



## World Journal of Pharmaceutical Science & Technology

Journal homepage: [www.wjpst.com](http://www.wjpst.com)

### Review Article

## A COMPREHENSIVE STUDY OF PARADI GUNAS IN AYURVEDA PHARMACOLOGY, PERTAINING TO DRUG DEVELOPMENT, WITH SCHOLARLY REFERENCES TO RASASHASTRA TEXTS

Vd. Sharvari Ramakant Satkar<sup>1</sup>, Vd. Smita Dhurde<sup>2</sup>, Vd. Gaurav Dilip Dongare<sup>3</sup>

1. PhD Scholar, Samhita Siddhant, CSMSS Ayurveda College, Aurangabad.
2. HOD, Samhita Siddhant, CSMSS Ayurveda College, Aurangabad.
3. Associate professor, RSBK, ARAC Manchi Hill Sangamner.

#### Address for correspondence:

**Dr. Sharvari Gaurav Dongare**, Assistant Professor, Dept. of Sanskrit Samhita Siddhant, Ashvin Rural Ayurveda College, Manchi Hill, Sangamner, Maharashtra

Email Id:- [sharvarisatkar@gmail.com](mailto:sharvarisatkar@gmail.com)

Received: 15-11-2023, Revised: 01-12-2023, Accepted: 29-12-2023

### ABSTRACT

**Introduction:** Human beings developed health care system from the beginning of human thoughts, but diseases were still flourishing and people felt health problems. According to Ayurveda, various types of ailments appear with development of human living systems. Ayurveda is a medical system that covers all the facts of life and is defined as the science of Dravya, Guna, Karma keeping the view of *Hita-Ahita, Sukha-Asukha* through *Pramana-Apramana*. Some previous works have been done related to Paradi Gunas, but no compiled study has been done yet. **Materials:** Ayurveda classical texts and Rasashastra texts. Methodology: Conceptual study of Paradi Gunas in Ayurveda. Application of Paradi Gunas in Drug preparation in reference to Rasashastra texts. **Discussion:** Rasashastra texts play a vital role in Ayurvedic pharmacology. These texts are ancient Indian documents that focus on the preparation and utilization of metallic and mineral substances for medicinal purposes. They provide comprehensive knowledge and guidelines on the processing, purification, and combination of various minerals and metals to create potent medicines. *Rasashastra* texts also contribute to the understanding of the properties and actions of these substances. They describe the

specific qualities, tastes, and therapeutic effects of each mineral and metal, helping practitioners select the most appropriate ingredients for a given condition. **Results:** By following the instructions outlined in Rasashastra texts, *Ayurvedic* practitioners can create personalized herbal formulations tailored to individual patients' needs.

**KEYWORDS:** *Ayurvedic* pharmacology, Drug development, Drug manufacturing, *Paradi gunas*, *Rasashastra* texts,

## INTRODUCTION

*Ayurvedic* principles play a significant role in the associated branches of therapeutics, particularly in *Rasashastra*. While *Rasashastra* primarily centres on *Rasa* (Mercury) as a fundamental element in therapeutics, it readily incorporates and applies several essential principles from classical *Ayurvedic* texts, including *Dravya*, *Guna*, and *Karma*. *Rasashastra* is concerned with the formulation of medicines in diverse therapeutic dosage forms. The *Rasashastra* texts masterfully utilize the *Paradi Gunas*, as elucidated by *Acharya Charaka*, in various aspects of medicine preparation, such as raw material selection, shodhana of raw drugs, and medicine processing, among others. Furthermore, *Rasashastra* texts emphasize the importance of proper purification and detoxification processes. These texts highlight the significance of removing impurities and toxic substances from minerals and metals to ensure the safety and efficacy of the final product. The knowledge shared in these texts enables *Ayurvedic* pharmacists to prepare medicines that are free from harmful substances and have minimal side effects. The importance of *Rasashastra* texts lies in their ability to enhance the therapeutic potential of *Ayurvedic* formulations. These texts serve as a valuable resource for *Ayurvedic* practitioners and pharmacists, providing them with detailed information on the preparation methods and dosage forms of metallic and mineral-based medicines.

In addition to their practical applications, *Rasashastra* texts also contribute to the preservation and continuation of traditional *Ayurvedic* knowledge. These texts have been passed down through generations, each adding their own insights and experiences. They are considered a valuable heritage and serve as a foundation for further research and innovation in *Ayurvedic* pharmacology.

In conclusion, *Rasashastra* texts hold great importance in *Ayurvedic* pharmacology. They provide valuable information on the preparation, properties, and utilization of metallic and mineral substances for medicinal purposes. By following the guidelines outlined in these texts, *Ayurvedic* practitioners can create safe and effective medicines tailored to individual patient needs. *Paradi gunas* provide the fundamental principles in the manufacturing of *Ayurvedic* medicines. Furthermore, these texts contribute to the preservation and evolution of traditional *Ayurvedic* knowledge, ensuring its continued relevance in modern healthcare practices.

## MATERIALS

*Ayurveda* classical texts and *Rasashastra* texts

## METHODOLOGY

- Conceptual study of *Paradi Gunas in Ayurveda*.
- Application of *Paradi Gunas* in Drug preparation in reference to *Rasashastra* texts.

### *Paradi Gunas*<sup>1</sup>

According to *Ayurveda*, *Paradi Gunas* are ten in number, while *Nyaya Vaisheshika Darshana* etc. has enumerated only eight *Paradi Gunas*. The seers other than *Ayurveda* have not mentioned the title in classified way like *Paradi Gunas*, though some of the *Paradi Gunas* are enumerated as general *Gunas*. The following *Gunas* (attributes) are included in *Paradi Gunas*: -

*Para-Apara-Yukti-Samkhya-Samyoga-Vibhaga-Pruthaktva-Parimana-Samskara-Abhyasa*

#### 1. *Para*<sup>2</sup>

In treatment, selection of drugs depends on view of *Para-Apara*. Various drugs are prescribed for a single disease, among them search of *Para* or main, superior drug is our chief aim. It is not necessary that one specific drug is *Para* always in every stage of disease. It also depends on time, situation and status of *Dosha-Dusya* etc. E.g., *Madhura-Tikta-Kashaya Rasas* pacify *Pitta Dosha*. But in condition of increased *Drava Guna* of *Pitta Dosha*, *Kashaya Rasa* is '*Para*' for treatment. Similarly, the application of tools and specific techniques is also based on *Para* and *Apara*.

- Selection of Raw Drugs – Superior quality

Good quality *Mauktika*<sup>2</sup> (Pearls) is clean and lustrous like sunrays, clear like water and have a complete spherical in shape.

#### 2. *Apara*<sup>3</sup>

*Aparatva* is the opposite of *Paratva*. Some seers has considered that the therapeutic value of *Para* and claimed that *Apara* as invaluable from clinical point of view. Their vision is that, if *Para Dosha*, drug, *Desha* are traced then remaining are automatically *Apara*.

- Criteria for rejection of Raw Drugs

Criteria for discarding *Mauktika*<sup>3</sup> (Pearls) – The Pearls greyish, coppery red in colour or appearance similar to Rock salt, distorted in shape with glandular structures should not be used for medicine.

#### 3. *Yukti*<sup>4</sup>

From clinical point of view *Yukti* maintains all meanings as union of *Chikitsa Chatushpada*, as appropriate application of drugs, a planning to manage the disease with three types of *Chikitsa* i.e., *Daivavyapasyaya*, *Yuktivyapasyaya* and *Sattvavajaya*. E.g., in treatment of *Rajyaksma*, all these three therapies have been planned to manage the disease. In fact, this term is applied in *Pramana* also in such meaning where it has clearly stated that *Yukti* is the tool which provides knowledge about production of *Karya* through combination of various *Karanas*.

- Drug preparation includes

**i. Raw drug selection****ii. Combination<sup>4</sup>**

*Praval Panchamrut Rasa* is prepared by the combination of *Mauktika*, *Shankha*, *Shukti*, *Kapardika* in equal parts and *Pravala* taken as 2 parts.

**iii. Processing<sup>4</sup>**

The above contents take together in an earthen pot and after sealing the pot it is subjected to the incineration.

**iv. Final Drug<sup>4</sup>**

After self-cooling of the pot, prepared *bhasma* is taken out and stored in proper container.

**4. Samkhya<sup>5</sup>**

*Samkhya* is one of the *Paradi gunas*, which is commonly applied in the meaning of numerals or calculation. Apart from these, in reference of *Rasayana*, it has great role as numbers of *Pippali*, *Bhallataka* and increase in their number is important. These mentioned facts clarify that there is no perfectness without *Samkhya*. It has been applied in both forms as numerical and statistics. In reference of *Vikalpana* of *Rasas* and *Doshas*, it has been clearly applied in form of combination and permutation. It has multidimensional applications such as biological, therapeutic, pharmacological etc. For sake of convenience, assessment and categorization of available information is required. *Samkhya Guna* serves for this purpose.

- *Triphala<sup>5</sup>* - combination of 1 *Haritaki*, 2 *Bibhitaki* and 4 *Amalaki* fruits

**5. Samyoga****6. Vibhaga**

This term *Samyoga* has clinical approach also and have great role in pharmaceutical processes too. For new inventions of food and drug preparations *Samyoga* and *Vibhaga* plays an important role. While explaining the *Vajikarana* recipes *Acharya Charaka* has used word *Samyoga*. So, due to *Samyoga* and *Vibhaga* innumerable preparations from different ingredients are possible.

***Samyoga* –**

- Union of multiple single *churna* (powders) to form a Compound Drug.

*Sitopaladi Churna<sup>6</sup>* – Combination of *Khandasharkara*, *Vanshlochan*, *Pippali*, *Ela*, *Dalchini*.

***Vibhaga* -**

- Metal converted to *Bhasma* form
- Crude drug converted to Powder form

**7. Pruthaktva**

The meaning of *Pruthaktva* is separateness or individuality etc. the medical term isolation is also referred in this text. Some *Acharyas* considered the term *Pruthaktva* in meaning of differentiation.

According to synonyms it may be considered as *Asamyoga* (non-combination), *Vailakshanya* (differentiation) and *Anekata* (plurality or individuality).

- Removal of physical impurities from raw drug – *Tuttha Shodhana*<sup>7</sup>
- Different types of same *Rasadravya* – 4 types of *Abhraka*<sup>8</sup> – *Shwet, Rakta, Peeta, Krushna*.

## 8. *Parimana*

Quantity of the food to be taken directly depends on digestive strength of a person (*Agnibala*). Measurement of food articles which should be taken has been mentioned clearly. Measurement of quantity of drugs as per age is most important factor for proper treatment. Without use of measurement the physician is unable to apply the medicine.

- Specific quantity of ingredients in a Drug preparation  
*Purnachandrodaya*<sup>9</sup> *Rasa* is prepared with 1 *pala* of Gold leaf, 8 *pala* of *Parada* and 16 *pala* of *Gandhaka*
- *Matra* - Therapeutic dose of a drug  
*Kamdudha Rasa*<sup>10</sup> – 2 *Raktika* = 240mg  
*Gandhak Rasayana*<sup>11</sup> – 1 *karsha* = 10gm

## 9. *Samskara*

In reference of drug preparation nine factors have been described as a specific content of *Samskara* i.e., *Toya sannikarsa* (contact with water), *Agni sannikarsa* (contact with direct or indirect heat), *Saucha* (washing), *Manthana*, *Desa*, *Kala*, *Vasana*, *Bhavna*, *Adi* – by this word, different procedures useful in drug preparation such as *Paka*, *Dhavana*, *Nimajjana*, *Avapa*, *Nirvapana*, *Patana*, *Shoshana*, *Sinchana*, *Sthapana*, *Mardana* should be considered etc. It means these nine factors may be considered as forms of specific process of *Samskara* which may be permuted in different ways according to necessity.

- **Shodhana of Rasadravyas**  
*Swedana*<sup>12</sup> – *Hartala*  
*Mardana/Bhavana*<sup>13</sup> – *Hingula*  
*Dhalana*<sup>14</sup> – *Vanga*  
*Nirvapa*<sup>15</sup> - *Abhraka*
- *Marana Sanskar* – *Abhrak Bhasma*, *Loha Bhasma*
- *Amrutikarana* – *Abhraka Bhasma*, *Tamra Bhasma*

## 10. *Abhyasa*

*Dosha* gets aggravated through *Abhyasa* of *Gunas*, i.e., '*samana gunabhyasa*'. Means some diets, drugs require repeated or continuous practice in maintenance of health. Some routine works require repeated practice like *Vyayama*, *Abhyanga* etc. these facts may be considered in *Abhyasa*.

- *Samanya Shodhana* of *Dhatu*<sup>16</sup> - Quenching procedure for 35 times.

- 64 *Prahar Pippali*<sup>17</sup> – Trituration of *Pippali Churna* with *Pippali* decoction for 64 times.

## RESULTS AND DISCUSSION

*Rasashastra*, in its own distinctive manner, adheres to the fundamental principles of classical Ayurveda texts. The teachings of *Acharya Charaka* on *Paradi Gunas* illuminate the path of *Chikitsa* (treatment). These *Paradi Gunas* also find resonance in the essential principles governing drug preparation, both in classical *Ayurveda* texts and *Rasashastra* texts. Manufacturing of quality medicines is an integral part of *Rasashastra*. *Paradi Gunas* provide the foundation in the pharmaceuticals. Numerous procedures in *Rasashastra* follow *Paradi Gunas*. Right from the drug development to drug manufacturing everything has bound to the framework provided by *Paradi Gunas*. *Paradi Gunas* provide the foundation for the discovery of new formulations.

## CONCLUSION:

*Paradi Gunas* serve as valuable guidelines for adhering to Good Manufacturing Practices in the preparation of Ayurvedic formulations. These principles offer valuable insights into maintaining quality and standardization throughout the manufacturing process.

## REFERENCES

1. *Acharya YT*, Editor. *Charaka Samhita of Agnivesha, Chakrapani, Ayurveda Deepika Commentary, Sutra sthana*. Ch. 26, Ver. 34. Reprint Edition, New Delhi: *Chaukhamba Publications*; 2020. p. 141
2. *Acharya Vagbhata, Rasa Ratna Samuchchaya, Kulkarni DA, Vigyanabodhini Hindi Commentary*, Vol.1, Ch.4, Ver.13, Reprint Edition. New Delhi: *Meherchand Lachhmandas Publications*; 2007. P.73
3. *Acharya Vagbhata, Rasa Ratna Samuchchaya, Kulkarni DA, Vigyanabodhini Hindi Commentary*, Vol.1, Ch.4, Ver.16, Reprint Edition. New Delhi: *Meherchand Lachhmandas Publications*; 2007. P.74
4. *Kaviraj Sen Govind Das, Bhaishajya Ratnavali, Mishra Siddhi Nandan, Siddhiprada Hindi Commentary*, Ch.73, Ver.44-53, Edition 1, Varanasi: *Choukhamba Surabharati Prakashan*, 2005. P.658
5. *Pt.Vidyasagar PS*, Editor. *Sharangdhar Samhita of Shri Sharangdharacharya, Adhamalla, Dipika commentary, Kashiram, Gudhartha-dipika commentary*, Section 2, Ch.6, Ver.9, Edition 1, *Varanasi: Chaukhamba Surbharati Prakashan*; 2006. P.179
6. *Acharya YT*, Editor. *Charaka Samhita of Agnivesha, Chakrapani, Ayurveda Deepika Commentary, Chikitsasthana*. Ch. 8, Ver. 103. Reprint Edition, Varanasi: *Chaukhamba Prakashan*; 2007. p. 464
7. *Pt.Shastrri Kashinath*, Editor, *Sharma Sadanand, Rasatarangini*, Ch.21, Ver.73-75, Edition 11, Reprint, Delhi:*Motilal Banarasidas publication*;2009. P.534
8. *Acharya Vagbhata, Rasa Ratna Samuchchaya, Kulkarni DA, Vigyanabodhini Hindi Commentary*, Vol.1, Ch.2, Ver.9, Reprint Edition. New Delhi: *Meherchand Lachhmandas Publications*; 2007. P.20

9. *Kaviraj Sen Govind Das, Bhaishajya Ratnavali, Mishra Siddhi Nandan, Siddhiprada Hindi Commentary*, Ch.74, Ver.124-129, Edition 1, Varanasi: *Choukhamba Surabharati Prakashan*, 2005. P.1137
10. *Vd.Gune GG, Ayurvediya Aushadhigunadharm Shastra*, Vol. 2, Reprint edition, Pune: *Vaidyak Granth Bhandar*, 2005. P.239
11. *Vd.Gune GG, Ayurvediya Aushadhigunadharm Shastra*, Vol. 2, Reprint edition, Pune: *Vaidyak Granth Bhandar*, 2005. P.270
12. *Acharya Vagbhata, Rasa Ratna Samuchchaya, Kulkarni DA, Vigyanabodhini Hindi Commentary*, Vol.1, Ch.3, Ver.70, Reprint Edition. New Delhi: *Meherchand Lachhmandas Publications*; 2007. P.54
13. *Acharya Vagbhata, Rasa Ratna Samuchchaya, Kulkarni DA, Vigyanabodhini Hindi Commentary*, Vol.1, Ch.3, Ver.142, Reprint Edition. New Delhi: *Meherchand Lachhmandas Publications*; 2007. P.69
14. *Acharya Vagbhata, Rasa Ratna Samuchchaya, Kulkarni DA, Vigyanabodhini Hindi Commentary*, Vol.1, Ch.5, Ver.156, Reprint Edition. New Delhi: *Meherchand Lachhmandas Publications*; 2007. P.124
15. *Acharya Vagbhata, Rasa Ratna Samuchchaya, Kulkarni DA, Vigyanabodhini Hindi Commentary*, Vol.1, Ch.2, Ver.16, Reprint Edition. New Delhi: *Meherchand Lachhmandas Publications*; 2007. P.21
16. *Acharya Vagbhata, Rasa Ratna Samuchchaya, Kulkarni DA, Vigyanabodhini Hindi Commentary*, Vol.1, Ch.5, Ver.13, Reprint Edition. New Delhi: *Meherchand Lachhmandas Publications*; 2007. P.93
17. *Ayurveda Sara Samgraha*, Edition 21, Nagpur: *Shree Baidyanath Ayurveda Bhavan Pvt.Ltd.*, 2004. P.309.