



ORIGINAL RESEARCH PAPER

Ayurveda

HETVABHASA IN AYURVEDA: A CRITICAL APPRAISAL OF FALLACIOUS REASONING IN CLINICAL PRACTICE

KEY WORDS: hetu, sapaksha, paksha, vipaksha, hetvabhasa

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ABSTRACT

The concept of Samprapti, outlines the progressive development of a disease from improper diet and life styles leading to Dosha Dushya Sammurchana, which is responsible for the manifestation of disease. A comprehensive understanding is crucial for accurate diagnosis and for developing treatment strategies that target the disruption of pathogenesis. Anumana Pramana bridges the gap between theory and practice by facilitating reasoning in real clinical scenarios by identifying the root cause of disease, predicting its progression, and selecting appropriate treatments¹. Anumana Prama a relies on logical reasoning, in which Hetu serves as the reason or ground of inference. When this Hetu is flawed, it results in Hetv bh sa, or fallacious reasoning, which accordingly leads to erroneous inferences and inaccurate diagnoses. Within clinical framework, Hetvabhasa refers to interpreting signs and symptoms as the Hetu, where the patient represents the Paksha. The Hetu within the patient is the signs and symptoms, that manifest during a disease. The Sadhya aligns with the disease that requires diagnosis. The validity of Anumana hinges on Vyapti, the invariable relationship between the Hetu and Sadhya, ensuring that the presence of the Hetu invariably indicates the presence of the Sadhya.² Understanding Hetvabhasa is crucial for making accurate clinical diagnoses, as it strengthens the critical reasoning skills necessary for identifying disease etiology, prognosis, and appropriate treatment strategies. This article explores the logical structure, classifications, and clinical applications of Hetvabhasa, highlighting its significance in routine Ayurvedic practice.

INTRODUCTION

Anumana Pramana or inferential knowledge, is a central epistemological tool in Ayurveda and is used to interpret clinical signs, infer internal disturbances, and assess conditions such as dosha imbalance and impaired agni. Classical and contemporary sources note that symptoms are often analyzed through inference to reach a diagnostic conclusion, especially when internal entities cannot be directly perceived. For example, clinical features such as heaviness, loss of appetite, and lethargy may lead the physician to infer the presence of Aama demonstrating that medical reasoning in Ayurveda is fundamentally the application of logic within a clinical context³.

In Ayurveda, diagnosis predominantly relies on anumana (inference), where observable signs and symptoms, hetu are used to identify the disease (Sadhya). This process depends on a valid vyapti, the invariable relationship between hetu and Sadhya, so that the physician can draw a correct conclusion from clinical evidence⁴. When a physician relies on inadequate, inconsistent, or unverified reasoning, the resulting inference becomes logically unsound and diagnostically unreliable. In Ayurveda, logical reasoning and medical reasoning are closely interrelated, as clinical judgment is founded upon structured modes of thought. Logical reasoning furnishes the essential principles of inference, analysis, and causal interpretation, whereas medical reasoning applies these principles to understand disease processes, establish diagnosis, and determine appropriate treatment strategies⁵.

Hetvabhasa is a fallacious or misleading reason that appears valid but does not support sound inference, and it can lead to diagnostic error. Understanding hetvabhasa helps clinicians recognize invalid signs, avoid wrong conclusions, and differentiate diseases that present with similar features⁶. Medical reasoning, logical reasoning, and Hetvabhasa are closely interconnected, especially in Ayurveda, where diagnosis and treatment depend on sound thinking. **Logical reasoning** provides the basic framework of correct thinking how to analyze cause hetu, effect, and relationships. This framework comes from systems like Nyaya. **Medical reasoning** is the practical application of this logic in a clinical setting, where a physician interprets symptoms, understands **Dosha imbalance**, and determines disease and treatment. **Hetvabhasa** comes into play when this logical process becomes faulty. It represents errors in reasoning when the Hetu used in inference is incorrect, incomplete, or

misleading. As a result, the medical reasoning built on that faulty logic also becomes incorrect. The present study is significant because it examines how the principles of hetvabhasa can inform the understanding of reasoning in medical diagnosis. Clinical diagnosis is not merely the collection of symptoms, but a structured process of inference in which evidence must be interpreted carefully and conclusions must be logically justified. In this context, hetvabhasa becomes relevant as it highlights the possibility of faulty reasoning, which may lead to diagnostic uncertainty or error. By linking classical logical analysis with medical decision-making, the study offers a deeper understanding of how accurate judgment is formed and how mistaken inference can be avoided in clinical practice. Employing a qualitative analytical framework, the study will integrate textual evidence with illustrative cases to underscore the epistemological and practical significance of hetvabhasa in preserving precision, validity, and therapeutic efficacy within Ayurvedic practice⁷.

AIMS AND OBSERVATION

- To identify different types of hetvabhasa and their characteristics
- To study hetvabhasa and understand its clinical importance in ayurveda for ensuring accurate diagnosis and rational decision making.

METHODOLOGY

A comprehensive descriptive and analytical review of classical Ayurvedic texts, including the Charaka Samhita, Sushruta Samhita, and Ashtanga Hridaya, as well as relevant Nyaya literature and contemporary research has been done. The methodology will further incorporate case studies from classical texts like Nyaya Sutras and Ayurvedic commentaries, to elucidate practical implications and critiques in Hetvabhasa. The study will also emphasize strategies for preventing Hetvabhasa through meticulous observation, cross-referencing with authoritative texts, and logical analysis, all of which are essential for ensuring accurate clinical decision-making. A qualitative analysis will synthesize textual evidence and case-based examples to underscore the significance of Hetvabhasa in preserving precision and efficacy within Ayurvedic practice⁸.

OBSERVATION AND RESULTS

A hetvabhasa is a fallacious or misleading reason that appears valid but does not support sound inference, and it can lead to diagnostic error. Understanding hetvabhasa helps

clinicians recognize invalid signs, avoid wrong conclusions, and differentiate diseases that present with similar features.⁹ In Ayurveda, diagnosis predominantly relies on anumana, where observable signs and symptoms are used to identify the disease. This process depends on a valid vyapti, the invariable relationship between hetu and Sadhya, so that the physician can draw a correct conclusion from clinical evidence¹⁰. This study will critically examine clinical reasoning through case-based examples to demonstrate how erroneous hetu may culminate in Hetwabhasa. employing a qualitative analytical framework, the study will integrate textual evidence with illustrative cases to underscore the epistemological and practical significance of Hetwabhasa in preserving precision, validity, and therapeutic efficacy within Ayurvedic practice.¹¹

Furthermore, concepts such as hetu, samprapti, and doSha-duShya interaction depend upon valid inferential relationships for accurate clinical interpretation. Since Anumana in Ayurveda is grounded in reasoning, observation, and vyapti, the invariable relationship between cause and effect any defect in logic through hetwabhasa can distort clinical inference and result in erroneous diagnosis and inappropriate treatment¹². Understanding of hetwabhasa becomes accurate when it is examined in relation to hetu, pak a, vyapti, and sadhya, because a fallacy occurs when one of these logical requirements is not properly established.

Hetwabhasa plays a crucial role in critically evaluating misleading or apparent causative factors while systematically analyzing the samprapti, identifying the precise Dosha-Dushya Sammurchana, arriving at an accurate diagnosis, and formulating an effective, individualized treatment strategy.

Types of Hetwabhasa (Fallacious Reasoning) in Ayurveda/Nyaya

TYPES OF HETWABHASA	DEFINITION
Savyabhichara	Inconclusive reason;
Viruddha	Contradictory reason
Satpratipaksha	Counterbalanced reason
Asiddha	Unestablished reason
Badhita	Contradicted reason

DISCUSSION

Hetwabhasa refers to fallacies or errors in logical inference that contribute to diagnostic errors in clinical diagnosis. It represents inferential defects that invalidate research protocols and clinical diagnoses due to flawed reasoning. These errors create the illusion of a valid argument while rendering it logically unsound. In clinical diagnosis, proper reasoning is essential; however, logical errors can occur inadvertently, leading to confusion and incorrect conclusions. To identify these logical errors, a thorough understanding of fallacies, or Hetwabhasa, is crucial. This knowledge aids in refining our reasoning processes, enabling us to uncover the true facts behind arguments through the components of Anumana¹³

1. Savyabhichara Hetwabhasa

a) Sadharana savyabhichara hetwabhasa

In Indian logic, the concept of Sadharana Savyabhichara Hetwabhasa, fallacy stemming from a reason that is overly general and present in both confirming and non-confirming instances finds significant parallels in clinical reasoning. In medical practice, reliance on such non-specific signs or symptoms can lead to diagnostic errors, as these features are prevalent across multiple conditions and therefore lack discriminative value. Recognizing this limitation encourages clinicians to adopt a more systematic approach, emphasizing differential diagnosis, the identification of specific clinical markers, and the use of confirmatory investigations. This principle underscores the necessity of avoiding overgeneralization and enhances the rigor of diagnostic decision-making in healthcare.

EG: A patient of 55 year exhibited with chief complaints of ati swedana and aswedana, so it is a case of kushta. Here, Paksha- The patient, Sadhya-kushta, Hetu-atiswedana aswedana In this case, the hetu Atiswedana aswedana is not only seen in Kushta but also in Vatarakta So, the hetu is irregularly related to Sadhya. Thus because of Sadharana Savyabhichara Hetwabhasa we tend to conclude to a wrong diagnosis in this case.

b) Asadharana savyabhichara

When the hetu is not present neither Sapaksha (where Sadhya is present) nor with Vipaksha (where Sadhya is absent). The Hetu is just a Paksha Matra Vritti which means it is just an Asadharana Guna of Paksha only. Clinically, this type of Hetwabhasa is seen when we tend to conclude a diagnosis of disease when we take into consideration only two probable diseases depending on the lakshana's but the actual disease diagnosis is different here. The Hetu is unique to the subject, but we fail to identify it.

EG: A 40-year-old woman came with chief complaints of abdominal mass in stomach. so it is a case of pregnancy. Paksha - The patient, Sadhya-uterine fibroid, pregnancy (considering the patient as an actual case of abdominal aortic aneurysm.), Hetu-massive genlargment. ie, abdominal aortic aneurysm.

Considering this case as actual abdominal aortic aneurysm, we took only in consideration utrine fibroid because of massive growth urine and pregnancy due to mild pustaion. & ignoring symptom of abdominal aortic aneurysm. So, in this case Hetu i.e., massive growth is neither with Sapaksha i.e., pregnancy nor with the Vipaksha i.e., uterine fibroid. The Hetu in this case is just with the actual disease i.e., abdominal aortic aneurysm. But due to improper history taking and/or depending on the various circumstances we tend to conclude to wrong diagnosis.

c) Anupasamhari savyabhichara hetwabhasa

When Hetu is present with every possible subject i.e., Paksha it is called Anupsamhari Savyabhichara Hetwabhasa. This kind of reasoning prevents the formation of a focused differential diagnosis and may lead to unnecessary investigations or mismanagement. Understanding this fallacy encourages clinicians to refine their reasoning by applying specific, limited, and clinically relevant criteria, thereby improving diagnostic accuracy and ensuring more targeted patient care.

EG: In pandemic, or in any pandemic virus, bacteria), etc. cause various diseases. As such in COVID outbreak, many patients present with Lakshana of Jwara, Kasa, Pratishyaya, Shira Shoola and Klama. Therefore, all individuals present in the outbreak region should also experience these lakshanas. This is Anupsamhari Savyabhichara Hetwabhasa, as we think that all individuals must suffer from Covid outbreaking that area, but not all individuals suffer. Also, Acharya Charak in Jwara Chikitsa Adhyayhas said that just as a seed lies dormant in the soil and germinates at an opportunate time, the Dosha in the body also lies dormant and intensify at right times, so some individuals may not suffer. In this example the Hetu is the lakshana's of the Covid outbreak and Sadhya are all the Paksha i.e., the individuals present in the outbreak region.

2. Viruddha Hetwabhasa.

The Hetu in this Hetwabhasa is actually present where there is absence of Sadhya. The reason which we give for an intended proposition, that reason itself proves the opposite of the intended proposition. EG: A patient of 40 years with chief complaints of kapota iva koojana, so it is a vataja kasa. Here, Paksha - The patient, Sadhya -vataja kasa, Hetu -kapota iva koojana.

The reasoning given here is fallacious because kapota iva koojana (Hetu) is characteristic of tamaka swasa not vataja kasa. As tamaka swasa show kapota iva koojana. Thus, the

Hetu kapot aiva koojana establishes a relation with the absence of Sadhya (tamaka swasa) directly contra-dicting the intended proposition. This makes it a Viruddha Hetu.

3. Satpratipaksha Hetwabhasa

To prove the absence of sadhya when a second strong inference is given with respect to first inference it is Satpratipaksha Hetwabhasa. In this the inference is neutralized by an equally strong counter-inference leading to an opposite conclusion

Eg: A patient 65-year-old presents with chief complaints of gala vaktra sosham along with pain in hrit, kukshi and parswa, Therefore, we may diagnose it as a case of vataja kasa but countering this inference by saying gala vaktra sosham along with pain in hrit, kukshi and parswa, is seen in vataja gulma. Both inferences are equally plausible, canceling each other out, leading to a stalemate. Thus, both the Hetu are inconclusive, leading to Satpratipaksha Hetwabhasa

4. Asidha Hetwabhasa

The Hetu which is itself a Sadhya and hence it is not different from Sadhya is Asiddha Hetwabhasa. Eg: In this type the Hetu is unestablished in the Paksha or lacks valid Vyapti, making the inference baseless.

A) Asraya asidha

The Hetu which has no Ashray is the Ashray Asiddha Hetwabhasa

The Paksha is unreal or non-existent.

EG: A female patient complaining of pain in the lower abdomen along with dribbling after micturition, excessive urination at night, frequent urination, sense of incomplete bladder emptying, incontinence. These all symptoms may be due to pregnancy or due to stone in urinary system but misdiagnosing it as a case of benign prostatic hyperplasia due to similar symptoms is Ashray Asiddha Hetwabhasa because prostate gland (Hetu) is not part of female reproductive system (Ashraya)

B) Swarupa asidha

The Hetu which has no Paksha is Swarup Asiddha Hetwabhasa. The Hetu has Ashray here, but it may not reside in the Paksha, due to its nature.

In the Sara Pariksha there is a possibility to diagnose wrongly by a physician simply by the sight of physical appearance (Swarup) of the patient. May assess the strong person due to his stoutness and weak person due to his leanness. Similarly, assess a person with large body as more strength and small bodied person as less strength. But it is not correct, because sometimes, a lean and small bodied person may be strong, just as an ant carries more than its weight according to Pipili-kabharaharana Nyaya. In this case Paksha is the physical appearance of the patient, Hetu is the Bala of the patient and Sadhya is the Sarata of the patient. The Hetu i.e. Bala in this case may not reside in Paksha i.e., in a large body person but we may conclude that the patient is of Pravara Bala just on the physical appearance of the patient i.e. Swarup hence it is Swarup Asiddha Hetwabhasa.

C) Vyapthi Asidha

- Vyapti between Hetu & Sadhya is unestablished or conditional due to an Upadhi.
- EG: Proposition - A patient has Amaja trishna due to ama because they have arochaka as a lakshana
- Paksha - The patient, Sadhya - Amaja trishna due to Ama aggravation,
- Hetu - complains of Arochaka
- Vyapti - Wherever there is arochaka in the body, there is Amaja trishna aggravation. The above given Vyapti is not universally true. A arochaka can also occur in other conditions, such as vatodara but not necessarily with

amaja trishna, arochaka is a main feature seen whenever there is agnimadya. Arochaka is also seen in vataika udara and kaphaja gulma. Since, the arochaka is solely related to amaja avstha, the Vyapti is conditional and unestablished. Hence, this is the case of Vyapti Asiddha Hetwabhasa. Therefore, to avoid Vyapti Asiddha we need to refine the Vyapti to account for the specific context and eliminate the Upadhi. Thus, a valid inference in this case can be wherever there is arochaka accompanied with flatulence and salivation, it is Amaja trishna.

5) Badhita Hetwabhasa

Here, the Vishaya is the Sadhyadharma means the conclusion of the inference. Badh means obstruction and Pramana here is another stronger, non-inferential source of knowledge, such as direct perception. Thus, this Hetwabhasa occurs when the conclusion of the inference gets obstructed by another strong inference such as By Pratyaksha Pramana.

EG: The patient does not have fever, because his skin is cold. Here Sadhya is fever and hetu is cold skin. But stronger evidence (Badhaka Pramana shows) with thermometer show a high body temperature. Here the direct measurement contradicts the inference that there is no fever. The Hetu here appears to be logical, but it is refuted by evidence that the inference is misleading to a correct diagnosis.

SIGNIFICANCE

Savyabhicara

Understanding Savyabhicara helps prevent premature conclusions, encourages consideration of differential diagnoses, and promotes the use of appropriate investigations for confirmation. Thus, it plays a crucial role in improving diagnostic accuracy, minimizing clinical errors, and ensuring rational, evidence-based decision-making in medical practice. It highlights that the presence of a single laksha should not be overinterpreted or used to label a condition without analyzing the unique and characteristic features of that disease. By stressing the importance of disease-specific lakshas and proper correlation of clinical findings, it helps prevent errors in judgment and supports a more accurate, logical, and comprehensive approach to diagnosis¹⁴.

Virudha

Its significance in clinical diagnosis lies in alerting the physician to such contradictions, thereby preventing incorrect association of clinical features with the wrong dosha. To avoid this error, one must possess a thorough and confident understanding of each dosha and its specific characteristics, so that the symptoms are interpreted accurately and the diagnosis remains logically sound¹⁵.

Satpratipaksha

Its significance lies in encouraging the clinician to think more critically and systematically when faced with conflicting symptoms. Instead of arriving at a quick conclusion, it promotes careful evaluation of all possible conditions and strengthens the process of differential diagnosis, helping to resolve contradictions and arrive at a more accurate and logical clinical decision¹⁶.

Asidha Hetwabhasa

It signifies that a diagnosis should not be made unless there is a clear and proven relationship (vyapti) between them. Thus, it guides clinicians to ensure that the clinical features are genuinely related to the suspected condition, promoting accurate correlation and preventing conclusions based on unverified or unsupported reasoning.

Baddhita

It signifies that if an inference is contradicted by objective evidence such as laboratory investigations or findings from nadi pariksha, it should not be accepted. Thus, it guides

clinicians to validate their diagnostic reasoning with concrete and observable evidence, ensuring accuracy and preventing errors in judgment¹⁷.

CONCLUSION

Hetvabhasa is needed because it helps detect faulty reasoning before it leads to an incorrect diagnosis. In Ayurveda, knowledge of these fallacies supports critical thinking, improves clinical judgment, and reduces diagnostic errors by making the clinician examine whether the reason truly fits the disease. Hetvabhasa is essential in clinical diagnosis because it identifies faulty reasoning, prevents premature conclusions, and promotes accurate, logically sound decision-making. By mastering hetvabhasa, physicians avoid misreading symptoms, differentiate look-alikes (e.g., rheumatoid arthritis vs. vataja sandhigata vata), and build rock-solid vyapti. This sharpens analysis, ensures precise treatments (like targeted shodhana), and boosts diagnostic reliability much like a quality check in modern evidence-based medicine.

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