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A Review of Folk Medicinal Practices and Plant- Based Remedies. An Ethnobotannical Prospective

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ABSTRACT

Indigenous and local groups have built and maintained traditional healthcare systems for generations, and folk medical practices are a significant part of these systems. The extensive ethnobotanical knowledge connected to plant diversity, cultural beliefs, and ecological interactions is reflected in the usage of medicinal plants to cure a variety of human illnesses. With an emphasis on traditional knowledge documentation, therapeutic uses, phytochemical relevance, and conservation elements of medicinal plant resources, this paper examines the value of folk medical practices and plant-based treatments from an ethnobotanical perspective.

Ethnobotanical research helps uncover possible therapeutic species utilized in primary healthcare and offers important insights into the human-plant relationship. Many plant-based treatments have been documented for the treatment of common conditions such wounds, inflammation, fever, respiratory infections, skin conditions, and digestive issues. Decoctions, extracts, powders, pastes, and infusions are examples of traditional preparations that show how various civilizations use medicinal herbs. Through phytochemical screening and bioactivity tests, recent scientific research has provided more evidence for the medicinal potential of a number of traditionally utilized plants.

However, ethnomedicinal legacy is seriously threatened by habitat destruction, fast environmental change, and the loss of traditional knowledge among younger generations. Therefore, maintaining medicinal plant diversity and related indigenous knowledge requires methodical documenting, verification of traditional claims, sustainable harvesting, and conservation tactics.

This study highlights the role of plant-based medicines in creating sustainable healthcare solutions and future drug discovery, as well as the significance of ethnobotanical research in linking traditional wisdom with contemporary scientific methodologies.

KEYWORDS

Traditional knowledge, ethnobotany, folk medicine, medicinal plants, plant-based therapies, Conservation and Phytochemicals

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1. Introduction

1. Medical Knowledge and Ethnobotany

The study of human-plant interactions, including traditional knowledge about using plants for food, medicine, and cultural purposes, is known as ethnobotany. Through generations of observation and experience, indigenous cultures have accumulated a wealth of information regarding medicinal plants (Schultes, 1962; Jain, 1987). For the identification of plants with potential medicinal significance and pharmacological actions, traditional knowledge systems offer useful information (Martin, 1995; Cotton, 1996).

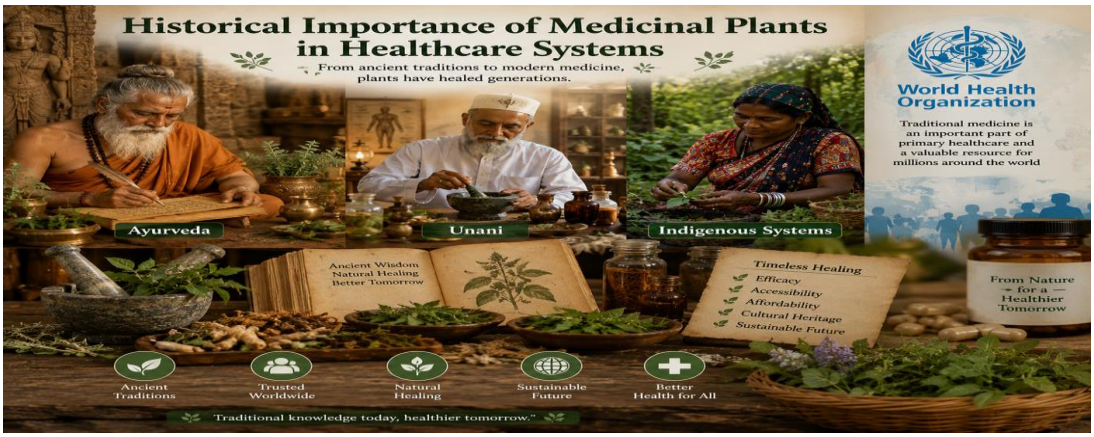
2. Medicinal Plants' Historical Significance in Healthcare Systems

Since ancient times, medicinal plants have been utilized as therapeutic agents. Plant-based medicines have a major role in traditional healthcare systems like Ayurveda, Unani, and other indigenous systems

(Mukherjee, 2002). The significance of traditional medicine has been highlighted by the World Health Organization, especially in developing nations where a sizable population relies on plant-based medical practices (WHO, 2013). According to Gurib-Fakim (2006), medicinal plants are still a significant source of bioactive chemicals for contemporary drug development.

3. Community Healthcare and Traditional Medicine

Locally formed healthcare customs based on naturally occurring materials are represented by folk medicinal practices. Traditional healers are well-versed in the identification, gathering, preparation, and medicinal uses of plants (Cotton, 1996). According to ethnobotanical surveys carried out in various areas, medicinal plants are widely used to heal wounds, fever, digestive issues, skin conditions, and respiratory issues (Kumar et al., 2007; Kala, 2005).



4. Variety and Application of Plant-Based Treatments

Traditional medicine frequently makes use of various plant parts, including leaves, roots, bark, flowers, fruits, and seeds. Depending on cultural customs and medical situations, different communities use different preparation techniques, such as decoction, infusion, powder, juice, and paste (Jain & Rao, 1977). Understanding plant diversity and their therapeutic uses is aided by the documentation of these activities (Alexiades, 1996).

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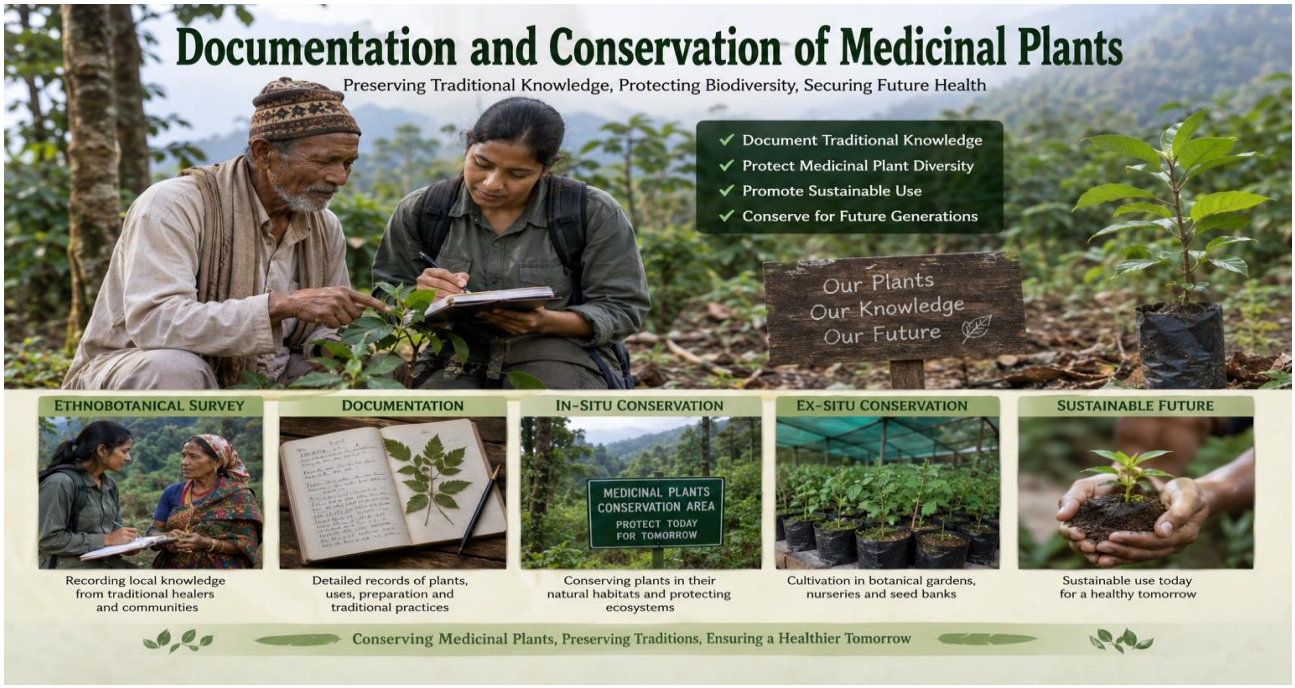
6. Recording and Preserving Therapeutic Plants

Traditional medical knowledge and medicinal plant resources are under risk due to habitat damage, overharvesting, decreased interest among younger generations, and biodiversity loss (Kala et al., 2006). For the sustainable use of medicinal plants, documentation via ethnobotanical surveys and conservation techniques is required (Hamilton, 2004). The diversity of medicinal plants is protected by both in-situ and ex-situ conservation techniques (Schippmann et al., 2002).



7. Ethnobotany's Place in Contemporary Drug Discovery

A scientific basis for choosing plants for pharmacological research and drug discovery is provided by ethnobotanical data. The discovery of new therapeutic chemicals has been greatly aided by traditional medical expertise (Fabricant & Farnsworth, 2001; Newman & Cragg, 2020). Sustainable healthcare development can be aided by the integration of traditional knowledge with contemporary scientific methods.

Conclusion

Plant-based treatments and folk medicine are important sources of ethnobotanical knowledge and traditional healthcare. The understanding of medicinal plants and their pharmacological potential has improved as a result of the combination of indigenous knowledge with contemporary scientific research. However, this priceless legacy is in danger due to biodiversity loss and the slow deterioration of traditional knowledge. Thus, it is crucial to document therapeutic plants systematically, validate them scientifically, and conserve them sustainably. The conservation of biodiversity, sustainable healthcare, and

the development of novel plant-based therapeutic agents for future generations will all depend heavily on ethnobotanical research.

References

1. Alexiades, M. N. (1996). Selected guidelines for ethnobotanical research: A field manual. The New York Botanical Garden.
2. Balick, M. J., & Cox, P. A. (1996). Plants, people, and culture: The science of ethnobotany. Scientific American Library.
3. Bennett, B. C., & Prance, G. T. (2000). Introduced plants in the indigenous pharmacopoeia of northern South America. Economic Botany, 54(1), 90–102.
4. Cotton, C. M. (1996). Ethnobotany: Principles and applications. John Wiley & Sons.
5. Cox, P. A. (2000). Will tribal knowledge survive the millennium? Science, 287(5450), 44–45.
6. Cunningham, A. B. (2001). Applied ethnobotany: People, wild plant use and conservation. Earthscan.
7. Fabricant, D. S., & Farnsworth, N. R. (2001). The value of plants used in traditional medicine for drug discovery. Environmental Health Perspectives, 109(Suppl. 1), 69–75.
8. Farnsworth, N. R. (1990). The role of ethnopharmacology in drug development. In Bioactive compounds from plants (pp. 2–11). Wiley.
9. Gurib-Fakim, A. (2006). Medicinal plants: Traditions of yesterday and drugs of tomorrow. Molecular Aspects of Medicine, 27(1), 1–93.
10. Hamilton, A. C. (2004). Medicinal plants, conservation and livelihoods. Biodiversity and Conservation, 13, 1477–1517.
11. Harborne, J. B. (1998). Phytochemical methods (3rd ed.). Chapman & Hall.
12. Heinrich, M., Barnes, J., Gibbons, S., & Williamson, E. M. (2012). Fundamentals of pharmacognosy and phytotherapy (2nd ed.). Elsevier.
13. Heinrich, M., Ankli, A., Frei, B., Weimann, C., & Sticher, O. (1998). Medicinal plants in Mexico. Social Science & Medicine, 47(11), 1859–1871.
14. Jain, S. K. (1987). A manual of ethnobotany (2nd ed.). Scientific Publishers.
15. Jain, S. K. (1991). Dictionary of Indian folk medicine and ethnobotany. Deep Publications.
16. Jain, S. K., & Rao, R. R. (1977). A handbook of field and herbarium methods. Today & Tomorrow's Printers.
17. Kala, C. P. (2005). Indigenous uses of medicinal plants. International Journal of Sustainable Development & World Ecology, 12, 205–210.
18. Kala, C. P., Dhyani, P. P., & Sajwan, B. S. (2006). Developing the medicinal plants sector in northern India. Journal of Ethnobiology and Ethnomedicine, 2, 32.
19. Kokwaro, J. O. (2009). Medicinal plants of East Africa (3rd ed.). University of Nairobi Press.
20. Kumar, M., Paul, Y., & Anand, V. K. (2007). Ethnomedicinal plants of Jammu and Kashmir. Journal of Ethnobiology and Ethnomedicine, 3, 29.
21. Lewis, W. H., & Elvin-Lewis, M. P. F. (2003). Medical botany: Plants affecting human health (2nd ed.). Wiley.
22. Martin, G. J. (1995). Ethnobotany: A methods manual. Chapman & Hall.
23. Mukherjee, P. K. (2002). Quality control of herbal drugs. Business Horizons.
24. Newman, D. J., & Cragg, G. M. (2020). Natural products as sources of new drugs (1981–2019). Journal of Natural Products, 83(3), 770–803.
25. Pandey, A. K., & Tripathi, Y. C. (2017). Ethnobotanical studies in India. Journal of Medicinal Plants Studies, 5(6), 12–18.

26. Pei, S. J. (2001). Ethnobotanical approaches of traditional medicine studies. Journal of Ethnopharmacology, 77, 99–107.
27. Prance, G. T. (1991). What is ethnobotany today? Journal of Ethnopharmacology, 32, 209–216.
28. Rao, R. R. (1996). Traditional knowledge and medicinal plants of India. Botanical Survey of India.
29. Rates, S. M. K. (2001). Plants as source of drugs. Toxicon, 39(5), 603–613.
30. Schippmann, U., Leaman, D. J., & Cunningham, A. B. (2002). Impact of cultivation and gathering of medicinal plants on biodiversity. FAO.
31. Schultes, R. E. (1962). The role of ethnobotanists in the search for new medicinal plants. Lloydia, 25, 257–266.
32. Schultes, R. E., & von Reis, S. (1995). Ethnobotany: Evolution of a discipline. Dioscorides Press.
33. Sofowora, A. (1993). Medicinal plants and traditional medicine in Africa (2nd ed.). Spectrum Books.
34. Stewart, K. M. (2003). The African cherry (Prunus africana). Journal of Ethnopharmacology, 89, 1–5.
35. Tiwari, P., Kumar, B., Kaur, M., Kaur, G., & Kaur, H. (2011). Phytochemical screening and extraction. International Pharmaceutica Sciencia, 1(1), 98–106.
36. Verpoorte, R. (1998). Exploration of nature's chemodiversity. Drug Discovery Today, 3(5), 232–238.
37. WHO. (2002). Traditional medicine strategy 2002–2005. World Health Organization.
38. World Health Organization. (2013). WHO traditional medicine strategy 2014–2023. World Health Organization.
39. World Health Organization. (2019). WHO global report on traditional and complementary medicine 2019. World Health Organization.
40. Ahmad, I., Aqil, F., & Owais, M. (2006). Modern phytomedicine. Wiley-VCH.
41. Evans, W. C. (2009). Trease and Evans pharmacognosy (16th ed.). Elsevier.
42. Kokate, C. K., Purohit, A. P., & Gokhale, S. B. (2010). Pharmacognosy. Nirali Prakashan.
43. Nadkarni, K. M. (2009). Indian materia medica (Vols. 1–2). Popular Prakashan.
44. Kirtikar, K. R., & Basu, B. D. (2005). Indian medicinal plants. International Book Distributors.
45. Chopra, R. N., Nayar, S. L., & Chopra, I. C. (2006). Glossary of Indian medicinal plants. CSIR.
46. Jain, S. K. (1995). Ethnobotany in modern India. Deep Publications.
47. Pushpangadan, P., & Atal, C. K. (1984). Ethnomedico-botanical investigations in India. Ethnobotany, 6, 7–14.
48. Singh, J. S. (2002). The biodiversity crisis. Current Science, 82(6), 638–647.
49. Gadgil, M., & Berkes, F. (1991). Traditional resource management systems. Ambio, 20(7), 289–293.
50. Farnsworth, N. R., Akerele, O., Bingel, A. S., Soejarto, D. D., & Guo, Z. (1985). Medicinal plants in therapy. Bulletin of the World Health Organization, 63(6), 965–981.