Head, Basic Principles Dept., National Institute of Ayurveda Jaipur, Rajasthan, India

³M.D. (Ayu), Lecturer, Dept. Of Shalaky Tantra, National Institute of Ayurveda Jaipur, Rajasthan, India

ABSTRACT

The concept of *hrdaya* (heart) as the seat of *mana* (psyche) occupied a prominent position in *Ayurveda*. In *amarkosha* the words *chitta*, *hrdaya* and *mana* have been used in the same sense. In *Ayurveda* also the words *mana*, *sattva* and *cheta* are synonymous. *Hridaya* and *mastishaka* (brain) are two well acknowledged essential organs. *Shira* (head) is associated with *indriya* (cognitive organs) and *pranavaha strotas* (vital centres and their connected paths) and the *hrdaya* (heart) is related with the *mana* (psyche), *buddhi* (intellect) *chetna* (consciousness) and *mahabhuta* (protoelements). *Sadhaka pitta* residing in *hrdaya* also regulates its functioning. The higher psychological faculties and emotional states are essentially credited to *sadhaka pitta*. The pathogenesis of mental diseases owes astonishing association of heart with them. On the other hand *Acharya Sushruta* also documented brain as the seat of psychological functions. *Shira* (brain) is particularly recognised due to it being the seat of *indriyas*. *Acharya Bhela* observed *mana* as controller of all the senses and *chitta* as the cause of various aspects of intellect. The *chitta* is regarded as an aspect of *mana* and has been stated to enable the *buddhi* to discriminate between good and bad. Therefore *Bhela* assigned the sensory and motor functions to brain while emotional activities are consigned to *chitta* located in heart. Yet few other references also situate *mana* in whole body signifying the intimate relation of mind with the whole body. Thus it seems that the term *mana* is considered in broad prospective including all the nervous activities along with psychological functions. It's one aspect *chitta* residing in heart is responsible for the emotional aspect of a human being. Yet the great spiritual knowledge is attained in brain.

Keywords: *hrdaya*, *manas*, *Shira*, *Sadhaka pitta*, *chitta*

INTRODUCTION

With the emergence of new trends in the development of medical field it looks that the terms *hrdaya* and *manas* have often been mixed up and these terms usually represent *mastishaka* (brain) in the context of mental and psychic activities.

This debate of brain verses heart regarding the site of psyche and consciousness is very old in east and the west. Plato considered the brain and spinal cord as the conductors of vital forces while Aristotle opined that heart is the chief source of

consciousness. In the times of *Atreya* and *Agnivesh* the beginning of this controversy was observed as is evident in the symposium of “development of first part in embryo” in which *Kumarshira bhardwaj* expressed his opinion on first development of *shira* (head) due to it being the site of all senses while *Kankayan* of *Bahleeka* opined the *hrdaya* being the first organ to develop since it is the seat of *chetna* (consciousness). *Vedic* literature also reveals the interrelation and importance of both the organs. It also observed the psychic importance of *hrdaya* ⁽¹⁾. *Chhandogya upanishada* clearly indicated the heart as the centre of consciousness and psyche. Upto the period of *Vagbhata* 500A.D. and *chakrapani* (11th century A.D.) *Arun-datta* (15th century), heart remained the seat of consciousness and psyche. Even well known Indian books e.g. *gita* also had the same approach. Thus in ancient Indian literature there are no definite evidences from which it can be concluded that there had been a lot controversy on the subject. But with the advancement of modern achievements in the field of biochemistry and physiology a tendency has developed in the modern psychology to explain all human behaviour in the framework of nervous system. Current *Ayurveda* scholars are also inclining towards the view of using the word *hrdaya* in the sense of brain in context to psychological descriptions of *hrdaya* in *Ayurveda* ⁽²⁾. Though there is need to testify the *ayurveda* principles on the parameters of modern medical research to make it evidence based science, yet the impartial consideration to maintain the original *ayurveda* facts reveals their approach as scientific. As the ancient *Ayurveda* scholars were very well acquainted with the two distinct entities i.e. brain and heart and their anatomical location in the body, hence clear concept

of *Ayurveda* of consigning psychic performances to *hrdaya* cannot be ignored.

AIMS AND OBJECTIVES

Critically analyse the concept of psychological deliberations of heart from *Ayurveda* perspective and modern sciences.

LITERARY REVIEW

Ayurvedic Review: In *Ayurveda* *hrdaya* and *mastishaka* have been well recognised as two separate vital organs of body ⁽³⁾. The importance of head or brain has been particularly recognised due to it being the seat of *indriyas* ⁽⁴⁾. *Acharya Charaka* directly mentioned the relation of *shira* (head) with *indriya* (cognitive organs) and *pranavaha strotas* (vital centres and their connected paths) and the relation of heart with the *mana* (psyche), *buddhi* (intellect) *chetna* (consciousness) and *mahabhuta* (proto-elements) ⁽⁵⁾. *Acharya Sushruta* claimed the position of heart in the thoracic region near *amashaya dwara* (stomach opening) ⁽⁶⁾. It is related to *rasa*, *rakta* and is the seat of major blood vessels. All these facts conclude that the word *hrdaya* in *ayurveda* definitely relates to heart of modern times. Upper most chief organ of all sense organs is *shiras* (brain) ⁽⁷⁾. *Hridaya* is regarded as the seat of *buddhi* and its proper functioning is regulated by *sadhaka pitta* ⁽⁸⁾. The *mana* and *buddhi* are greatly reciprocally related to each other e.g. in *gyanotpatti krama* (gaining the knowledge) *Charaka* says that *buddhi vyapaara* (accomplishments of intellect) occurs after *manovyaapaara* (psychic actions) for attaining the deterministic knowledge ⁽⁹⁾. *Sadhaka pitta* which is deemed to be essentially responsible for the higher mental faculties and emotional states is located in *hrdaya*. The various psychological functions performed by *saadhaka pitta* are *bhaya* (fear), *shouraya* (courage), *krodha* (anger), *harsha* (ex-

hilation)⁽¹⁰⁾. *Sushruta* assigns it the function to achieve one's aspiration. Its mode of action has been explained by *Dalhan* as it dispels the *kapha* and *tama* of *hrdaya* and thus enables the *mana* to perceive the things clearly⁽¹¹⁾. *Acharya Vagbhatta* expounds the *buddhi* (intelligence), *medha* (memory and intellect), *abhimana* (ego) as attributes to *sadhaka pitta* which is residing in heart (*hrdaya*). Thus emotions are shown to be deeply related to and dependent on heart.

The pathogenesis of mental diseases depicts the association of heart with them. The morbid *dosha* lodged in *dhamani* affecting *hrdaya* cause disturbance in its function and the person is affected with stupor and derangement of mind⁽¹²⁾. In the pathogenesis of *unmada* (insanity), *dosha* in the body of *alpasattva* (feeble minded) get morbid, vitiate *hrdaya* and become localised in *manovahi srotas* and derange the function of *chitta* (psyche) of the person⁽¹³⁾. The purely psychological disorder *atatvabhinivesha* in which irritated *dosha* get localised in *hrdaya* and vitiate *manovahi srotas* hence the person formulates wrong judgements concerning true and false, the wholesome and unwholesome⁽¹⁴⁾. Thus *hrdaya* has been shown to be immensely related to psychic derangements and to the pathogenesis of mental diseases.

The supporting references to consider brain as the seat of psychological functions are also there e. g. *Acharya Sushruta* opined that mental ailments *unmada*, *bhaya*, *chittanasha* may happen due to defects in the five *simanta* of *shiras*⁽¹⁵⁾. *Acharya Bhela* observed that *mana* is enclosed between *shira* and *taalu* and it is the controller of all *indriya* and receives the objects of senses⁽¹⁶⁾. The power of all *indriya* is derived from *mana*. But *Bhela's* distinguishing ability among *mana*, *chitta*

and *buddhi* is for this distinct attitude that he regards *mana* as entirely different from *chitta* and believes it the cause of all cognitive functions and situated in brain. The *chitta* is observed as the cause of all the activities, feelings, judgements and the heart is regarded as its site. '*Buddhi*' the deterministic understanding and judgement was put a function of *chitta*. Thus even assigning the seat of *mana* to *mastishaka* the activities of *mana* are limited to *indriya* and rest of more important functions of psyche like intellect have been assigned to *chitta* which is located in *hrdaya*. Moreover the role of emotional well being in the treatment of heart diseases depicts their interrelation⁽¹⁷⁾. Thus it appears that *Ayurveda* has emphasised the sensory and motor functions being governed by *mastishaka* but psychic (*manas*) and *chetna* (consciousness) functions are assigned to *hrdaya*.

Modern Review:

Various views of modern psychologists also put doubt in assigning the psychological functions to brain e. g. K. S. Hausey considers the neurological explanations of psychological explanations on cerebral localisation and reflex pathways as inadequate. A. H. Maslow mentioned, "we know that the fundamental psychological atom is not a muscle twitch nor a muscle reflex nor an elementary sensation, nor a neuron nor even an observable overt behaviour"⁽¹⁸⁾. Psychology's recognition of the body's influence on the mind coincides with a recent focus on the role of the heart in our social psychology. It turns out that the heart is not only critical for survival, but also for how people related to one another. In particular, heart rate variability (HRV), variation in the heart's beat-to-beat interval, plays a key role in social behaviours ranging from decision-making, regu-

lating one's emotions, coping with stress, and even academic engagement⁽¹⁹⁾.

A thorough appraisal of modern works on emotions and their psychosomatic explanations also let us know the interaction of psyche and the circulatory system. Braun in his publication 'HERZ AND ANGST' stresses the necessity of a thorough study of the relation between heart and mental life. He introduced in his work the concept of cardiac psyche of which the essential mark is anxiety. Heart is specified the organ of anxiety comparable to eyes as the sense organ for sight⁽²⁰⁾. Wmpedocles the leading member of the medical centre at Agrigentum taught that the blood was the medium of thought and the degree of intelligence depended on the composition of blood Thus for him heart was the central organ of intellect and the seat of mental disorder⁽²¹⁾. It was observed that since circulation performed by heart was the function the cessation of which means cessation of life, therefore heart has become one of the most important organ of inner expression. It is for the reason that heart has close relation with emotional life⁽²²⁾. There is also a growing body of evidence to suggest a link between heart and mind still there is need to explore these issues further. The independent nature of heart for its activity particularly from nervous tissue inclines to think in ascribing the heart as the site of consciousness⁽²³⁾ e. g. a specialised cluster of myocardial conducting cells the sinoatrial node (SA node) has the highest inherent rate of depolarization& it initiates the sinus rhythm or normal electrical pattern followed by contraction of heart⁽²⁴⁾. Great blood vessels emanating from heart (*ojovaha / mahaphala*) carry mental stimulus with them to different parts of body as is evident from the dominant psychological alterations in deficiency of *oja*⁽²⁵⁾. Depression has been linked with in-

creased Ischaemic heart disease (IHD) risk and death following myocardial infarction (heart attack). Three major clinical trials have shown that cardiac morbidity and, to a certain extent, even mortality can be reduced by interventions which have a psychosocial component⁽²⁶⁾.

According to a study published in the New England Journal of Medicine, memory, attention and concentration somewhat declined immediately after the bypass surgery and similar decline was observed five years after because of two obvious explanations i.e. either a bypass may affect the brain blood flow or the heart lung pump used during the surgery may cause mental impairment. So, we know there is heart-mind connection through blood circulation. While some experts might find it outside the mainstream of scientific thought, researchers based at the HeartMath Institute, claim that the heart plays a role in the functioning of human intelligence, emotions and personality⁽²⁷⁾.

DISCUSSION

In *Ayurveda hridaya* and *mastishaka* well acknowledged as two separate essential organs are involved in the manifestation of psychological disorders e. g. brain's involvement in psychological diseases is testified by the principles of purification of *shira* as well along with purification of *hrdya*, *indriya* and *koshatha*⁽²⁸⁾. *Acharya Bhela* also observed influence of *mastishaka* on heart⁽²⁹⁾. *Sushruta* also clearly mentioned the involvement of brain in mental ailments. Thus it becomes evident in *Ayurveda* that though great stress has been laid on relation of psyche and *hrdaya* yet the involvement of brain is also given due recognition. Reason for giving heart the importance over brain is due to it being the site of consciousness and psyche and

the dependency of other body organs on it⁽³⁰⁾.

Thus the primary site of *mana* is heart and to perform *gyanotpatti karma* (knowledge from senses) it reaches the brain through blood. The functional relation between heart and brain is well accepted in *atharvaveda*⁽³¹⁾ And the unhindered circulation is mandatory for the successful performance of all bodily functions. *Bhagvada Geeta* also stress to hold the *mana* in heart so as to restrict its movement to brain so that it could be free from objects perception for attaining meditative stage⁽³²⁾. Acharya Bhela also opined that supreme salvation is achieved in the area of *shrigatata* i.e. in brain⁽³³⁾. Thus the prime location of mind and intellect is in heart and supreme knowledge of salvation is attained in brain.

However few other references also signify *mana* in whole body i.e. there is intimate relation of mind with the whole body⁽³⁴⁾. *Charaka* regards that the skin (*sparshanendriya*) pervades all the senses and *mana* is inherent to it⁽³⁵⁾ which shows the innate relationship between the *mana* and peripheral nervous system. Thus it seems that *Ayurveda* considers nervous system as functions of sensory and motor but psychic and emotional factors are assigned to heart.

CONCLUSION

It can be concluded that in *Ayurveda* most of the psychic functions are attributed to *hrdaya* and its role in the pathogenesis of psychic disorders is also profoundly deliberated. Performance of emotional functions by heart is attributed to *sadhaka pitta* and *buddhi* residing in heart. Even today's psychologists are also not agreed in the view of allocating the psychological activities within the field of neurons. While laying stress on *hrdaya* ancient scholars have

recognised the importance of *mastishaka* in the pathogenesis of psychic diseases as well. Acharya Bhela's view of locating *mana* to *mastishaka* and limiting its activities to *indriya* and assigning important functions of psyche like intellect to *chitta* (also a synonym of *mana*) located in *hrdaya* also establishes the heart and brain relationship. Thus it appears that *Ayurveda* does not assign the total psychological functions to *hrdaya*. The inherent relation of *mana* with whole body extensive tackle sense establishes its relation with the whole body also. Hence *mana* is related to heart, brain and whole body. Therefore the innate relation between *manas* with nervous system gets proved to a certain extent. The whole story depicts the term *mana* to be representative of all the nervous activities along with psychological functions. It's one aspect *chitta* residing in heart is behind the emotional state of a human being. In *Bhagvad Gita* also holding this very *chitta* within its place i.e. in heart and thus avoiding its reach to *shira* (place of senses) results in attainment of true meditative state and acquirement of supreme spiritual knowledge in brain.

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CORRESPONDING AUTHOR

Dr. Monika Kumari

Ph. D. Scholar, Basic Principles

Dept. National Institute of Ayurveda

Jaipur, Rajasthan, India

Email address: drmonika1981@gmail.com
