



Traditional Herbal Medicines: Opportunities And Challenges In India

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Abstract- Man has sought out plants with medicinal properties since time immemorial. Knowledge of plants and knowledge of healing diseases have been intimately linked from the time of men earliest social and cultural groupings. This can be by the thousand year old traditions and records popular healing. Herbal medicines doubtlessly are a vital part of our natural and medical heritage.

Keywords- Medicine, Herbs, Diseases, Medicinal properties.

I. INTRODUCTION- The medicinal plants have been used since ancient times for treatment of human ailments. In India, traditional system of medicine together with Homeopathy and folklore medicine continue to play an important role in the health care system of the population at large. Lately, increasing awareness of the side effects of synthetic drugs has necessitated exploration of the efficacy of natural drugs. This has led to the revival of the herbal treatments for a large number of diseases. Plant derived drugs represent 30% of all medicines in clinical use 80% of the people in developing countries rely on traditional plant based medicines. Among 250,000-300,000 total plants of the world, India harbour about 45,000 (18%) plants. out of 20,000 medicinal plants of the world, India contributes about 15% (3000-3500) medicinal plants. About 80% of these are found growing wild in different climatic regions of the country. Systematic explorations of plant wealth in conjunction with ethno- botanical data, is needed, so as to assess the plant genetic resources of any area. In order to strengthen the plant resource base extensive floristic studies are to be undertaken on regional basis. Medicinal plants of Rajasthan have not been studied much despite the fact that this region is actually an ecotone of western, arid and eastern, lush green, floral segments [1]. Due to this ecological condition nature represents great biodiversity in the floral elements. Naturally medicinal plants are also represented in larger number in this region. The importance of gathering information on medicinal plants is to initiate their proper scientific management and exploitation [2]. It also serves as a stepping stone for further research and a ready reckoner to persons interested in this sphere of knowledge. Critical review of literature reveals that attention is needs to assess particularly the medicinal component of the flora of India district. The present work is a maiden attempt to enlist and document the existing medicinal plant species of the site of study. It is an endeavor to bring out the value and importance of the medicinal flora available in India district. While it may not be an exhaustive compendium it will serve as a valuable reference for medicinal plant taxonomy. Since plant descriptions are available in floras only the medicinal value of the plants available in the region have been documented along with the name of the family to which they belong.

II. HERBAL MEDICINAL PLANTS- India district is blessed with a treasure trove of medicinal plants, each with unique properties and applications in traditional and modern healthcare. Here are a few well-known Indian herbal medicinal plants and their uses:

1. *Adusa [Adhatoda vasica]*: It belongs to family Acanthaceae. Fresh dried leaves constituents the drug *vasaka* used in bronchial troubles.
2. *Aloe Vera [Aloe barbedensis]*: It belongs to family Liliaceae. Aloe vera is a potent skin healer, often used to treat burns, wounds, and various skin ailments. It also has digestive benefits.
3. *Amla [Emblica officinalis]*: It belongs to family Phyllanthaceae. Indian gooseberry, or amla, is rich in vitamin C and supports immune health and hair growth.
4. *Arjuna [Terminalia arjuna]*: Arjuna bark is used for heart health, as it helps in managing cholesterol levels. It belongs to family Combretaceae.
5. *Ashwagandha [Withania somnifera]*: This adaptogenic herb helps manage stress, anxiety, and boosts overall vitality. It belongs to family Solanaceae.
6. *Bel [Aegle marmelos]*: It belongs to family Rutaceae. Unripe fruits are astringent, and stomachic used for diarrhoea.
7. *Brahmi [Bacopa monnieri]*: Brahmi enhances cognitive function, memory, and reduces anxiety. It belongs to family Scrophulariaceae.
8. *Black Pepper [Piper Nigrum]*: It belongs to family Piperaceae. This spice is used in bronchial ailments.
9. *Clove [Syzygium aromaticum]*: It belongs to family Myrtaceae. Cloves are the flower buds and used as expectorant.
10. *Fenugreek [Trigonella foenumgraecum]*: It belongs to family Fabaceae. Various part of plant like seed, leaves are used as herbal medicines.
11. *Ginger [Zingiber officinale]*: Ginger is a digestive aid, anti-nausea remedy, and anti-inflammatory agent. It belongs to family Zingiberaceae.
12. *Garlic [Allium sativum]*: Garlic is known for its cardiovascular benefits and its antimicrobial properties. It belongs to family Zingiberaceae
13. *Neem [Azadirachta indica]*: Known as the "Village Pharmacy," neem is revered for its antibacterial and antifungal properties. It is used to treat skin conditions, control diabetes, and boost immunity. It belongs to family Meliaceae.
14. *Tulsi [Ocimum sanctum]*: It belongs to family Holy basil, or tulsi, is renowned for its anti-inflammatory and antioxidant properties. It aids in respiratory health, relieves stress, and is used for fever management.
15. *Turmeric [Curcuma longa]*: Curcumin, found in turmeric, is a powerful anti-inflammatory. It belongs to family and antioxidant agent. It is used for joint health, wound healing, and to improve digestion.
16. *Pippali [Piper longum]*: It is belongs to family Piperaceae and used in asthma, , cough, indigestion.
17. *Cinnamon [Cinnamomum verum]*: It is belongs to family Lauraceae. It has pungent smell and used in diabetes treatment,

These are just a glimpse of rich herbal heritage, with each plant offering a plethora of health benefits and traditional remedies [3]. The wealth of knowledge surrounding these medicinal plants continues to be a vital component of healthcare practices.

III. CHALLENGES TO HERBAL MEDICINES AND BIODIVERSITY- The rich tapestry of herbal medicine in India faces a multitude of challenges that threaten both the practice of traditional medicine and the biodiversity upon which it depends. Overharvesting of Medicinal Plants: One of the most significant threats to herbal medicine and biodiversity is the overharvesting of medicinal plants [4, 5]. Increased demand, driven by the growing herbal and pharmaceutical industries, has led to the unsustainable extraction of these plants from their natural habitats. As a result, many species are now endangered or at risk of extinction.

Habitat Destruction: The destruction of natural habitats, particularly due to urbanization, agriculture, and deforestation, has a direct impact on the availability of medicinal plants. Loss of habitat disrupts the ecosystems where these plants thrive, making them increasingly scarce.

Erosion of Traditional Knowledge: Traditional knowledge about medicinal plants is transmitted orally from one generation to the next. However, with modernization and globalization, there is a growing

concern about the erosion of this knowledge. Younger generations may not be as inclined to learn traditional practices, and as a result, the wisdom of herbal medicine is at risk.

Unsustainable Harvesting Practices: Even when medicinal plants are not over harvested, the methods used to collect them can be unsustainable. Some practices involve uprooting entire plants, which can lead to plant mortality. Moreover, the use of harmful chemicals, such as pesticides, in the cultivation of medicinal herbs can have detrimental effects on the environment.

Loss of Traditional Healers: As the younger generation turns to modern medicine, the number of traditional healers is dwindling. When these healers pass away without passing on their knowledge, it represents a significant loss to the preservation of traditional herbal medicine practices [6].

Bio-piracy and Intellectual Property Rights: Bio-piracy, where the knowledge of traditional healers is exploited without adequate compensation or recognition, is another concern. Additionally, issues related to intellectual property rights and patenting of traditional remedies raise ethical questions and can deprive local communities of their rightful benefits.

Climate Change: Climate change poses a significant threat to the distribution and abundance of medicinal plants [7, 8]. Alterations in temperature and precipitation patterns can disrupt the growth of these plants, making them more vulnerable to pests and diseases [9].

Government Policies and Initiatives- The protection and preservation of herbal medicine in India have garnered the attention of policymakers and government bodies. In order to promote medicinal plants sector, the Government of India has set up National Medicinal Plants Board [NMPB] on 24th November 2000. Currently the board is located in Ministry of AYUSH [Ayurveda, Unani, Siddha & Homoeopathy], Government of India. NMPB has developed an online portal cum android based application for trading of medicinal plants named “e-CHARAK” to enable trading and information exchange between various stakeholders involved in the medicinal plants sector [10]. Some government initiatives offer incentives to local communities and individuals who actively participate in biodiversity conservation efforts

IV. CONCLUSION- Government policies aim to integrate local and indigenous knowledge, which often includes the knowledge held by women, into modern healthcare systems. This recognition enhances the credibility and utility of traditional practices. Government initiatives related to forest conservation and biodiversity protection are integral to the preservation of medicinal plant biodiversity. These initiatives include the establishment of protected areas and conservation programs that benefit both plants and ecosystems. Government policies encourage the adoption of sustainable harvesting practices. This includes guidelines for ethical and non-destructive harvesting methods, which align with the traditional practices. Their contributions to the preservation of traditional knowledge, biodiversity conservation, and sustainable practices align with and support the policies.

V. REFERENCES-

1. A. K. Bisht, A. Bhatt, R. S. Rawal, and U. Dhar, “Prioritization and conservation of himalayan medicinal plants: *Angelica glauca* Edgew. a case study,” *Ethnobotany Research & Applications*, vol. 4, pp. 11–23, 2006.
2. D. E. Moerman, R. W. Pemberton, and D. Kiefer, “A comparative analysis of five medicinal floras,” *Journal of Ethnobiology*, vol. 19, no. 1, pp. 49–67, 1999.
3. D. P. Semwal, C. P. Kala, and A. B. Bhatt, “Medicinal plants and traditional health care knowledge of Vaidyas, Palsi and others: a case study from Kedarnath Valley of Uttarakhand, India,” *Medicinal Plants, International Journal of Phytomedicines and Related Industries*, vol. 2, no. 1, pp. 51–57, 2010.
4. E. Ernst. Toxic heavy metals and undeclared drugs in Asian herbal medicines. *Trends Pharmacol Sci* . 23:136–139, 2002.
5. H. C. Saslis-Lagoudakis, J. A. Hawkins, S. J. Greenhill et al., “The evolution of traditional knowledge: environment shapes medicinal plant use in Nepal,” *Proceedings of Royal Society B*, vol. 281, no. 1780, 2014.
6. H. Sher, A. Aldosari, A. Ali, and H. J. de Boer, “Indigenous knowledge of folk medicines among tribal minorities in Khyber Pakhtunkhwa, northwestern Pakistan,” *Journal of Ethnopharmacology*, vol. 166, pp. 157–167, 2015.
7. H. Singh. Prospects and challenges for harnessing opportunities in medicinal plants sector in India. *LEAD J2*:198–211, 2006.
8. P. K. Mukherjee, A. Wahile. Integrated approaches towards drug development from Ayurveda and other Indian system of medicines. *J Ethnopharmacol* 103: 25–35, 2006.

9. R. A. Qureshi, M. A. Ghufraan, K. N. Sultana, M. Ashraf, and A. G. Khan, "Ethnobotanical studies of medicinal plants of Gilgit District and surrounding areas," *Ethnobotany Research and Applications*, vol. 5, pp. 115–122, 2007.
10. S.Wakdikar. Global health care challenge: Indian experiences and new prescriptions. *Electron J Biotechnol.* 7:214–220, 2004.

