

HISTORICAL APPROACHES OF DRUG DISCOVERY IN SIDDHA MEDICINE

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ABSTRACT

The Siddha system of medicine is one of India's oldest and most profound traditional healing sciences, deeply embedded within Tamil culture and philosophy. Developed by enlightened sages known as Siddhars, this system integrates spirituality, alchemy, and empirical science into a holistic medical framework. This manuscript explores the historical evolution of drug discovery in Siddha medicine, focusing on its foundational principles of observation, experimentation, and intuitive understanding. It also examines classical methodologies used for identifying, purifying, and preparing medicines from botanical, mineral, and animal sources. By analyzing the scientific rationale behind these ancient practices, this study emphasizes the enduring relevance of Siddha pharmacology in contemporary medical research.

KEYWORDS: Siddha medicine, traditional drug discovery, Tamil Nadu, Siddhars, Indian systems of medicine, Pharmacology.

1. INTRODUCTION

Siddha medicine represents one of the earliest and most sophisticated systems of traditional medicine practiced in India, particularly in Tamil Nadu. It is an integral component of the Indian Systems of Medicine (ISM) alongside Ayurveda and Unani. The term 'Siddha' originates from the Tamil word 'Siddhi', meaning achievement or perfection, symbolizing the ultimate attainment of physical, mental, and spiritual harmony. According to historical

tradition, Siddhars were enlightened sages who acquired profound medical knowledge through meditation, experimentation, and observation of nature. They emphasized that human health depends on the equilibrium of three fundamental biological forces known as Vatham (air), Pitham (fire), and Kapham (water). An imbalance among these humors results in disease, and the primary objective of Siddha therapy is to restore balance through diet, lifestyle, and natural remedies (Ramasamy & Subramanian, 2019).

2. MATERIALS AND METHODS

The Siddha approach to drug discovery and formulation was grounded in systematic observation, experiential learning, and spiritual insight. Siddhars meticulously studied the effects of natural substances on the human body and environment, often deriving inspiration from animal behavior and ecological interactions. Through iterative experimentation, they developed effective formulations, standardized dosages, and purification procedures. Empirical knowledge accumulated over centuries was preserved through oral traditions and palm-leaf manuscripts. Purification techniques (Suddhi) were crucial to eliminate toxins and enhance therapeutic efficacy. These processes included washing, soaking, grinding, heating, and combining raw materials with herbal extracts, cow's milk, or lime water. Such practices ensured the safety, stability, and bioavailability of medicinal substances (Natarajan et al., 2020).

3. RESULTS AND DISCUSSION

Siddha medicine classifies drugs into two primary categories internal and external each encompassing 32 distinct formulations. Internal medicines comprise powders (Churanam), decoctions (Kudineer), pills (Mathirai), ghee preparations (Ney), and tonics (Lehyam). External applications include oils, ointments, pastes, and fumigations utilized for therapeutic massage, wound care, and detoxification. The Siddhars also pioneered alchemical processes such as calcination (Pudam) and sublimation (Urasal) to purify and transform metals and minerals into bioavailable compounds like Parpam and Chenduram. These processes illustrate an early understanding of chemical conversion, detoxification, and the enhancement of pharmacological activity (Ravindran et al., 2021). Moreover, Siddha pharmacology emphasizes synergistic combinations of ingredients to achieve balance among the three humors. The principles of taste (Suvai), potency (Veeriyam), and post-digestive effect (Pirivu) govern the formulation of medicines. The timing of drug collection (Kaalam) and administration (Neram) is also considered critical, as seasonal and environmental factors

influence medicinal potency. Siddha toxicology (Visha Vaidyam) further contributes to this system by providing diagnostic methods and treatments for poisonings using herbal and mineral antidotes. The preservation of this knowledge through palm-leaf manuscripts and the Guru Sishya (teacher disciple) tradition reflects the meticulous documentation and continuity of Siddha medical practice (Shanthi *et al.*, 2018).

4. CONCLUSION

The Siddha system of medicine embodies a holistic understanding of health and disease that integrates empirical science, spirituality, and alchemy. Its principles of observation, experimentation, and purification demonstrate a profound grasp of natural processes long before the emergence of modern pharmacology. By focusing on harmony between the human body and the natural environment, Siddha medicine continues to provide valuable insights into preventive and therapeutic healthcare. The scientific validation of Siddha formulations and methodologies can contribute significantly to contemporary pharmacological research and promote the integration of traditional wisdom with modern biomedical science (Venkatesan & Balasubramanian, 2022).

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REFERENCES

1. Natarajan, R., Kumar, A., & Selvi, S. Traditional drug formulation and standardization in Siddha medicine. *Indian Journal of Natural Products*, 2020; 8(1): 25–32.
2. Ramasamy, S., & Subramanian, S. A review on Siddha system of medicine. *Journal of Traditional Medicine*, 2019; 15(2): 45–52.
3. Ravindran, T., Priya, M., & Dinesh, K. Scientific validation of Siddha alchemical preparations: A review. *Journal of Ethnopharmacology*, 2021; 276: 114172.
4. Shanthi, R., Mahendran, G., & Rajalakshmi, R. Palm-leaf manuscripts as a source of Siddha medical knowledge. *Indian Journal of History of Science*, 2018; 53(4): 512–520.
5. Venkatesan, R., & Balasubramanian, P. Integrating Siddha medicine into modern healthcare: Prospects and challenges. *Asian Journal of Complementary Medicine*, 2022; 11(3): 102–110.