

A Review of Sharangdhar Samhita's Bhaishajyakalpana: An Ancient Wisdom for Modern Practice

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Annotation: Sharangdhar Samhita, a seminal text of medieval Ayurveda, holds a pivotal place in the evolution of Bhaishajyakalpana (the science of pharmaceutical formulations). This review explores the profound contributions of Sharangdhar Samhita to the principles, methods, and classifications of Ayurvedic drug preparation, emphasizing its continued relevance to modern pharmaceutical practice. The text systematically elaborates on dosage forms like avaleha (linctus), asava-arishta (fermented preparations), and sneha kalpana (medicated oils and ghee), highlighting its scientific approach to formulation stability, bioavailability, and patient-centric medicine. By analyzing the ancient methodologies described and correlating them with contemporary pharmaceutical concepts such as drug delivery systems and standardization, this article underscores the enduring wisdom embedded in the Samhita. The review advocates for deeper integration of Sharangdhar's principles into modern Ayurvedic pharmaceutics to enhance therapeutic efficacy, safety, and global acceptance of traditional medicine. Sharangdhar Samhita, offers profound insights into Bhaishajyakalpana (the science of pharmaceutical formulations). This review explores the enduring relevance of Sharangdhar's methodologies, highlighting the precision in dosage forms, preparation techniques, and the rational use of adjuvants (Anupana). The text systematically categorizes medicines into practical formulations such as Kashaya (decoctions), Churna (powders), and Sneha Kalpana (medicated oils and ghee), many of which parallel modern pharmaceutical practices. By examining Sharangdhar's principles through a contemporary lens, this study reveals how ancient wisdom can inform current trends in personalized medicine, pharmaceutics, and holistic healthcare. Emphasizing its applicability in today's pharmacological innovations, the review advocates for a renewed integration of Sharangdhar Samhita's practices into modern clinical and pharmaceutical contexts.

Keywords: asava-arishta, sneha Kalpana, avaleha, Churna, Anupana.

Introduction

The *Sharangdhar Samhita*, composed around the 13th century, holds a distinguished place in the history of Ayurveda, particularly for its systematic and detailed exposition of *Bhaishajyakalpana*—the science of pharmaceutical formulations. At a time when Ayurveda was evolving and diversifying, *Sharangdhar* unified scattered knowledge into a coherent guide focused on the preparation and administration of medicines. His work stands out for bridging classical wisdom with practical methodologies, offering formulations that are remarkably relevant even in modern clinical practice.

This review, titled "A Review of Sharangdhar Samhita's Bhaishajyakalpana: An Ancient Wisdom for Modern Practice," aims to explore the timeless principles embedded within Sharangdhar's text and their applicability to contemporary health care needs. By revisiting the foundations of Ayurvedic pharmaceutics, the review seeks to highlight how traditional knowledge can inspire innovation, standardization, and improved therapeutic outcomes in the modern era. Sharangdhar's emphasis on dosage forms, palatability, precision, and patient-centric approaches reflects a depth of pharmaceutical understanding that continues to offer valuable insights today. Ayurveda, the ancient Indian science of life and healing, has a rich tradition of pharmacology and therapeutics, encapsulated in a branch known as Bhaishajyakalpana (the science of pharmaceutical preparations). One of the seminal works

that systematically elaborates on this field is the *Sharangdhar Samhita*, authored by Acharya Sharangdhar in the 13th century. This text bridges the classical doctrines of Ayurveda with practical, accessible methods of formulation and dosage, making it remarkably relevant even in the context of modern pharmaceutical practices. This article delves into a comprehensive review of the *Bhaishajyakalpana* section of *Sharangdhar Samhita*, highlighting its unique contributions, the timelessness of its principles, and its potential applications in contemporary healthcare.

Overview of Sharangdhar Samhita

Acharya Sharangdhar composed the *Sharangdhar Samhita* at a time when the accessibility of complex Ayurvedic treatises had diminished for the general practitioner. Unlike earlier voluminous works such as *Charaka Samhita* and *Sushruta Samhita*, Sharangdhar focused on clarity, brevity, and practical utility.

The Samhita is divided into three sections (*Khandas*):

- 1. **Purva Khanda** Basic principles of Ayurveda
- 2. *Madhyama Khanda Bhaishajyakalpana* and pharmaceutical procedures
- 3. *Uttara Khanda* Clinical aspects and specialized therapies

It is the *Madhyama Khanda*, particularly, that serves as a cornerstone for pharmaceutical preparations.

Bhaishajyakalpana: The Science of Pharmaceutical Formulations

The term *Bhaishajya* refers to a medicine, and *Kalpana* denotes preparation. Thus, *Bhaishajyakalpana* entails the systematic processing of raw materials into forms that are therapeutically effective and practically convenient.

Sharangdhar Samhita's *Bhaishajyakalpana* covers a variety of formulations, including:

- ✓ Svarasa (juice extract)
- ✓ Kalka (paste)
- ✓ *Kwatha* (decoction)
- ✓ *Phanta* (hot infusion)
- ✓ *Hima* (cold infusion)
- ✓ *Churna* (powder)
- ✓ *Vati/Gutika* (tablets/pills)
- ✓ Asava-Arishta (fermented liquids)
- ✓ *Taila* (medicated oils)
- ✓ *Ghruta* (medicated ghee)
- ✓ Avalehya (confections)

Sharangdhar not only outlines the methods of preparation but also the appropriate *Anupana* (vehicles like honey, ghee, milk), dosing guidelines, and shelf lives — an aspect quite advanced for his time.

Unique Contributions of Sharangdhar Samhita's Bhaishajyakalpana

1. Standardization of Dosages

One of Sharangdhar's revolutionary contributions is the concept of standard dosage forms, such as pills (*Vati*) of uniform size. Prior to this, dosage was often approximated based on intuition or experience, leading to variability in treatment outcomes.

Modern pharmaceutical science heavily emphasizes dosage standardization, and Sharangdhar's insights can be seen as an early precursor to these practices.

2. Introduction of New Formulations

Sharangdhar introduced several novel formulations that were easier to prepare and consume, thus promoting patient compliance. For example, *Churna* (powder) preparations allowed for faster administration compared to time-intensive decoctions. Today's fast-dissolving tablets and capsules echo this same drive towards convenience and adherence.

3. Detailed Guidelines on Preservation

Shelf life (*Aushadhi-Sevana Kala*) and methods to preserve medicines were systematically discussed. Sharangdhar's observations on the degradation of potency over time mirror modern concerns about drug stability and expiration.

4. Emphasis on Palatability

By recommending the addition of sweeteners, flavoring agents, and specific *Anupanas*, Sharangdhar emphasized making medicines more acceptable, particularly to children and the elderly — a principle echoed in modern pediatric pharmaceutics.

5. Rational Use of Vehicles

The choice of *Anupana* depending on the disease and patient constitution shows an early understanding of pharmacokinetics and pharmacodynamics — how a drug interacts within the body depending on its medium.

Relevance to Modern Pharmaceutical Practice

The Sharangdhar Samhita, a revered text in Ayurvedic literature, holds timeless significance in the field of Bhaishajya Kalpana (the science of pharmaceutical formulations). Written around the 13th century AD, it systematized the preparation of medicines, detailing proportions, methods, and processing techniques that ensured efficacy, stability, and patient compliance. In today's era of evidence-based medicine and advanced pharmaceutical sciences, revisiting the Sharangdhar Samhita offers valuable insights that align remarkably well with modern practices.

Integration with Modern Pharmaceutical Science:

Modern pharmaceutical industries emphasize precision in drug formulation — stability, bioavailability, and targeted delivery systems are paramount. Interestingly, *Sharangdhar Samhita* discussed analogous principles, such as *Yukti* (rational application) in combining ingredients, *Kalpana* (creative innovation in preparation), and *Samskara* (processing techniques to enhance properties or reduce toxicity). Many ancient techniques, like *Bhavana* (levigation), *Marana* (incineration), and the concept of *Anupana* (vehicles for administration), mirror contemporary practices in drug formulation and adjuvant therapies.

Personalization of Therapy:

Modern trends in precision medicine aim to tailor treatments to individual patients based on genetic, environmental, and lifestyle factors. The *Samhita* already emphasized the personalization of drug formulations according to a person's *Prakriti* (body constitution), *Vikriti* (pathological condition), *Ritu* (season), and *Desha* (geography), indicating a sophisticated understanding of individualized therapy much before modern medicine conceptualized it.

Standardization and Quality Control:

Today, pharmaceutical industries rigorously adhere to GMP (Good Manufacturing Practices) and quality control measures. *Sharangdhar Samhita* underlined the importance of *Shuddhi* (purification of raw materials), specific *Matrās* (accurate dosage), and well-defined preparation methods — all precursors to current standardization protocols. Modern validation studies of Ayurvedic formulations further prove that these ancient guidelines ensure safety, efficacy, and reproducibility.

Green Pharmacy and Sustainability:

With growing awareness of sustainable practices in drug production, *Bhaishajya Kalpana* promotes the use of locally available, natural resources, minimalistic processing, and eco-friendly techniques. This approach is gaining attention in the modern pharmaceutical world where green chemistry is becoming a priority.

Innovation and New Drug Development:

Several classical formulations from *Sharangdhar Samhita* have inspired research into new therapeutic agents. Formulations like *Kwatha* (decoctions), *Kalka* (paste), *Swarasa* (juice extracts), and *Vati* (pills) are being studied for their pharmacokinetics, bioactive principles, and synergistic actions. Understanding these traditional recipes opens new avenues for drug discovery and integrative medicine

Modern Applications and Relevance

In today's era, where personalized medicine, natural products, and holistic approaches are gaining momentum, the wisdom of *Bhaishajyakalpana* offers several advantages:

1. Prototype for Modern Dosage Forms:

Many classical Kalpanas mirror contemporary pharmaceutical forms. For instance, *Vati* corresponds to modern tablets, *Kwatha* resembles decoctions, and *Asava-Arishta* are similar to modern tinctures and fermented beverages. Understanding these ancient forms helps bridge Ayurvedic pharmaceutics with modern pharmaceutical technology.

2. Focus on Natural and Minimal Processing:

The minimalistic yet effective processing methods advocated in Bhaishajyakalpana align with modern trends favoring **natural**, **organic**, and **minimally processed** therapeutics.

3. Personalized and Holistic Medicine:

The customized use of formulations based on *Prakriti* (body constitution) and *Vikriti* (disease state) resonates with the contemporary move toward precision medicine.

4. Sustainability and Eco-friendly Practices:

Traditional preparation methods emphasize local resources and eco-friendly techniques, offering models for **sustainable healthcare solutions** in the face of environmental challenges.

5. Potential in Integrative Medicine:

As the world shifts towards **integrative healthcare models**, blending conventional and traditional systems, *Kalpanas* present themselves as effective adjuncts, especially in chronic disorders, lifestyle diseases, and preventive health care.

6. Inspiration for Modern Pharmaceutical Research:

The sophisticated techniques of *Bhavana Samskara* (potentization) and *Paripaka Samskara* (processing for stability and efficacy) provide a rich field for pharmaceutical research, especially in enhancing bioavailability, stability, and therapeutic efficacy of natural compounds.

The integration of traditional knowledge with contemporary science is a major focus of today's pharmaceutical and nutraceutical industries. *Sharangdhar Samhita*'s *Bhaishajyakalpana* provides:

- ➤ Guidelines for personalized medicine: Ayurveda's concept of tailoring treatment to an individual's constitution (*Prakriti*) and disease profile aligns with modern personalized medicine.
- Frameworks for herbal drug formulation: In an era witnessing a resurgence in herbal therapeutics, Sharangdhar's systematic approach can guide standardization and quality control.

Natural preservation techniques: With growing interest in natural preservatives over synthetic ones, ancient methods can inspire eco-friendly pharmaceutical innovations.

Challenges and the Need for Further Research

While the principles are robust, challenges include:

- ✓ Translating traditional measurements (like *Pala*, *Karsha*) into modern units.
- ✓ Standardizing raw material quality amidst varying cultivation practices.
- ✓ Ensuring scientific validation of efficacy and safety for ancient formulations using contemporary clinical research methodologies.

Interdisciplinary research involving Ayurveda experts, pharmacologists, botanists, and pharmaceutical scientists is essential to harness the full potential of *Bhaishajyakalpana*.

Conclusion

The *Bhaishajyakalpana* section of *Sharangdhar Samhita* represents a profound confluence of art and science — balancing the principles of healing with the practicalities of preparation and administration. Far from being a relic of the past, Sharangdhar's wisdom offers invaluable insights that can enrich modern pharmaceutical sciences and promote safer, more effective, and personalized healing methods. The *Kalpanas* described in *Sharangdhar Samhita* represent a profound pharmaceutic tradition that is not merely of historical interest but holds **tremendous contemporary relevance**. By integrating the ancient wisdom of *Bhaishajyakalpana* with modern scientific approaches, we can develop **safe**, **effective**, **personalized**, **and sustainable healthcare solutions** for the future. As we seek sustainable, holistic healthcare solutions, revisiting such ancient texts with a scientific lens is not just a tribute to our ancestors' ingenuity but also a forward-looking step towards integrated medicine.

References

- 1. Sharma, P.V. (1994). Sarangadhara Samhita: A Treatise on Ayurvedic Pharmaceutics. Chaukhambha Orientalia, Varanasi.
- 2. Dash, B., & Sharma, R.K. (1998). *Materia Medica of Ayurveda Based on Madanapala's Nighantu*. Concept Publishing Company, New Delhi.
- 3. Kulkarni, P.H. (2005). *Bhaisajya Kalpana Vijnanam (Pharmaceutical Science of Ayurveda)*. Sri Satguru Publications, Delhi.
- 4. Srikanthamurthy, K.R. (2001). *Sarangadhara Samhita: Text, English Translation and Commentary.* Chaukhambha Orientalia, Varanasi.
- 5. Tripathi, I. (2018). Bhaishajya Kalpana: An Insight into Ayurvedic Pharmaceutics. *Journal of Ayurveda and Integrative Medicine*, 9(3), 223–229. https://doi.org/10.1016/j.jaim.2018.03.004
- 6. Patwardhan, B., Warude, D., Pushpangadan, P., & Bhatt, N. (2005). Ayurveda and Traditional Chinese Medicine: A Comparative Overview. *Evidence-Based Complementary and Alternative Medicine*, 2(4), 465–473. https://doi.org/10.1093/ecam/neh140
- 7. Lad, V. (2000). Textbook of Ayurveda: Fundamental Principles. The Ayurvedic Press, Albuquerque.