

Review Article

Volume 13 Issue 5

May 2024

AN AYURVEDIC REVIEW ON ANCIENT APPROACHES OF RESEARCH METHODOLOGY

Dr. Nirmal Mahendra Savale¹, Dr. Athulya CM²

¹Professor (*Samhita Siddhant* and *Sanskrit* Dept.) Chaitanya Ayurved College, Sakegaon, Bhusawal, India.

²Assistant Professor (*Agadtantra* Dept.) Chaitanya Ayurved College, Sakegaon, Bhusawal, India.

Abstract

Ayurveda is considered as science of life, associated with wisdom of *Atharvaveda*, this science provides guideline toward a healthier life. The various aspects of Ayurveda not only work for physical and mental well being, but also support moral, social and spiritual well being. Ayurveda boasts the capacity to address chronic ailments, in this regards Ayurveda suggests effective preventive and curative measures. The various concepts of Ayurveda evolve through different *Pramanas* or sources of knowledge. However, the lack of scientific substantiation for many of its principles has hindered its progress. Ayurveda still requires evidence-based research for wider global recognition and acceptance. Ayurveda research methodology serves as a tool for evaluating its hypothesis of principles. There is a need to explore Ayurveda perspective of research methodology and its correlation with modern science. Present article summarizes Ayurveda and modern aspects of research methodology and its impact on the development of Ayurveda science.

Key-Words: *Ayurveda, Research Methodology, Science, Anusandhan, Pramana*

Introduction

Ayurveda as oldest medical system is embodying a wealth of concepts and hypotheses related to the health. It offers many holistic approaches for the management of health and prevention of disease. It addresses physical, psychological, social, ethical and spiritual dimensions of human life. The fundamental principles of Ayurveda remain unchanged till date and serves as tool for comprehensive care of humanity. The research in Ayurveda field helps to evaluate and validate its hypothesis related to these foundational principles of Ayurveda [1-3].

Lack of standardized protocol is one of the challenges of Ayurvedic research. References of Ayurvedic classics provide understating about the ancient ways of conducting research in early days. The understanding of ancient approaches of research methodologies is very crucial for advancement of Ayurveda. The research in Ayurveda mainly encompasses investigation of cause-and-effect relationship between *Dravya*, *Guna* and *Karma*. Through multiple observations and verifiable examinations, researchers arrive at conclusive findings known as *Anusandhana*.

The primary goal of *Anusandhana* is to unravel complexities within a subject. According to *Charak* the researcher must possess some qualities as depicted in **Figure 1** for conducting effective research. These qualities include *Vidhya*, *Vitarka*, *Vigyan*, *Smirti*, *Tatparta* and *Kriya*. Together, they emphasize the importance of possessing comprehensive knowledge, logical reasoning, a scientific mindset, a retentive memory and practical approach for implementing research protocol within set period of time [3-5].

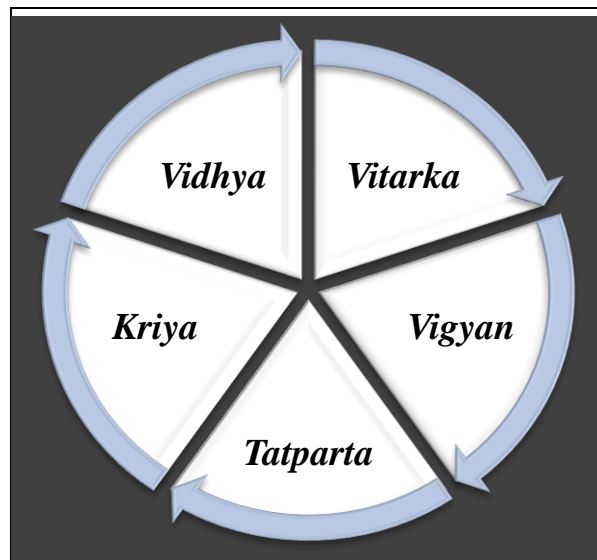


Figure 1: Qualities Prerequisite in Ayurveda Researchers

CLASSICAL TECHNIQUES FOR RESEARCH [5-9]:

- ❖ **Paryeshana and Pariksha:** These techniques involved careful observations and systematic experiments to gather information.
- ❖ **Chaturvidha Pramana:** This include various approaches of investigation as follows:
 - a) **Pratyaksha:** Direct perception through the senses.
 - b) **Anumana:** Drawing conclusions based on logical reasoning.
 - c) **Aptopadesha:** Relying on authoritative sources.
 - d) **Yukti:** Employing logical reasoning and experimentation.
- ❖ **Prashna and Sambhasha:** Utilizing questioning and discussion for deeper research.
- ❖ **Pratisanskar:** Active acquisition of information from primary sources with a focus on studying subjects from all dimensions.
- ❖ **Other Methods:** Techniques like *Avastha*, *Panchaavayava*, *Samkhya*, *Tantrayukti* and *Tantra* were employed to validate observations and experiments.

Observational studies:

Observational studies of *Ayurvedic Siddhantas* are very crucial for deciphering hidden meanings in ancient quotations. The *Prati Purush Siddhanta* emphasized individual differences, encouraging experimentation with various medicines. The *Loka Purush Samya Siddhanta* highlighted the interconnectedness between individuals and the universe, showing that the phenomena of the universe are mirrored in individuals.

Pratyaksha Pramana:

Pratyaksha Pramana means direct perceptions; this is considered as a supreme method amongst the other methods of knowledge acquisition. It plays a pivotal role among all other *Pramanas*. The direct perception can be acquired through the eyes along with other *Gyanendriyas*. *Pratyaksha* is described as immediate knowledge arising from the conjunction of *Atma*, *Indriyas*, *Mana* and *Indriyarthas*. The sensory organs are crucial in acquiring knowledge and differentiating living from non-living entities, therefore proper functioning

of sensory organs gives correct perception about sensory objects which becomes resultant of *Pratyaksha Pramana*.

Anumana Pramana:

Anumana Pramana means inference, this knowledge arises after perception or related with the mental belief. Inference involves knowing the unknown based on known data. *Acharya Charak* signifies that inference is founded after the argumentation accompanied by reasoning. *Anumana Pramana* contributed remarkably in clinical methodology that follows perception when *Pratyaksh Pramana* not available. This process of inference is integral to understanding and deducing information beyond what is directly perceived and considered vital approach in the absence of *Pratyaksh Pramana*.

Aptopadesha Pramana:

Aptopadesha Pramana means authoritative testimony; *Aptopadesha* is considered the foundation of all *Pramanas* because it plays a crucial role in acquiring existing knowledge since it support data of experimental research and provide knowledge which forms fundamental concepts of Ayurveda. *Aptopadesha* refers instructions of authoritative knowledge and these texts serve as valuable resources for research scholars, providing them with facts and parameters for verification of experimental research data. *Aptopadesha* comes from trustworthy and impartial sources who are dedicated to truth and knowledge. The authoritative uninterrupted knowledge of *Aptopadesha* includes *Aptas*, *Shista* and *Vibuddha*. In situations where direct perception or inference is not sufficient, *Aptopadesha* becomes essential for ascertaining facts. *Aptopadesha* is crucial for development of scientific knowledge and proving it experimentally. Researcher can initially learn about a scientific fact from authoritative statements and then confirm its characteristics through perception and inference approaches. *Aptopadesha* helps in examining various aspects related to diseases, such as causative factors, *Dosha* involvement, symptoms, pathogenesis and complications, etc.

Yukti Pramana

Yukti Pramana means reasoning or logical consideration of some scientific facts. Perceiving things as outcomes of a combination of many factors gives reasoning thinking

associated with scientific facts. *Yukti* is considered a valuable source of knowledge, it takes consideration of all aspects which includes *Dharma*, *Artha* and *Kama*. It aids in understanding various concepts logically using multidimensional approaches. *Yukti* helps to draw conclusions based on past, present, and future perspectives using some rational thinking. *Yukti Pramana* finds application in various areas including determining the dose and time schedule of a drug, developing methods of analysis, synthesizing and compounding medications, isolating specific extracts, studying role of *Anupana* and mode of action, etc.

Prashna Pariksha

Prashna Pariksha is the method of interrogation mainly used in *Rogi Pariksha* along with *Darshan* and *Sparshan*. *Prashna Pariksha* also used in survey studies, this approach provides precise knowledge and a detailed history, aiding in accurate outcome or conclusion. This method is considered valuable in various areas including clinical studies, survey analysis and disease diagnosis as well as observational questionnaire.

Sambhasha

Sambhasha means discussion, which is also a classical method in which specialist physicians facilitate the establishment and acceptance of facts, promote knowledge, bring recognition, prevent repetitions on topics, clarify doubts, generate new concepts and boost confidence and acceptance in the subject area. *Sambhasha* helps in acquisition and validation of knowledge in particular area.

Pratisanskar

Pratisanskar means re-editing; it is another traditional method of gaining knowledge used in ancient times, in which knowledge was acquired through teaching and studying in *Gurukuls* or *Ashrams*. Ayurvedic scholars possessed a unique intuitive sense that aided their understanding of the universe, nature, medicinal plants, and bodily elements. The subsequent modifications and additions made by *Acharyas* highlight the importance of re-editing old literature to incorporate new knowledge and rectify inaccuracies. Knowledge from valid sources helps to comprehend cause-and-effect relationships in Ayurvedic concepts.

Tantrayukti

Tantrayukti refers to techniques of exposition; encompasses technical terminology, methodologies, or techniques that enable intelligent interpretation of scientific treatises. These techniques are crucial in literary research for elaborating exact statements in texts, exploring hidden meanings using *Arthayojna Tantrayukti*, correcting and rearranging sentences with *Vakyayojna Tantrayukti* [9-11].

Conclusion

Paryeshana, Pariksha, Pratyaksha Pramana, Anumana Pramana, Aptopadesha Pramana, Yukti Pramana, Prashna and Sambhasha, etc. are various approaches of Ayurveda research. These techniques involved observations and experiments to gather information, direct perception through the senses, draw conclusions based on logical reasoning, rely on authoritative sources, employ logical reasoning and experimentation, utilizes questioning and discussion for deeper research. Ayurveda, with its rich history and time-tested treatments, provides a unique perspective on health and well-being. Integrating traditional knowledge with modern research methodologies can indeed lead to innovative and effective research that can results better outcome for well being of mankind.

References

1. Kirti Soni, Rohit Ranjan, Vijay Shankar Pandey. Ancient Methods of Research In Ayurveda. International Journal of Ayurveda and Pharma Research. 2020;8(11):36-46.
2. Dr. Subhash Ranade, Dr.R.R.Deshpande. Author Dr.Sachin Sarpotdar, Dr.Santosh Bhor and Dr.Ila. Bhor Research Methodology and Medical Statistics 5th edition, published by Girish D. Gandhi Manikarnika publication, Pune. P.N. 15.
3. Dr. Subhash Ranade, Dr.R.R.Deshpande. Author Dr.Sachin Sarpotdar, Dr. Santosh Bhor and Dr.Ila. Bhor Research Methodology and Medical Statistics 5th edition, published by Girish D. Gandhi Manikarnika publication, Pune. P.N. 20.
4. Dr. Dyaneshwar K. Jadav, Manual of Research Methodology and Medical Statistics, published by Chaukhambha Subharati Prakashan, First edition 2017, P.N. 3-4.

5. Pt. Kashinath Shastri, Dr. Gorakhanath Chaturvedi, Charak Samhita, with Vidyotini Hindi Commentary, Sharir Sthana Chapter 5/3, published by Chaukhamba Bharati Academy 2015, P.N. 886.
6. Dr. K.V.L. Narasimhacharyulu, Padartha Vigyana 4th edition 2010, published by Chaukhamba Krishnadas Academy, Varanasi P.N. 204.
7. Dr. Yogesh Chandra Mishra, Basic Principles of Ayurveda Padartha Vigyana, edition reprint 2007, published by Chaukhamba Sanskrit Sansthan, Varanasi P.N. 348.
8. Dr. K.V.L. Narasimhacharyulu, Padartha Vigyana 4th edition 2010, published by Chaukhamba Krishnadas Academy, Varanasi P.N. 217.
9. Dr. Ambika Datta Shastri, Sushruta Samhita, Purvardha with Ayurvedatatvasandipika Hindi Commentary, Sutra Sthana 15/48, Chaukhamba Sanskrit Sansthan, Varanasi. 84.
10. Dr. Subhash Ranade, Dr.R.R.Deshpande. Author Dr.Sachin Sarpotdar, Dr. Santosh Bhor and Dr. Ila. Bhor Research Methodology and Medical Statistics 5th edition, published by Girish D. Gandhi Manikarnika publication, Pune. P.N. 65.
11. Vaman Shivram Apte, Dr. Uma Prasad Pandey, Sanskrit Hindi Shabdakosh, published by Kamal Prakashan, P.N. 898.