



## A REVIEW ON SCIENTIFIC APPROACH OF TEACHING AND LEARNING METHODOLOGY IN AYURVEDA

### Ayurveda

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### ABSTRACT

Teachers are the custodians of tradition and knowledge. *Acharya Charaka* said that for a wise man entire universe is act as a preceptor. Beside this *Acharya Charaka* also describe three methods of obtaining knowledge *Adhayan*(study) *Adhyapan*(teaching)and *Sambhasa*(participating debate).For globalization of this holistic life science, factory approach toward education needed to be stopped because it discourages student curiosity, questioning, innovation and feedback. Lord Dhanwantri- describe that the subject studied without having been enlightened about depth of the meaning have no use. It is like that as weight of the sandalwood for an ass. This shows that in ancient system of teaching there was more emphasis on meaningful learning of the subject and not only cramming without trying to understand its implication. As we know Lord dhanwantri is the chief treatise of its surgical school and etymologically Dhanwantri itself signifies full expertise in surgery. In Charaka samhita viman sthana procedure of teaching and procedure of study are explained elaborately. But in Susrut Samhita no specific chapter is allotted to these procedure though there are so many things about learning and teaching procedure which may be more practical in present era.

### KEYWORDS

Adhyana, Adhyapana, Sambhasa, Teaching and Learning

#### INTRODUCTION:

Acharya charaka describe three methods of obtaining knowledge:<sup>1</sup>

1. *Adhayan*(study)
2. *Adhyapan*(teaching).
3. *Sambhasa*(participating debate).

Beside this *Acharya Charaka* also said that for a wise man entire universe is act as a preceptor. According to *Vagbhata*, *Patha* ,*Bodh*, *Anusthan* are the stages of any learning process<sup>2</sup>.As it was described by *Lord Dhanwantri*-The subject studied without having been enlightened about depth of the meaning have no use. It is like that as weight of the sandalwood for an ass.<sup>3</sup> This shows that in ancient system of teaching there was more emphasis on meaningful learning of the subject' and not only cramming without trying to understand its implication. As we know *Lord dhanwantri* is the chief treatise of its surgical school and etymologically *Dhanwantri* itself signifies full expertise in surgery. In *Charaka samhita viman sthana* procedure of teaching and procedure of study are explained elaborately. But in *Susruta Samhita* no specific chapter is allotted to these procedure though there are so many things about learning and teaching procedure which may be more practical in present era.

The knowledge mentioned in *Samhita* could be achieved according to this prescribed way, i.e.<sup>4</sup>

*Tantram - Tantrartham*  
*Sthanam - Sthanartham*  
*Adhyayam - Adhyayartham;*  
*Prasnam - Prasnartham.*

Furthermore the *Prasnartham* should be studied according to – *Vakyasah*, *Vakyarthasah* and *Arthavayavasah*.<sup>5</sup>

- a. *Vakyasha* - means reading the *Sutra* as told in the *Tantra* or understanding literal meaning of *Sutra*.
- b. *Vakyarthasha* - is the meaning achieved after proper understanding and interpretation of a *Vakya*.
- c. *Arthavayavasha* - are the words which are difficult to understand. They need special attention and also special elaboration and application of *Tantrayukti*.

*Acharya Charaka* tells a person can be known as *Ayurvedgya* who studies *Ayurveda* should be in a position to explain the whole text, its different sections and chapters and specific topics in each chapter distinctly, and it is done by *Vakyasha*, *Vakyarthasha*, *Arthavayavasha*.<sup>6</sup>

Another important thing for learning or understanding *Ayurveda* classics is *Tantrayukti*. *Acharya Charaka* said that these tools are like that sun makes lotuses bloom and the lamp illuminates the house, similarly these all are meant for elucidation of treatise and correlating the sentences and clarifying their meaning.<sup>7</sup> While studying the texts, to elaborate the hidden meaning, and in order to understand these

subjects of *Samhita* their is need to have the knowledge of these tools and ability to apply them.

#### *Susruta samhita*

In *Susruta Samhita* as we go through its sequence of chapters of *Sutrasthana* we find that sequence itself describe the learning methodology of this *Shastra*.

- *Shisyaupanayan*
- *Adhyan Sampardanam*
- *Parbhasnam*
- *Yogya*
- *Vishikhaanuparvesham*

#### *Shisyaupanayan*

After *Vedoutpati Adhyaya* 2<sup>nd</sup> chapter *Shisyoupnaynia Adhyaya* means student initiation ceremony-entrance in to medical profession as a student was symbolised by a *Vedic* ceremony or initiation ceremony. There is a selection criteria for the student, he had to undergo a test of his worthiness to become a would be doctor. The ceremony in the presence of experts had a great moral, psychological and social impact upon the student to take the medical profession seriously. *Brahmans* is authorised to teach three castes, a *Kshatriya* of two classes and a *Vaisya* of *Vaisya* only.<sup>8</sup>

#### *Adhayansamprdniya:*

*Samyak pervibhajay danam sampardanam* means give completely. This chapter envisages the ancient Indian method of describing the contents of *Shastra*. At the first and foremost day a teacher should told the student that what he will going to teach. The teacher should explain each verses in full, half or quarter of it, appropriate to the capacity of the student. Again they should be linked together properly as words, phrases and verses. Student who has worn good clothes has become pure by his both body and his mind and who has concentrated mind should study the *Shastra*.<sup>9</sup>

#### *Prbhashnam:*

deals with the importance of understanding the subject thoroughly, including all it possible interpretation. It is very necessary for teacher to explain thoroughly each verse word by word, and for the student to listen attentively.<sup>10</sup>

#### *Yogya:*

The principal of experimental surgery explained in *Yogya Sutra* *Adhyay*. *Acharaya* has emphasized that student should be made to practice experimental surgery even after he has thoroughly mastered the interpretations of all the scriptures. One who has not practiced experimental surgery remains incompetent in operations even though he may be well versed in theoretical knowledge.<sup>11</sup> *Acharya Sushruta* has given the list of items on which experiments of *Shastra Karma* can

be performed. Various objects like Pumpkin, bottle gourd, watermelon, cucumber etc. are described on which the experimental surgical procedure such as excision, incision, scraping, puncturing, probing were to be carried out. According to *Chakarpani* to obtain complete success in the aimed work, practice of similar operations before hand is called yoga(experiment) and performance of such practice is called *Yogya*. *Susruta Samhita* also emphasis of learning the related science means basic sciences, Philosophy, literature, as also the specialities of the medical science itself as internal medicine, paediatrics, toxicology etc.<sup>12</sup> The value of understanding basic and other applied science along with the main subject was well recognised. One who studied many branches of science is to be called as *Bahusruta* in this context.

**Vishikha Anuprvasha** (Entry in to profession):

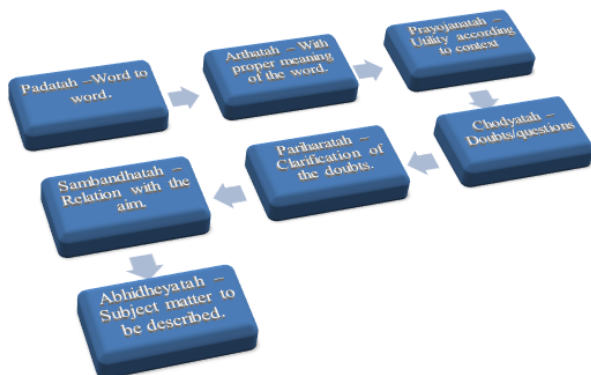
*Vishikha* literally means the highway and in this context it is taken as path of medical profession. In this chapter Acharya Susruta explained that when a student become a physician or a surgeon practice can be started by a physician only after through study and mastered the science of medicine from the teacher having seen the all surgical procedure and performed them experimentally having developed the capability of quoting the text meaningfully.<sup>13</sup>

### Astanghrudyam

According to *Vagbhata*, *Patha*, *Bodha*, *Anusthan* are the stages of any learning process. Out of these *Paatha* means 'to make by heart' likewise repeated reading or reciting *Shlokas*. *Bodha* is the second stage of learning wherein the *Shishya* is empowered by the Guru to analyse the meaning of the verses with *Purva-apra sambhandha* (*Arthasharya*). *Anusthana* means to follow the methods/guidelines as quoted in texts or do as directed i.e. the implementation or application of conceived meaning.<sup>14</sup>

*Arunadutta* commentator of *Ashtanga Hrudaya* explain the teaching methods beautifully. According to him teacher should explain every verse with following points.<sup>15</sup>

- *Padatah* – Word to word.
- *Arthatah* – With proper meaning of the word.
- *Prayojanatah* – Utility according to context
- *Chodyatah* – Doubts/questions
- *Pariharatah* – Clarification of the doubts.
- *Sambandhatah* – Relation with the aim.
- *Abhidheyatah* – Subject matter to be described.



### DISCUSSION AND CONCLUSION:-

*Ayurveda* is globally being perceived in several contradictory ways in present era. The important factors responsible for this scenario; Poor quality of *Ayurveda* graduates produced as a result of poorly structured and poorly regulated education system. Hard to accept but studies show that *Ayurveda* practitioners and students have a feeling of inferiority to the conventional medicine. It seems that there is lack of proper scientific teaching and communication. There are great teachers with lots of knowledge, they just need to communicate better. *Upnayan sanskar* of a student before entering in field of *Ayurveda* have a scientific approach. This type of initiation was not limited to only medical profession it indicate that there was a prevailing custom for the all branches of study. The selection procedure emphasises the systematic approach of a high order employed in the selection of a medical student. In ancient India four social groups-Brahmans is authorised to teach three castes, a *Kshatriya* of two classes and a *Vaisya* of *vaisya* only. People of the first three orders only were permitted to study the Vedas. However medical

education was accessible even to the lowly *Shudra* if he was meritorious. This shows the generosity and liberal mindedness of the medical sages. Here we can think that this division of no of student per teacher is may be on the basis of how much time to a student can give a teacher. Because in that era the division of social group is on the basis of superiority of their profession but in general medical education was open to all. A high code of conduct was evolved for both teacher and taught.

Scientific view behind *Sampardanam* method is that every word pronounced accurately, wrong pronunciation misleads the student in understanding the right meaning of the word. In ancient time there is a pronunciation session. The student is devoted to the teacher and studies attentively. Both theoretical knowledge and practical experience have been considered essential in this field. Post graduate studies were encouraged.

### Parbhasanam:-

This discredits the general opinion that in ancient Indian system of teaching there was more emphasis on learning the subject by cramming only without trying to understands its implication.

Another important part of learning and teaching methodology of *Susruta Samhita* is *Yogya*. The importance of practising surgery on objects other than human being was recognised and emphasised. It shows that ethical principals are being followed by our sages and they are not using human being as a subject in their experimental studies. A student who does experimental surgery methodically on articles does not lose his presence of mind while doing the actual surgical operation. The science of *Ayurveda* is better learnt when learnt directly from the preceptor and repeatedly studies and practicing it.

Being An *Ayurveda* MD scholar I got a chance to attend a 10 day residential program organized by Bangalore's *Ayurveda* academy, in which students and teachers live in the same place following all recommended *Ritucharya* and *Dinacharya*: In this residential program they taught *Ayurveda* through *Ayurvedic* methodology. This program produces huge changes in me and my friends attitudes towards learning and teaching of *Ayurveda*. At Bangalore's *Ayurveda* academy, *Ayurveda* students are now genuinely interested in practicing *Ayurveda* in any situation, even first aid, to manage with *Ayurvedic* Medicine. In short, this type of program should be essential for teachers and students. CCIM has been requested to conduct similar programs throughout the country, to encourage *Ayurvedic* textual training. This in itself will encourage continued reading of the texts, and make undergraduate training a platform for life-long learning: once a first degree is finished, it is not the end, only the beginning.

In most of the *Ayurvedic* college teachers who taught *Sanskrit* to first year students are of non *Ayurvedic* background and even reference book also don't have examples related to *Ayurveda*. After passing the subject of *Sanskrit* students of first year are unaware of applicability of *Sanskrit* language in understanding *Ayurveda* classics. *Ayush* department should promote learning programme for *Sanskrit* teachers for introduction of *Ayurveda*. Or for *Ayurveda* graduates their should be a master course in *Sanskrit* language also. Studying only a single science gives limited understanding. Physicians should listen to other scientists. There should be exposure to different fields of knowledge. Science, both theoretical and practical, should be learned from experienced teachers.

We can say that in ancient time *Charaka samhita* represents treatise of school of physician and *Susruta Samhita* is the chief treatise of its surgical school. After spending approximately six years of life a BAMS student remains unaware about *Samhitas* which are the only available source of *Ayurveda* in present scenario. Students after completion of BAMS even don't have hold on a single *Samhita*. The pattern followed for studying *Ayurveda* in colleges is not up to the mark. To become *Ayurveda* expertise students should have knowledge of *Sanskrit* language, *Darshans shastra* and biological science.

As per *Acharya Charaka Shastra Pariksha*, *Shishya Pariksha* and *Acharya Pariksha* must be done before opting *Ayurveda* or any profession. This proves that in Ancient time a students have right to choose a profession according to his capability and he has also right of selection of his *Acharya*. Beside this even a teacher also have power to identify and select capable students which is lacking in present scenario. Most of students choose *Ayurveda* as a carrier unwillingly

or their parents force them to do. Because of this our education system producing only degree holders of *Ayurveda*.

and *Ayurveda Rasayana Commentary of Arundutta and Hemadri*, edited by Bhisagacharya Harishastri Paradkar, Reprint ed. Chaukhamba Surabharati Prakashana, Varanasi, 2007;3.

## CONCLUSION

Teaching and learning both are like two sides of a coin. The art of teaching is a nonstop 'Quality Improvement' learning process which was followed in Ancient days. Acharya Charaka and Sushruta and Vagbhata have mentioned diverse sets of scientific teaching and learning methodologies which prove to be acceptable even in present era. Though the technology has made many innovations in this field and also made a lot of change in the old system of teaching and learning, but attainment of knowledge is not like that of ancient time. So the spirit of the teaching methodology and the accomplishment of core objective of teaching should never be deviated by the use of an inventive technology. Modern education system should maintain the scientific approach of ancient education system

## Component Of Learning



*Acharya Charaka* says that a teacher himself remains always in a learning face. *Sambasha* can be a learning process between *Ayurveda* scholars and in teachers also. *Adhyana*, *Adhyapan* and *Sambhasa* these three process of learning should practiced by students and teachers both. All of these empower the knowledge, communication skill, creates awareness and dissolve the various facts and myths about the science behind every phenomena. Teaching is a means of offering a unique, definite, and essential social service through specialized training. This service is in the form of facilitation of learning, based on the beliefs, needs and practices of each community and each individual. Teachers can accomplish these requirements by creating an most favourable teaching-learning environment by utilizing a variety of teaching methods and teaching styles.

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