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# A SUMMARY OF PRAMANAS' PART IN AYURVEDIC RESEARCH METHODS

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## ABSTRACT

Ayurveda is a scientific system based on four Pramanas: Aptopadesha, Pratyaksha, Anumana, and Yukti. Aptopadesha is the primary method of information acquisition, Pratyaksha is direct knowledge perception, Anumana deals with inferential understanding, and Yukti emphasizes rational thought. These Pramanas play a crucial role in Ayurvedic research methodology, guiding researchers through every stage of the research process, including selecting the research problem, formulating the hypothesis, gathering data, analyzing the findings, extrapolating the findings, and publishing the findings. As the study of Ayurvedic specialties accelerates, researchers must strike a balance between Ayurvedic principles and contemporary research instruments. Siddhanta, mentioned in 44 Vadamargas, is a tool used to develop theories in four varieties: Abhyupagama Siddhanta, Sarva Tantra Siddhanta, Pratantra Siddhanta, and Adhikaran Siddhanta. A successful research project requires careful preparation and planning. Research is the search for unknown knowledge, with research methodology being the general approach used to identify, select, process, and analyze problems. In Ayurveda, valid knowledge is called Parma, and the means to acquire it are Pramana, which are crucial for developing Ayurvedic Research Methodology.

**KEYWORDS:** Pramana, Pararthanumana, Research Methodology, Aptopdesha, Pratyaksha, Anumana, Yukti.

## INTRODUCTION

New knowledge, which is the foundation of scientific development, is created continuously by a variety of sources. Ayurveda has also indicated a number of sources for learning. We refer to these knowledge sources as Pramanas.[1]

For Pramana, Acharya Charaka used the term Pariksha. Pariksha is a tool used to precisely identify the things. Pariksha refers to the act of making a comprehensive and confirming choice regarding anything. Pariksha is the process of using Pramana to establish an object's reality. Acharya Charaka asserts that everything is either non-existent or existent (Sat/Bhava). (Asat/Aabhava) and four Pramana can study them; namely.

- Aptopadesha (Authoritative statement)
- Pratyaksha (Direct Perception).
- Anumana (Inference)
- Yukti (Rationale – Logical reasoning

According to Acharya Charaka, a thorough understanding of illness requires an understanding of these Pramana, or Aptopadesha, Pratyaksha, and Anumana. Of all the Pramanas, Aptopadesha should first learn the current information, and Pratyaksha and Anumana should next conduct the examinations.[2] The original source of knowledge regarding Ayurveda or any other subject is Aptopadesha. The last two (Pratyaksha & Anumana) are said to be adequate for people who already know the fundamentals of science.[2]

The foundation of theoretical knowledge in this cosmos is Aptopadesha. Aptopadesha thus emerges as the primary method of information acquisition.

Pratyaksha Pramana is equivalent to direct knowledge perception. On the other hand, Anumana Pramana deals with inferential understanding. YuktiPramana emphasizes the value of rational thought.[4] As time goes on, study into various Ayurvedic specialties is accelerating. Ayurvedic researchers must strike a careful balance between the fundamentals of Ayurveda and contemporary research instruments. The development of an Ayurvedic-based research methodology using pertinent Ayurvedic principles and fundamentals is

desperately needed.[5] Pramanas can play a significant role in the advancement of this Ayurvedic research methodology.

The words "Ma “dhatu,” Pra Upsarga and "Lyut" Pratyaya are the roots of the word "Pramana." Pramana refers to the methods by which actual knowledge is perceived. Pramana are helpful for examining things for actual knowledge, according to Chakrapani. Pramana, Pariksha (examination), Gyana (knowledge), Sadhana (source), and Uplabdhi (availability) are synonymous terms. Four Pramanas are recognized in Ayurvedic literature. Aptopdesha, Pratyaksha, Anumana, and Yukti Pramanas are these.

**Aptopdesha pramana**

Apta denotes learned; "Aptopadesha," which is regarded as a Pramana, is the term for learned precepts that are free from rajas and tamas.[6] According to Acharya Charaka, Aptas are those with unadulterated, unhindered, and unquestionably knowledgeable minds. They don't have any aversion or disengagement. They are constantly telling the truth. Aaptopadesha Pramana is composed of Aptas's words and works.[7]

**Pratyaksha pramana**

Pratyaksha is a mental faculty that arises instantly as a result of the soul, sense faculties, mind, and object being close to one other. Pratyaksha is the knowledge that the mind and sense organs perceive, and Pratyaksha Pramana is the source of this information. Knowledge comes from the interaction of sense organs and objects.[8] For the sake of knowledge advancement, Acharya Susruta has suggested combining Aaptopadesha with Pratyaksha Pramana, or direct perception. There are two varieties of Pratyaksha Pramana:

Alaukika Pratyaksha, or extraordinary direct perception, and Laukika Pratyaksha, or regular direct perception the typical perception of the real world is known as Laukika Pratyaksha.[9] On the other hand, remarkable perception based on transcendental encounter is known as Alaukika Pratyaksha.

**Anumana pramana**

Anumana, or inference, is the process of drawing conclusions about the unknown from the known facts. Inference, also known as anumana, is the logical conclusion drawn from reasoning or indirect knowledge. Anumana is the knowledge that is perceived subsequent to the perception of Pratyaksha and Aptopdesha. Anumana is the root cause or origin of Anumiti. There are two kinds of Anumana Pramana:

The assumption of logical inference in one's own thinking is caused by Swarthanumana. Curiosity is a prerequisite for self-inference.[10] The source of all knowledge is curiosity. A person who is inquisitive and questioning will look for the truth in a methodical way and by using a logical line of reasoning; he or she will arrive to a sound conclusion.

The purpose of Pararthanumana is to educate others. Demonstrative inference, or Pararthanumana, is the process of using Panchavayavivakya (the five components of reasoning) to show others what one has concluded. Pratigya (proposition), Hetu (reason or cause), Udaharana (example), Upanaya (justification), and Nigamana (conclusion) are the contents of Panchavayavi Vakya.

**Yukti pramana**

Yukti, also known as rationale or logical thinking, is the knowledge that examines the products of a mixture of several causative elements. It is true at all times and aids in the accomplishment of the three goals (Dharma, Artha and Kama). Yukti is a sensible and beneficial mix of multiple elements.[11]

**Aaptopadesha pramana's**

Scope in the field of research

1. **Research problem identification**

- A detailed examination of Aaptopadesha aids in the identification of the research problem.
- For instance, an analytical investigation to determine a relationship between skin disease signs brought on by Chhardi Vega dharana (repression of the natural impulse to vomit).

2. **Literary & Historical review**

- A scholar ought to examine the pertinent literature in his area of interest.
- The source for literary and historical reviews in any research is Aaptopadesha.

3. **Assist in Discussions and Debates**

- The purpose of Vada Marga, which are the logical procedures one must understand before engaging in debates, as outlined in the eighth chapter of Charaka Vimana Sthana, is to develop the art of debate or discussion.
- Vada Marga can help develop the oratory skills required to interact with patients or the community about the healthcare system or to educate others orally.

**Assist in the development of theories**

- Siddhanta, which is mentioned in 44 Vadamargas, is proven to be true following a number of analyses and arguments. These are comparable to accepted theories.
- Siddhanta comes in four varieties:
  Abhyupagama Siddhanta (Hypothesis)
- Abhyupagama Siddhanta can be regarded as a postulate or an assumption that is now taken for given. Other theories include Sarva Tantra Siddhanta (Universal theory)
- Pratitantra Siddhanta (Textual theory)
- Adhikaran Siddhanta (Contextual theory)
- Abhyupagama Siddhanta is comparable to a hypothesis, which gives a research study focus, clarity, and specificity.

For instance, an analytical study was conducted to determine a correlation between the introduction of the subject of Research Methodology and Statistics in the last year of the BAMS curriculum and the advancement of undergraduate Ayurvedic students' scientific writing skills. One way to formulate a hypothesis is:

- The development of scientific writing skills among undergraduate Ayurvedic students is unrelated to the inclusion of the course of Research Methodology and Statistics in the final year BAMS curriculum. Under the null hypothesis.[12]
- The foundational understanding of Research Methodology and Statistics in the last year of the BAMS curriculum is necessary for undergraduate Ayurvedic students to advance in their scientific writing. (As a substitute theory)

**Scope of pratyaksha pramana in research**

The following ideas help to clarify the scope of Pratyaksha Pramana in research:

1. Support for Clinical and Experimental research

Pratyaksha Pramana facilitates the direct perception of Shabda, Sparsha, Rupa, and Gandha—aside from Rasa—during clinical and experimental research.

Pratyaksha Pramana aids in Rogi-Roga Pariksha in clinical trials.

2. Assist with data collection

The main methods for gathering data include questionnaires, interviews, and observation. These data collection techniques rely on Pratyaksha Pramana to a greater or lesser extent. Additional techniques for gathering data include surveys, experiments, and documentation.

Among them, Pratyaksha Pramana is also necessary for experiments (in prospective research) and, to a lesser extent, surveys.[13]

Anumana Pramana's scopes there are several ways that Anumana Pramana is used in study. The following points can be used to understand the scope of Anumana Pramana in research:

- Inference of the cause from the effect, or Anumana, is related to the past. The case control study design, sometimes known as a retrospective study, can be linked to this.
- Anumana (Inference) of the cause-effect relationship with the future. This may be related to the design of a prospective or cohort study.
- Anumana from the current occurrences that are frequently noticed this is comparable to the design of a cross-sectional study (time prevalence study). For instance, the Charak Samhita states that malnourished Krishna's are more likely to suffer from Pliha roga. The investigation to determine a relationship between Karshya (emaciation) and Pliha roga according to Anumana.

Ayurveda is regarded as one of the oldest known sciences. Ayurveda made extensive use of the examination instruments known as Pramana. Pramana provide as evidence of Ayurveda's scientific and evidence-based methodology. It is impossible to conduct any form of research in the present world without taking into account these four principles. In each case, research aims to establish a cause-and-effect relationship.[14] A researcher must review the pertinent literature in his area of study. He needs to stay current in his field and related fields. Acharaya Sushruta has emphasized the value of studying every text that is available in any field of study. The doctor, who has studied all relevant branches of knowledge, should attempt to practice medical science since "a person who has studied one branch of science only, cannot arrive at proper conclusion," he said.[15] Therefore, the researcher can create the theoretical foundations of the investigation and reinforce them with his findings by using Aptopadesha or authoritative remarks. For reputable information, textbooks written by notable figures in their disciplines are cited. One of the characteristics of a researcher is that he should gain the current information and training in the mental and physical abilities required to carry out the tasks specified in research.[16] Aptopadesha, or authoritative statements, can be used to learn about the current state of science. Two approaches form the basis of the fact-finding process: the scientific method and the unscientific or arbitrary technique. An arbitrary approach to question-answering is fictitious or opinion-based. It should not be inferred from the references mentioned above that Ayurvedic knowledge is

founded on arbitrary methodology. Conversely, Ayurveda uses the critical scientific process in order to learn new things.[17] The scientific method is a methodical, logical approach to fact-finding. It is impartial, accurate and bases its conclusions on evidence that can be verified. Pramana Vigyana, found in ancient Ayurvedic writings, demonstrates the scientific basis of Ayurveda. The fundamental ideas presented succinctly in Ayurveda have a great deal of room for additional research. Below are a few examples of this type.

- When describing Samprapti of Panduroga in the Charaka Samhita, it is said that Raktadhatu and Medodhatu are decreased; however, no rational explanation for the decline in Medodhatu is provided.[18] As a result, when treating Pandu Roga patients, more attention is paid to increasing Raktadhatu, whereas Medodhatukshaya does not receive the proper attention. More research can be done on this subject.
- Although it is stated in Ashtanga Hridaya that Medodhatu Kshaya (Decreased Medodhatu) causes Plihavriddhi (Splenomegaly), the text does not explain Karya-karana Bhava (Cause and Effect link). There is room for more investigation on this subject. Likewise, according to Samanya Vishesha Siddhanta, a lack of Raktadhatu should result in a preference for hot things, but a lack of Raktadhatu results in a preference for cold things rather than hot ones.[19]

However, the book does not adequately explain this phenomenon. There are numerous instances in which Aptopdesha needs to be investigated logically and rationally in order to validate the aforementioned phenomena. As a result, studying Ayurvedic texts—that is, authoritative statements—helps identify research problems that need more investigation using scientific methodologies.[20] When studying the Aptopdesha, a number of pertinent subjects need to be investigated in order to confirm the previously mentioned Ayurvedic phenomena. Any research project may use one of two methods. Occasionally, the necessary data is already accessible. However, there are instances where new data must be gathered. Data may be primary or secondary based on these two methods.[21] The three basic methods of gathering data are questionnaires, interviews, and observation. These data collection techniques rely mostly on Pratyaksha Pramana. A researcher can get close to and study a research hypothesis with the help of Pratyaksha Pramana. In order to do actual research, a variety of experimental studies and clinical trials rely on Pratyaksha Pramana's direct perception. Establishing a correlation or cause-and-effect link between two variables is aided by anumana, or inference? Anumana aids in information acquisition and outcome interpretation. Interpretation is the process of making deductions from the facts gathered

during an analytical or experimental investigation.[22] It looks for a more comprehensive interpretation of study results. Results can only be generalized based on inference.

A researcher can receive guidance from Panchavyavi Vakya on how to effectively report their findings. It is discovered that the framework proposed by Pathavyavi Vakya closely resembles the IMRAD format for scientific writing.[23] A researcher can effectively use Yukti Pramana as a guide. Yukti facilitates the development of connections between many causes and their effects. It encourages the researcher to arrange a research study more effectively. The secret to a successful research project is preparation. The researcher can only get near to the findings with a carefully thought-out research study.[24] A researcher in any field of study is guided from the start by the Pramanas. Four Pramanas are necessary for the execution of every stage of the research process, including selecting the research problem, formulating the research hypothesis, gathering data, analyzing the findings, extrapolating the findings, and publishing the findings. Therefore, Pramanas should receive the most attention when creating an Ayurvedic research methodology.

## DISCUSSION AND CONCLUSION

Ayurveda is a system of knowledge that is the foundation of scientific development. It consists of four Pramanas: Aptopadesha (authoritative statement), Pratyaksha (direct perception), Anumana (inference), and Yukti (rational – logical reasoning). Acharya Charaka defines Pramana as the tools used to accurately identify things and establish an object's reality. The four Pramanas are: Aptopadesha, Pratyaksha, Anumana, and Yukti.[25]

Aptopadesha is the primary method of information acquisition, while Pratyaksha is equivalent to direct knowledge perception. Anumana deals with inferential understanding, while Yukti emphasizes rational thought. As the study of various Ayurvedic specialties accelerates, researchers must strike a balance between Ayurvedic principles and contemporary research instruments.[26]

Pramanas are synonymous terms in Ayurvedic literature, and they play a significant role in the advancement of Ayurvedic research methodology. Aaptopadesha Pramana's scope in research includes identifying research problems, conducting literary and historical reviews, and aiding in discussions and debates. It also helps develop the art of debate or discussion skills, which are essential for communicating with patients or the community about healthcare systems.[27]

Siddhanta, mentioned in 44 Vadamargas, is a tool used to develop theories, which come in four varieties: Abhyupagama Siddhanta (hypothesis), Sarva Tantra Siddhanta (universal theory), Pratantra Siddhanta (textual theory), and Adhikaran Siddhanta (contextual theory). For example, an analytical study was conducted to determine the correlation between the introduction of Research Methodology and Statistics in the final year of the BAMS curriculum and the advancement of undergraduate Ayurvedic students' scientific writing skills.[28]

Pratyaksha Pramana is a crucial tool in research, supporting clinical and experimental studies by facilitating the direct perception of Shabda, Sparsha, Rupa, and Gandha, apart from Rasa. It also aids in Rogi-Roga Pariksha in clinical trials. Data collection methods include questionnaires, interviews, and observation, with additional techniques like surveys, experiments, and documentation.[29]

Anumana Pramana's scope includes inference of cause from effect, cause-effect relationship with the future, and current occurrences. For instance, the Charak Samhita states that malnourished Krishnas are more likely to suffer from Pliha roga, requiring investigation to determine a relationship between Karshya (emaciation) and Pliha roga according to Anumana.[30]

Ayurveda, one of the oldest known sciences, heavily relies on Pramana as evidence of its scientific and evidence-based methodology. Researchers must review relevant literature and stay current in their field. Aptopadesha or authoritative remarks can help create theoretical foundations and reinforce findings.[31] The scientific method and unscientific or arbitrary technique form the basis of fact-finding in Ayurvedic knowledge.

Pratyaksha Pramana helps researchers study research hypotheses, establish correlations, and interpret results. Panchavyavi Vakya provides guidance on reporting findings, while Yukti Pramana facilitates the development of connections between causes and their effects. A successful research project requires careful preparation and careful planning.[32]

In conclusion, Pramanas play a vital role in Ayurvedic research methodology, as they guide the researcher through every stage of the research process, including selecting the research problem, formulating the hypothesis, gathering data, analyzing the findings, extrapolating the findings, and publishing the findings.

Research methodology in Ayurveda should be based on the Pramanas (Aptopdesha, Pratyaksha, Anumana, and Yukti), which are the guiding principles for scholars, ensuring a quality, pattern, and direction in any field.

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