

EDITORIAL

Application of *Pramāṇa* in Research: Reconnecting Ayurvedic Epistemology with Contemporary Scientific InquiryID Prof. Dr. Shailza Kumari¹¹ Department of Samhita and Maulik Siddhant, National Institute of Ayurveda (Deemed University), Jaipur, Rajasthan, India.

Corresponding Author

Prof. Dr. Shailza Kumari
Email: shailza.samhita@nia.edu.in

Received: 22-09-2026

Revised: 26/09/2026

Accepted: 29/09/2026

Published: 05/10/2026

Introduction

Research is fundamentally an organised process of generating, examining, validating and communicating knowledge. Contemporary research methodology provides sophisticated approaches to study design, measurement, analysis and inference [1]; however, an epistemological question remains at its foundation: how do we know that a research claim is justified? This question is not foreign to Ayurveda. The classical Ayurvedic tradition developed a systematic framework of examination (*Parīkṣā*) and valid means of knowledge (*Pramāṇa*) for understanding disease, the patient and therapeutic action. In the Charaka tradition, *Aptopadeśa*, *Pratyakṣa*, *Anumāna* and *Yukti* occupy an important place in the acquisition and application of knowledge. Charaka presents these not merely as philosophical categories but as means through which phenomena can be examined and conclusions reached. Recent Ayurvedic scholarship has likewise discussed *Pramāṇa* as an examination framework relevant to diagnosis and research.

Pramāṇa as an Epistemological Foundation

The epistemological foundation of inquiry encompasses four interrelated concepts—*Prameya* (object of knowledge), *Pramāṇa* (means of acquiring valid knowledge), *Pramā* (resulting valid cognition) and *Pramātā* (the knower).¹

1. *Pratyakṣa*: From Observation to Reliable Measurement

Pratyakṣa concerns direct perception.² In research, its methodological relevance may be considered in relation to systematic observation and measurement. Clinical examination, anthropometry, laboratory investigations, imaging, physiological measurements and structured assessment instruments all depend on observations that are converted into data.³ Yet observation is not synonymous with valid measurement. A research observation requires an operational definition, an appropriate measurement method, attention to reliability and validity, and control of observer-related variation. For example, if *Kapha Vrddhi* is investigated as a research variable, recording a symptom as simply 'present' or 'absent' may be inadequate. The researcher must specify the construct, identify observable indicators, establish a reproducible assessment procedure and, where applicable, evaluate the measurement properties of the instrument.

2. *Anumāna*: From Observation to Justified Inference

Research rarely ends with description. Researchers seek relationships, explanations and conclusions that extend beyond the immediately observed data. This is the domain in which *Anumāna* becomes especially relevant. Charaka recognises inference as a means of acquiring knowledge beyond direct perception and uses it in the examination of disease and the patient.⁴ The contemporary parallel should, however, be drawn carefully. Statistical inference is not identical to Ayurvedic *Anumāna*. A statistically significant association does not by itself establish causation; observed relationships may be affected by confounding, selection, measurement error, bias or chance. The methodological lesson is therefore shared at the level of reasoning: a conclusion should be proportionate to the evidence and justified by the design and assumptions

on which the inference rests. For Ayurveda research, *Anumāna* can consequently serve as a conceptual reminder to distinguish observation from interpretation.

3. *Aptopadeśa*: Textual Knowledge, Authority and the Research Question

Aptopadeśa provides an important route through which knowledge is received from authoritative sources, and Charaka places authoritative instruction at the beginning of the sequence of examination.⁴ A classical statement may therefore initiate a research pathway:

Aptopadeśa → conceptual proposition → research gap → research question → hypothesis.

The researcher must preserve the textual context, distinguish the original statement from later commentary or interpretation, and specify precisely what is being tested. This distinction prevents a common methodological error: measuring a modern operationalisation and subsequently claiming that the classical statement itself has been empirically validated.

4. *Yukti*: Integrative Reasoning for Complex Ayurvedic Questions

Yukti is particularly important when multiple factors must be considered together.⁵ Ayurvedic reasoning frequently involves interactions among *Doṣa*, *Duṣya*, *Agni*, *Srotas*, *Āhāra*, *Vihāra*, *Prakṛti*, *Bala*, *Deśa*, *Kāla* and other determinants. Contemporary research similarly addresses multifactorial phenomena through multivariable models, interaction terms, systems approaches and personalised approaches to clinical investigation.

The correspondence should again be understood as conceptual rather than one-to-one. *Yukti* is not equivalent to a statistical test or a particular study design. Rather, it can provide a rationale for why variables are selected, why they are considered together, and how findings from different domains are integrated. In a study of *Prameha*, for example, a researcher may consider *Āhāra*, *Vihāra*, *Doṣa*, *Meda*, *Agni*, *Prakṛti*, family history, physical activity and comorbidity as interacting elements rather than assuming a single-factor explanation.⁶

Implications for Ayurveda Research

A *Pramāṇa*-informed research culture could strengthen Ayurveda research in at least four ways. First, it can encourage explicit separation of observation from inference. Second, it can promote greater care in translating classical constructs into measurable variables. Third, it can encourage researchers to state the evidentiary basis of different claims rather than treating

all evidence as interchangeable. Fourth, it can support integrative reasoning when Ayurvedic constructs involve multiple interacting determinants. The application of *Pramāṇa* in a research process can be understood as shown in Figure 1.

Pramāṇa and Construct Validity

One of the most promising areas for dialogue between Ayurvedic epistemology and contemporary research methodology is construct validity. When a construct is multidimensional, a single observable measure may capture only one component of it. Modern validity theory emphasises that interpretation of a measurement requires evidence supporting the proposed meaning and use of the measure.⁷

For Ayurveda, the sequence may be expressed as: classical definition → conceptual definition → operational definition → measurement → validation. Consider *Agni* as an example. The researcher must first establish what the relevant classical description denotes, identify the dimensions of the construct that are intended for investigation, determine observable indicators, and then establish how those indicators can be measured consistently. This approach can reduce both uncritical traditionalism and premature biomedical reductionism.

Avoiding one-to-one equivalence

A central caution is necessary. It would be conceptually simplistic to declare *Pratyakṣa* = laboratory evidence, *Anumāna* = statistics, *Aptopadeśa* = literature review and *Yukti* = study design. These are different categories operating at different levels. *Pramāṇa* is principally concerned with the means and justification of knowledge; contemporary research methodology specifies designs, measurements, analytic procedures and reporting standards.⁸

The more defensible relationship is therefore complementary: epistemology → research question → methodology → study design → measurement → analysis → interpretation. *Pramāṇa* can inform the epistemological reasoning that precedes and surrounds these methodological decisions without being presented as a substitute for them.⁹

The way forward

The launch of the WHO Global Research Priorities and Agenda for Traditional, Complementary and Integrative Medicine (TCIM) 2025–2034 on 16th September 2026 highlights the need for research that addresses diverse evidence needs and supports the translation of evidence into policy and practice.¹⁰ For Ayurveda, this agenda provides a timely context for examining how its indigenous epistemological frameworks can inform contemporary research.

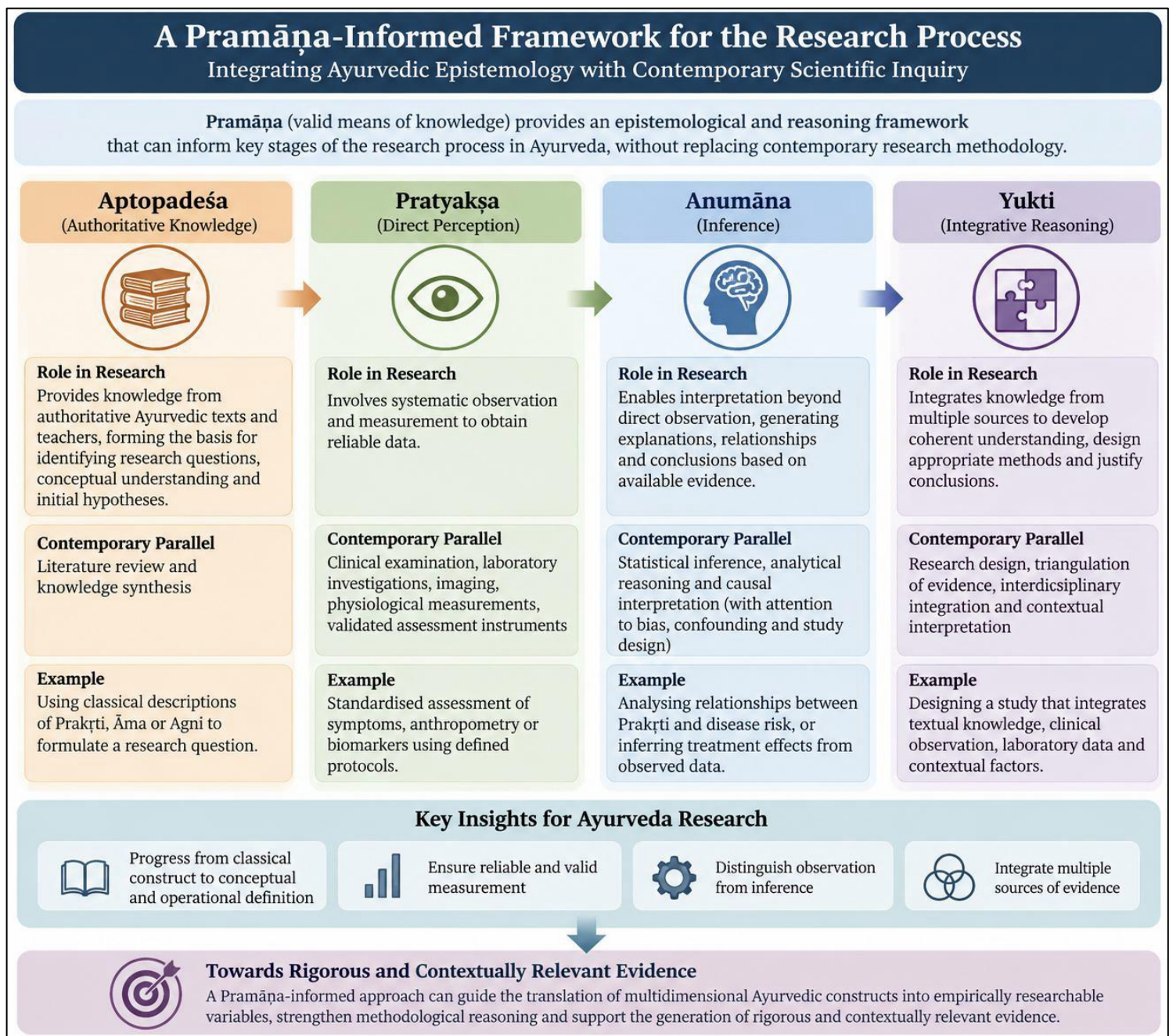


Figure 1: A Pramāṇa-Informed Framework for the Research Process.

This sequence should not be understood as a rigid replacement for established research methodology. Rather, it offers an epistemological thread running through the research process. Its value lies in making the route from source to observation, from observation to inference and from inference to conclusion explicit.

Pramāṇa may provide an epistemologically informed approach to formulating research questions, operationalising multidimensional constructs, distinguishing observation from inference, and integrating evidence from textual, clinical and empirical domains. This should not be understood as replacing contemporary research methodology, but as strengthening the epistemological reasoning that precedes and informs methodological decisions. Moving forward, *Pramāṇa* should be advanced as a practical

programme of methodological scholarship. Frameworks derived from it-targeting construct development,

diagnostic reasoning, qualitative inquiry, and mixed-method evidence-must be dynamically tested in active research settings rather than accepted on philosophical pedigree alone. Ultimately, the utility of *Pramāṇa* lies in its capacity to encourage foundational epistemological questions: clearly distinguishing what is observed from what is inferred, and examining whether modern operationalised measures adequately represent the intended dimensions of the Ayurvedic constructs from which they are derived.

Conclusion

Pramāṇa offers Ayurveda research an indigenous epistemological vocabulary for thinking about observation, inference, authoritative knowledge and rational integration. Its contemporary value lies less in creating direct equivalents for modern statistical or experimental procedures and more in strengthening the reasoning that connects concepts, measurements, evidence and conclusions. A mature Ayurveda research tradition can respect its classical epistemology while maintaining contemporary standards of methodological rigour.

The essential task is therefore integration without conflation: respect the classical construct, define it carefully, formulate a researchable question, select an appropriate methodology, generate empirical evidence and interpret the findings with intellectual transparency. In this sense, *Pramāṇa* can remain not merely a historical topic in Ayurveda education, but a useful stimulus for a more explicit and critically reflective research epistemology.

References

1. Garg R. Methodology for research I. Indian J Anaesth. 2016;60(9):640-645. doi:10.4103/0019-5049.190619.
2. Tiwari P. Tistraishaniya Adhyaya. In: Dixit U, Deole YS, Basisht G, editors. Charak Samhita New Edition. 1st ed. Jamnagar, India: CSRTSDC; 2020. Available from: https://www.charakasamhitaupToDate.com/index.php?title=Tistraishaniya_Adhyaya. Accessed October 1, 2026.
3. Dwivedi RB, Gujarathi R. Trividha Roga Visheshha Vijnaniya Vimana Adhyaya. In: Pol A, Deole YS, Basisht G, editors. Charak Samhita New Edition. 1st ed. Jamnagar, India: CSRTSDC; 2020. Available from: https://www.carakasamhitaonline.com/index.php?title=Trividha_Roga_Visheshha_Vijnaniya_Vimana. Accessed October 1, 2026.
4. Dubey SD, Singh AN, Singh A, Singh A, Samant A, Deole YS. Rogabhishagjitiya Vimana Adhyaya. In: Khandel SK, Bhagwat M, Deole YS, Basisht G, editors. Charak Samhita New Edition. 1st ed. Jamnagar, India: CSRTSDC; 2020. Available from: https://www.carakasamhitaonline.com/index.php?title=Rogabhishagjitiya_Vimana. Accessed October 1, 2026.
5. Javeed A, Chate V, Shreevathsa. Concept and application of Pramana Pareeksha. J Ayurveda Integr Med Sci. 2018;3(5):104-112. doi:10.21760/jaivs.v3i05.501.
6. Dwivedi BK, Dwivedi L, editors. Padartha Vigyana Evamu Pramana Vigyana. Varanasi: Chaukhambha Krishnadas Academy; 2005. p.307-308.
7. Strauss ME, Smith GT. Construct validity: advances in theory and methodology. Annu Rev Clin Psychol. 2009;5:1-25. doi:10.1146/annurev.clinpsy.032408.153639.

8. Pandey PK. The Concept of Pramana and Its Relevance to Modern Research Methodology: An Analytical Review. Int J Res Trends Innov. 2026;11(1):a587-a589.
9. Vinodkumar MV, Anoop AK. Review on comparability of 'classical' and 'contemporary' research methods in the context of Ayurveda. J Ayurveda Integr Med. 2020;11(4):539-546. doi:10.1016/j.jaim.2019.02.005.
10. World Health Organization. WHO global research priorities and agenda for traditional, complementary and integrative medicine 2025–2034. Geneva: World Health Organization; 2026. Available from: <https://www.who.int/publications/i/item/9789240124738>. Accessed October 1, 2026.

Funding

None.

Conflict of Interest

The author declares that there is no conflict of interest.

How to cite this article: Kumari S. Application of *Pramāṇa* in Research: Reconnecting Ayurvedic Epistemology with Contemporary Scientific Inquiry. *Journal of Advanced Ayurveda Research & Innovation*. 2026;1(1):1-4.