From Scripts to Evidences: Ayurvedic Research for the Bright Future

Ragini Patil¹

Submission: 14.12.2018

¹PDEA'S College of Ayurved and Research Centre, Nigdi, Pune, Maharashtra, India-411044 Email: principal carc@pdeaayurvedcollege.edu.in



Publication: 15.02.2019

https://www.doi.org/10.63778/PDEASIJRAAS-ARJCPL/2019 112019

Abstract

Ayurveda, the millennia-old system of Indian medicine, is poised at a crossroads between tradition and science. To ensure its relevance and integration into global healthcare, there is an urgent need to transition from scriptural foundations to evidence-based research. This editorial explores the current state of Ayurvedic research, its scientific integration, emerging challenges, and the potential for a bright and impactful future.

Keywords: Ayurveda, evidence-based medicine, integrative health, traditional knowledge, clinical research

Ayurveda, derived from the Sanskrit words *ayus* (life) and *veda* (knowledge), represents a holistic system of health and wellness practiced in India for over 3,000 years. With foundational texts like the *Charaka Samhita*, *Sushruta Samhita*, and *Ashtanga Hridaya*, Ayurveda offers deep insights into preventive care, longevity, and individualized treatment approaches. Despite its historical significance, Ayurveda faces critical scrutiny in the age of evidence-based medicine.

The primary concern among modern clinicians and researchers is the lack of robust scientific validation for Ayurvedic interventions. While the traditional knowledge is extensive, much of it is based on empirical wisdom and philosophical constructs such as *dosha*, *prakriti*, and *agni*, which require scientific mapping and clinical validation to gain global acceptance⁽¹⁾.

Recent years have witnessed a promising shift. Government and academic initiatives, particularly in India, have increased support for Ayurvedic research. The Ministry of AYUSH has established dedicated research councils and institutions that focus on validating classical Ayurvedic drugs and therapies. Herbs like *Withania somnifera* (Ashwagandha), *Tinospora cordifolia* (Guduchi), and *Curcuma longa* (Turmeric) have undergone preclinical and clinical studies demonstrating their immunomodulatory, adaptogenic, and anti-inflammatory properties^(2,3).

Moreover, modern biological techniques—especially those within the "omics" sciences—have started to decode Ayurvedic principles at the molecular level. For instance, studies have demonstrated genetic and metabolic differences correlating with *prakriti* (body constitution), offering a potential model for personalized medicine⁽⁴⁾.

Despite these advances, Ayurveda research continues to face challenges. These include lack of standardized methodologies, insufficient funding for large-scale randomized controlled trials (RCTs), and a dearth of

interdisciplinary collaborations. Many studies are observational or based on anecdotal evidence, limiting their impact in peer-reviewed international journals⁽⁵⁾. Furthermore, product variability, inconsistencies in raw material quality, and concerns over contaminants such as heavy metals need urgent attention through regulatory and scientific oversight⁽⁶⁾.

To ensure Ayurveda's rightful place in the global health landscape, it is imperative to move from *shastra* (scripture) to *pramana* (evidence). This transition requires:

- **1. Rigorous clinical trials** following CONSORT and ICMJE guidelines.
- 2. Standardization and quality control of formulations.
- **3. Integration with modern biomedical science**, without compromising traditional epistemology.
- **4. Global publication and data sharing**, enhancing transparency and credibility.

Conclusion

The future of Ayurveda lies in harmonizing ancient wisdom with scientific scrutiny. By investing in high-quality research, fostering interdisciplinary partnerships, and upholding ethical standards, Ayurveda can contribute meaningfully to the global paradigm of integrative and personalized medicine. The time to bridge the gap between script and evidence is now - ensuring Ayurveda is not merely a relic of the past, but a pillar for the future of healthcare.

Source of Support: Nil Conflict of Interest: Nil

Copyright © 2019 PDEA'S International Journal Research in Ayurved and Allied Sciences. This is an open access article, it is free for all to read, download, copy, distribute, adapt and permitted to reuse under Creative Commons Attribution Non Commercial-ShareAlike: CC BY-NC-SABY 4.0 license.

Editorial Article

References

- Patwardhan B, Warude D, Pushpangadan P, Bhatt N. Ayurveda and traditional Chinese medicine: a comparative overview. Evid Based Complement Alternat Med. 2005; 2(4):465-473. doi:10.1093/ecam/neh140
- Bani S, Gautam M, Sheikh FA, et al. Selective Th1 upregulating activity of *Tinospora cordifolia* with concurrent down-regulation of Th2 cytokines in a rat model of sepsis. *Immunopharmacol Immunotoxicol*. 2002;24(1):1-13. doi:10.1081/IPH-120002747
- 3. Tillu G, Joshi J, Vora K, Patwardhan B. Integrating traditional medicine with modern medicine: a case for

- Ayurveda. *Integr Med Res.* 2019;8(1):1-3. doi:10.1016/j.imr.2019.02.002
- 4. Prasher B, Negi S, Aggarwal S, et al. Whole genome expression and biochemical correlates of extreme constitutional types defined in Ayurveda. *J Transl Med.* 2008;6:48. doi:10.1186/1479-5876-6-48
- 5. Panda AK, Patwardhan B. Vaidya-scientists: catalyzing Ayurveda renaissance. *J Ayurveda Integr Med*. 2019;10(2):91-94. doi:10.1016/j.jaim.2018.04.003
- Saper RB, Phillips RS, Sehgal A, et al. Lead, mercury, and arsenic in US- and Indian-manufactured Ayurvedic medicines sold via the Internet. JAMA. 2008;300(8):915–923. doi:10.1001/jama.300.8.915