A conceptual study on Medha, Buddhi, Dhee, Dhruti, Smruti and Manas

Dr. Sujit Kumar, Dr. Deepika Mehra, Dr. Vaidehi V Raole and Dr. Sunil P Nikhate

Abstract
The holy Gayatri mantra is a prayer offered to the sun, the illuminator of the Universe, to stimulate and enlighten the mind [1]. In one or the other way has always tried to achieve great abilities in terms of physical and psychological excellences. The changes, improvements and evolutions that have occurred from civilization to civilization, generation to generation are the proofs of developing skills of mankind. The scholars of Ayurveda gave due to emphasis on the maintenance of health as well as treatment of diseases which enabled us to enquire in depth about the mind and intellect. The analysis of the mind and intellect from different angles and their explanations are abundantly available in the Ayurvedic literature which provide evidence of the quantum of thoughts, clarity of vision as well as expertise of the ancient scholars.

Keywords: Intellect, manas, ayurveda

1. Introduction
The holy Gayatri mantra is a prayer offered to the sun, the illuminator of the Universe, to stimulate and enlighten the mind [1]. In one or the other way has always tried to achieve great abilities in terms of physical and psychological excellences. The changes, improvements and evolutions that have occurred from civilization to civilization, generation to generation are the proofs of developing skills of mankind. The scholars of Ayurveda gave due to emphasis on the maintenance of health as well as treatment of diseases which enabled us to enquire in depth about the mind and intellect. The analysis of the mind and intellect from different angles and their explanations are abundantly available in the Ayurvedic literature which provide evidence of the quantum of thoughts, clarity of vision as well as expertise of the ancient scholars. Ayurveda has laid down certain principles, which can prove a great solution for many of the problems concerned with Manas and body. The explanation regarding the concept of Medhya Rasayana’s is one among them. Basically man is an intelligent animal. Without intelligence a man is a burden on the society. Hita, ahiya-ayu discrimination, selection, prioritization etc are the faculties of intelligence. Indriya, Indriyardha, Satva and Atma combination produces sense perception (Indriya buddhi) [2]. A man without intelligence cannot lead a desirable life in the society. A person whose intellect, patience and memory is impaired, subjects himself to intellectual blasphemy (Pragnaparadha) by virtue of his bad action. This intellectual blasphemy aggravates all the dosha’s. Forceful stimulation of natural urges and suppression of expressed ones i.e. (Adharaniya Vegas) and (Dharaniya Vegas) [3]. Baffling situations on the contemporary society are hampering memory faculties. Many of the diseases like Unmada, Apasmara, Atatvabhinivesha etc and other mano vikaras are there in which smriti nasha, buddhi nasha, buddhi vibrama take place (Charaka Chikitsa Sthana). Taking all this into consideration Ayurveda mentions about Jata karma samskara (With madhu, ghrita), Svarna prasana for the new born child as medha vardhaka [4].

2. Material and Methodology
Source of data
Materials related to Mootrakruchha and other topics have been collected from different journals, Ayurvedic and Modern text books, Authentic websites (PubMed, Drug Bank, NCBI, Medicinal Plants websites like CIMAP etc.), Reputed Magazines, Authentic works, Manuscripts, Sanskrit Dictionary etc [5, 6].

3. Medha
A healthy mind resides in a healthy Body.
The psychological health of the individual plays a significant role in the well-being of a person. In Ayurveda, vast knowledge about the various psychological factors like Medha and Smruti are available. It is the need to understand these concepts and utilize them for the well-being of mankind.

### 3.1 Derivation and definition

Generally the meaning of a word can be understood in three ways, viz. by virtue of its derivation (Yougika artha), by virtue of its common use (Samanya artha) and by the virtue of its specialized use (Vishesha artha). Derivation (Yougika artha) of medha the word medha is a streelinga vachaka pada which is derived from the root “medh sangame” which means to collect or to meet or to come together [7] with the prathyaya ‘ang’ the root ‘medh’ becomes Medha. Thus the yougika artha of medha is collecting or totaling all the data of a matter.

### 3.2 Definition (Samanya and vishesha artha)

Samanya artha: The meaning implied in non-Ayurvedic Sanskrit literature can be taken as samanya artha. The retention power of intellect is known as Medha. Due to medha a person will be able to obtain the knowledge of existing objects and hence the person becomes learned. It is that type of knowledge which is retained for long period and is not forgotten [8]. Vishesha artha the meaning implied in Ayurvedic literature can be considered as vishesha artha. Medha is defined as the ability of retention of knowledge gained through literary source is known as Medha [9]. Chakrapani defines Medha as; which means a type of intellect having the power of retention of knowledge, is Medha [10]. Dalhana, the commentator of Susrutha Samhita defines medha as a variety of buddhi, which acquires the knowledge which is complete, uninterrupted, minute and deep and gathered from different sources [11]. It is also defined as the ability to grasp the knowledge and retaining of the same [12]. Arunadatta, the commentator of Ashtanga Hrudaya defines Medha as a variety of buddhi [13]. As per Hemadri, Medha is the retention power of an individual or it is the unobstructed and uninterrupted perception and retention of the knowledge in all the aspects of an object [14]. The different aspects regarding buddhi will direct towards the exact nature of Medha. So it is worth considering the relation of buddhi, medha, dhruti, smruti and Manas [15].

### 4. Buddhi

Buddhi is a well-designed unit of human Sharira which distinguishes the stimulus either from sensory organs or memory cells. The term “buddhi” used in Ayurveda has two angles, one of philosophical and the other that of applied form. Philosophical view: Buddhi is one of the primary factors of evolution arising as a vikara of Prakrti [16]. It gives rise to the next principle of evolution ‘Ahanaka’ tattva. Its said to be Trigonatmaka. The Buddha in Darshana refers to perception from memory and perception from senses and logics.

#### 4.1 Derivation

The word ‘buddhi’ is derived from the root ‘buddh grahane’ which means to grasp [17]. Applying the pratraya “ktin” to buddh dhatu, the word has been derived.

#### 4.2 Definition

Buddhi is one by which knowledge is obtained. It is considered as the causative factor for all the activities of the person [18]. It is the phenomenon which motivates the person to work in a particular fashion. Buddhi is responsible for conclusive knowledge [19] According to Chakrapani buddhi gives an initiation to work and to come to final conclusion after proper analysis [20]. This has been stated by Dalhana, which means coming to final conclusion after proper reasoning and logic, is by means of buddhi only [21].

### 4.3 Synonyms

The various synonyms of Buddhi are Buddh, Maneesha, Dhishana, Dhee, Prajna, Shemushi, Mati, Preksha, Upalabdhi, Chitta, Samvit, Pratipat, Jnapti and Chetana [22]. In Charaka Samhita, it has been stated that buddhi, mati, medha, prajna and jnana have the same meaning [23]. On this basis buddhi has been accepted as an intellectual entity which has close relationship with the psyche and is an integral part of psychology.

### 4.4 Features of Buddhi

Buddhi executes the work after looking for pros and cons. Commencement for any work and concluded after suitable analysis are carried out by buddhi itself. Buddhi is considered as one of the atma gunas [24], [25].

### 4.5 Types of Buddhi

In this view five types of buddhi are mentioned as

- a) Shabda,
- b) Sparshana,
- c) Chakshusha,
- d) Rasana
- e) Ghranaja Buddhi [25]

The same buddhi is said to be many in consequence of the diversity of the results, sense organs and their objects [26]. Sankhya karika explains about three types of buddhi as vaikarika, tajasika and bhutadi [27]. Similarly in Bhagavat Geeta three types of buddhi are mentioned viz. Satvika, Rajasika and Tamasika [28]. In Charaka Samhita Prajna (One of the synonym of Buddhi) is classified into three as dhee, dhruti and smruti [29].

### 4.6 Functions of buddhi

- a) Alocana – Perception
- b) Manana – Contemplate
- c) Abhimana – Pride
- d) Avadharana - Determination.

The various functions are carried out by different components of buddhi such as dhee, dhruti and smruti. The action is seen at different levels of jnanotpatti. In a gross view it is difficult to mark the line of differentiation between these components. However the individual description shows the differentiation and inter-relation of dhee, dhruti and smruti.

### 5. Dhee

#### 5.1 Derivation and definition

The term ‘dhee’ is derived from the root ‘dhai bhave’. With the pratraya ‘quip’ and by applying the soostra ‘hal’ it becomes dhee. Dhee is the deciding factor of knowledge. It is responsible for real perception of knowledge [30]. Commenting on this Chakrapani quotes that information of a subject is the sense “as it is” that is yathartha anubhava [31].

### 6. Dhruti

#### 6.1 Derivation: The word dhruti is derived from the root ‘dhrityan dharane’ with the pratraya ‘ktin’.
6.2 Definition
Dhruiti is the governing feature \(^{[32]}\). Which is averts the mind from spoiling in destructive or non-beneficial substances. According to Acharya Dalhana has cited that regulatory body that is Manas is possible only on the basis of reserved skills whether that entity or things are useful or not \(^{[33]}\).

7. Smruti
Smruti is a sort of perception from one’s imprints of his/her previous experiences. If the same experience is happening to a person for the first time from extrinsic environment, not from the self, then it is known as Anubhava. The same knowledge when processed retained and reproduced then it is termed as smruti.

7.1 Derivation
The word smruti is derived from the root ‘Smri adhyane’ with the pratyaya ‘Ktin’.

7.2 Definition
Recollection of facts which were seen, heard or experienced is known as smruti \(^{[34]}\). It is a type of knowledge brought about by means of processing the information \(^{[35]}\). Remembering the previous proficiencies i.e. recovering of previous information is because of smruti only. Unforgetfulness of the internal impression in the mind about the moments of the past is called as smruti. Smruti is the product of the traits of internal impressions produced by the union of experiences of the soul and the mind. Smruti indicates ability to recollect and to be well versed in shastras and to acquire ma.

7.3 Smriti Karanani
1. Nimitta: (Rightly recalling the circumstances): For smruti, the knowledge of cause and effect is very useful. One remembers karya by noticing karana.
2. Roopa ghanatan: (Rightly recalling the appearance): Knowledge of form is also helpful in smruti. Due to the recollection of their common appearance.
3. Sadrushyat: (By comparison): Knowledge of similarity helps in smruti.
4. Saviparyayat: (By contrast): Here viparyaya is the cause for smruti to occur.
5. Satvanubhandhat: (By the concentration of the mind): If one concentrates the mind for remembering anything, it comes to memory at once.
6. Abhyasaat: (By practice): If one reads a particular subject many times, it becomes memorized and one can remember it even for a longer period.
7. Jnana yogat: (By the acquisition of knowledge): Attainment of Meta physical knowledge also known as tatva Jnana yoga is attributed to be one of the causes for smruti.
8. Punaha shrutat: (By rehearing): Repeated hearing helps in memorizing \(^{[39]}\).

8. Manas
In the sequence of perception the role of mind is most important after the intellect. So the description of Manas will give better support for analyzing the process of perception.

8.1 Description of Manas
8.2 Derivation: The word Manas is derived from the dhatu ‘man jnane’

8.3 Definition
Through which knowledge is perceived is Manas. Manas is the indriya pravartaka and Manas itself is aatendriya.

8.4 Synonyms: Chitta, Chetas, Chetana, Mana, Hrudaya, Svanta, Hrut and Satva.

8.5 Qualities of Manas
Satva, raja and tama are considered as the qualities of mind. Charaka Samhita mentions anutvam (Subtleness or minuteness) and ekatvam (Single form) as the two qualities of mind \(^{[40]}\). In Bhagavat geeeta, the qualities of mind mentioned are restlessness, turbulent, strong and unyielding. Hence it is said that mind is as difficult to control as wind \(^{[41]}\).

8.6 Features of Manas
Indriyas get the knowledge of the object with the support of mind. Gaining or not gaining of knowledge depends on mind itself. If mind is somewhere else cognition does not take place even though the soul, sense organs and objects are there. Only in the presence of mind cognition takes place \(^{[42]}\).

8.7 Types of Manas
There are three types of satva based on the predominant quality of mind. They are

a) Satvika satva
b) Rajasika satva
c) Tamasika satva

a. Satvika satva: The satvika / shuddha satva is considered to be without any defects as it represents the beneficial aspect of intellect. The features of satvika satva are judicious regimen of diet, forbearance, truthfulness, belief in god, spiritual knowledge, intelligence, retention capacity, memory, firmness and doing of good deeds.

b. Rajasika satva: It represents the violent aspect. The features are feeling of much pain and misery, non-firmness, egoistic, untruthfulness, non-clemency, pride, overconfidence, lust, anger, and desire.

c. Tamasika satva: It represents the mohamsha. The features of tamasika satva are despondency, disbelief in the existence of god, imparity, stupification and perversity of intellect, lethargy in action and sleepiness \(^{[43]}\).

8.8 Objects of Manas
a) Chintyam: Consideration about worth doing or otherwise.
b) Vicharyam: Deliberation or critical analysis about rightness or otherwise.
c) Uhyam: Reasoning or conjecture or speculated about.
d) Dhheyam: Concentration and fixation of fluctuating mind towards knowledge.
e) Sankalpa: Sankalpa is that about which merit or demerit is considered \(^{[44]}\).

8.9 Functions of Manas
a) Indriyabhigraha: Controlling of indriyas
9. Indriyas

Indriyas and indriyarthas are involved in the process of cognition along with atma, buddhi and Manas. The word

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Indriya</th>
<th>Dravya</th>
<th>Adhisthana</th>
<th>Artha</th>
<th>Buddhi</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Shrotra</td>
<td>Akasha</td>
<td>Karn</td>
<td>Shabd</td>
<td>Shrotra</td>
</tr>
<tr>
<td>2.</td>
<td>Twak</td>
<td>Vayu</td>
<td>Twak</td>
<td>Sparsh</td>
<td>Twachya</td>
</tr>
<tr>
<td>3.</td>
<td>Chakshu</td>
<td>Jyothi</td>
<td>Akshini</td>
<td>Roopa</td>
<td>Chakshu</td>
</tr>
<tr>
<td>5.</td>
<td>Ghrana</td>
<td>Bhumi</td>
<td>Nasika</td>
<td>Gandha</td>
<td>Ghranaja</td>
</tr>
</tbody>
</table>

9.2 Jnanotpati krama

The process of acquiring knowledge is a multi-step phenomenon. In Charaka Samhita, different steps involved in the process of acquiring the knowledge are mentioned as follows.

a. Nirvikalpaka grahana: By the contact of sense organ with its object 1st forms the nirvikalpaka jnana. Nirvikalpaka means nishprakaraka jnana, where the knowledge of form, type, quality of the object is not known. This type of perception is based on guess (UHA).

b. Kalpana: The mind determines whether the object grasped is beneficial or not, based on its guna and dosha.

c. Nishchaya: The definite conclusion about the firm object is occupied by the buddhi. Here the true nature of the object is known.

d. Vyavasaya: Governed by the intellect, on the basis of gained knowledge, the response in the form of verbal or physical action is seen [47]. Role of Doshas in Jnanotpatti Doshas are the regulators of all the functions of the body. The involvements of all the doshas are invariably essential for any sort of action taking place in the body. Similarly medha, which is considered as the function of sadhaka pitta, too requires the co-ordination of other doshas along with pitta.

10. Role of Vata

Vata is responsible for all the activities of the body. The derivation of the word vata as “va gati gandhanayoh” indicates that vata dosha governs the action of motor and sensory perception. Vata directs the sense organs towards the object and takes the object towards the sense organs [48]. Among the five types of vata, prana, udana and vyana vata are involved in the function of medha. Prana vata sustains the function of intellect, sensory organs, heart and mind [49]. Udana vata controls the process of speech, effort / enthusiasm / initiating the action of grasping etc. Apart from these dhee, dhruti, smruti and mano bodhana are the functions of udana vata itself, whereas vyana vata is the controller of all sorts of actions taking place in the body.

11. Role of Pitta

Medha and dhee are mentioned as the function of pitta. More specifically sadhaka pitta is mentioned as the dosha concerned with medha. The achievement of one’s own aspiration especially that of perception and memory are dependent upon sadhaka pitta [50]. So it is the prime dosha involved in perception and retention of knowledge. In Bhela Samhita two types of pitta are mentioned as Chakshu vaisheshika and buddhi vaisheshika [51].

12. Role of Kapha

Fortitude (Dhruti) is one of the functions attributed to kapha. Jnana and buddhi are under the control of kapha. Among the 5 types of kapha, tarpaka kapha has the major role. It nourishes the sensory organs [52]. The role of doshas pertaining to grasping and retention of knowledge can be tabulated as follows.

| Table 2: Showing doshas and their role in jnanotpatti |
|-----------------|-----------------|-----------------|
| Dosa | Karma |
| Vata | Pravartaka Chestanam, niyanta praneta cha Manasaha, sarvendriyana mudyojakaha, sarvendriyaarthana mabhivoda, akshanam patava (indriyanan vishayagrahana samarthym) |
| Pitta | Medha, dhee |
| Kapha | Jnana, buddhi, dhruti |

Table 3: Showing the sub types of doshas and their role in jnanotpatti

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Dosa</th>
<th>Karma</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Prana</td>
<td>Buddhi, hrudaya, indriya and chitta dharana</td>
</tr>
<tr>
<td>2.</td>
<td>Udana</td>
<td>Vak Pravrutti, prayatna, dhee, dhruti, smruti and mano bodhana</td>
</tr>
<tr>
<td>3.</td>
<td>Vyana</td>
<td>Prayaha sarvaha kriyaya</td>
</tr>
<tr>
<td>4.</td>
<td>Sadhaka</td>
<td>Buddhi, medha, abhiprarthitha manoratha, sadhana</td>
</tr>
<tr>
<td>5.</td>
<td>Buddhi Vaisheshika</td>
<td>Grahanah, dharana, pratyuaharanah, smaranah</td>
</tr>
<tr>
<td>6.</td>
<td>Tarpaka</td>
<td>Aksha tarpana</td>
</tr>
</tbody>
</table>

These physiological entities regulate the functions such as smruti and medha etc. There will be a specific site of action where the actual process is carried out.

13. Site of Medha

Hrudaya as the seat of Medha The site of Medha can be traced by the location of sadhaka pitta which is the chief regulator of Medha. Both in Sushruta and Ashtanga Hrudaya it is clearly mentioned that sadhaka pitta is located in hrudaya.
14. Dosa Karma
Vata Pravartakahara Chestanam, niyanta praneta cha Manasaha, sarvendriyana mudyojakaha, sarvendriyarthana mahbhivoda, akshanam patava (Indriyam vishayagrahama samarthym) Pitta Medha, dhee, Kapha Jnana, buddhi, dhruti, parts, knowledge, the cognitive and conative organs, the objects of special senses, and the soul with its attribute, mind and its concepts all are linked with hrudaya [53]. In Kasyapa Samhita, indriyas with Manus are said to be emerging from hrudaya [54]. In the samprapti of unmade, hrudaya is considered as the seat of buddhi and there is mentioning about mano vaha srotas through which doshas spread.

15. Shiras as the seat of Medha
Charaka Samhita describes Shiras as part, wherein, is contained vital centers, which is the seat of all senses and which is the best among all parts of the body [55]. Shiras is considered as the root of knowledge. Bhela Samhita describes as Manus is enclosed between the Shiras and talu. It is the controller of all the indriyas. It receives the object of senses. Apart from this the buddhi vaisheshika pitta which is responsible for concentration, response and cogitation is present in between the eyebrows [56]. Atharva Veda quotes that Atharva has, inseparably, blended together the hrudaya and the Shiras in man. Because of this relationship, vayu which is located in the upper portion of mastishika controls everything. Hata yoga pradeepika holds that mana is the master of the indriyas and vayu the master of the Manus [57].

These references suggest that hrudaya the seat of sadhaka pitta refers to mastishka rather than hrudaya proper. Thus mastishika can be said as the seat of Medha. In this way the synchronized effect of action of different structural and functional entities will result in Medha. There are different measures explained in the Ayurvedic literature to measure the various psychosomatic factors including Medha.

16. Valuation of Medha
For the assessment of various factors three methods of examination are mentioned as Auptopadesha, Pratyaksha and Anumana. Among these medha is assessed using anumana pareeksha (Inferential knowledge). Medha is assessed by means of grahanah samarthya [58], Grahamana refers to “granthadi dharana” or “Manasa dharana”. The retention power of an individual can be known through his grasping capacity.

17. Valuation of Smruti
Smruti is evaluated by means of recalling.

18. Analysis of Shraddha
The term shraddha designated as one’s longings. It is tested by evaluating one’s judgment regarding one object.

19. Analysis of Vijnana
The assessment is finished by viewing how perfect the work has been done. The performance clarity indicates his knowledge and logic application with a work.

20. Analysis of Moha
In clinical, the term Moha specifies, i.e. the level of enhancement in the consciousness. It is a phase of misunderstanding and lethargy. This stage person is unable to perceive the sensations by which Moha is identified.

21. Analysis of Virya
It is the analysis of bravery in literary meaning. But it also the assessment of the modality and quantity of inspiration, in the activity of science and latest trends. Thus determined medha is not a fixed entit.

22. Discussion and Conclusion
Medha is the Grahama Shakti or Dharaana Shakti which can be compared with that of grasping and retention power respectively. Medha is a faculty of Buddhi or is a specific psychic ability which is responsible for encoding and retaining a large amount of knowledge. Though Dhee, Buddha are used as synonymous terms with that of medha, practically these are the separate entities. The Indriya Buddha is temporary one, by repeated practice it can be converted in to medha. So “Satata adhyay-anadi Buddha Medhakara gana” is having its own importance. The change in the Medha according age is again specific to each individual and depends on many other factors like environmental, dietary etc. Hence based on these factors the chronology of the status of Medha may change. Medhya Rasayanas are especially meant for improving Medha. Improvement of Medha is achieved by cyclic procedures and application of certain drugs periodically. Nourishment of intellect is as important as general nourishment. This is a special gift of Ayurveda to the people of this life.

23. Acknowledgement
The Authors would like to thanks Prof., Dr. Vaidehi V. Raole & HoD & Asso. Prof., Dr. Sunil P. Nikhate (Kriya Sharir Department, Parul Institute of Ayurveda, Parul University, Vadodara, Gujarat) for their Support & Guidance.

24. References
4. Dr. Sujit Kumar. Concept of Agni and Its Physiological Aspects on Human Body Name of Author: Sujitkumar et al JIF: 1.021 2(1), ISSN: 2456-82799.
http://www.ipsonline.com
23. Vishwanath Dwivedi Shastri, Bhavaprakasha Nighantu. of Bhavaprakasha, Delhi, Motilal Banarsidas, 1997; 783.
27. Personal interaction with Dr. M. Paramakushh Rau, M.D (Ayu.), Ph.D (Ayu.) (Hypothesis – Dr. M. Paramakushh Rau, M.D (Ayu.), Ph.D (Ayu.) Professor and Head, P.G. Department of Dravyaguna, S.V. Ayurvedic College, Tirupati.