

Ancient Remedies: Exploring the Traditional Medicine Systems of Northeast Indian Tribes

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ABSTRACT

This paper seeks to explore the traditional medicine systems practiced by indigenous people and community of Northeast India, focusing on their ancient remedies and medicinal practices. Northeast India is known for its rich biodiversity and cultural diversity, which have shaped unique healthcare traditions among various indigenous communities. The study examines the medicinal knowledge and practices of tribes such as the Khasi, Garo, Naga, and Mizo, highlighting their use of local medicinal plants, traditional healing methods, and cultural beliefs related to health and wellness. Drawing on secondary data from findings of ethnobotanical surveys, interviews with traditional healers, and literature reviews, the research investigates the therapeutic properties of indigenous plants, their preparation methods, and the role of traditional healers within their communities. Additionally, the paper discusses the challenges faced by these traditional medicine systems, including threats from modernization, habitat loss, and the need for sustainable conservation strategies. Ultimately, this study contributes to the documentation and preservation of Northeast India's traditional medicine heritage while advocating for its integration into modern healthcare systems for improved healthcare delivery and cultural sustainability. The paper also highlights major initiatives and policy interventions made by the government of India in promoting traditional medicine in the region and the country as a whole.

Keywords: Traditional medicine, Northeast India, Indigenous, Tribes, Policy

INTRODUCTION

Northeast India covers a significant part of the Himalaya and Indo-Burma biodiversity hotspots (Mittermeier, 2020). Covering nearly 262,379 km², this biogeographic hotspot includes the states of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura. The region is situated between 22°N and 29°5'N latitude, and 88°E and 97°30'E longitude, sharing international borders with China, Bangladesh, Myanmar and Bhutan. Topographically the region is positioned at the confluence of the Indo-Malayan, Indo-Chinese and Indian biogeographical realms, the region is a home to 225 of the country's 450 tribes, whose cultures and customs play a crucial role in understanding sustainability and biodiversity conservation (Chakravarty, Suresh, Puri, & Shukla, 2012). Northeast India boasts a wealth of flora and fauna, owing to its diverse climate and geography, making it a biodiversity hotspot. The region's rich

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tapestry of tribes, with their extensive traditional knowledge, has made it a focal point for scientific exploration. Herbal medicines from this area have garnered global interest and acceptance. Researchers and government policies are increasingly focusing on the medicinal plants and traditional knowledge of these tribes. Much of this traditional knowledge is orally transmitted across generations, with limited written documentation. Over the past 30 – 40 years, numerous researches, reviews and systematic surveys have been conducted. Through documentation, adaptation and scientific investigation using modern tools, new avenues for disease control can be explored. Systematic scientific investigations, coupled with modern techniques and knowledge, are crucial for validating traditional knowledge scientifically. The utilization of herbal formulations, isolated phytochemicals, and their subsequent biological investigations offer promising avenues for modern health management strategies (Sen & Chakraborty, 2015). According to the World Health Organization (2002:7), traditional medicine encompasses health practices, knowledge and beliefs utilizing plant, animal, and mineral-based remedies, spiritual therapies, manual techniques, and exercises, either individually or in combination, for the treatment, diagnosis, prevention of illnesses, or the maintenance of well-being. Additionally, terms like "complementary" and "alternative" medicine, as well as "non-conventional" or "parallel" medicine, are employed to describe a diverse range of healthcare practices not integral to a country's own tradition or mainstream healthcare system. Given this expansive definition, it is challenging to find a region devoid of some form of traditional, complementary, or alternative medicine practice. Depending on the context or type of knowledge employed, these practices may be referred to by various names such as traditional medicine, alternative medicine, complementary medicine, natural medicine, herbal medicine, phyto-medicine, non-conventional medicine, indigenous medicine, folk medicine, ethno-medicine, among others. Notable established systems include Chinese medicine, Ayurveda, herbal medicine, Siddha, Unani, Kambo, Jamu, Thai medicine, Homeopathy, acupuncture, chiropractic, osteopathy, bone-setting, spiritual therapies, etc. (Payyappallimana, 2010). When we discuss about traditional healthcare system, it not only involves the practices of traditional healers but also the widespread local knowledge passed down through generations, often in the form of home remedies. While traditional medicine predominantly focuses on the expertise of traditional healers, it tends to underestimate the significance of domestic medicine, which includes the wisdom of elder community members, spiritual healers, healers who heal by chants and incantations, healing by black magic, prophecy, among others. Most of these spells originate from two main sources: the *Atharvaveda* and various Tantric texts. Unlike the other three Vedas, the *Atharvaveda* primarily comprises spells and incantations addressing common and regular issues. In the book 'Hindu World: An Encyclopedic Survey of Hinduism (Walker, 1968), Benjamin Walker describes two main categories of mantras in the *Atharvaveda*. The first category, *Bheshajani* or peaceful mantras, includes those used for healing, medicinal purposes, love spells, safe childbirth, and begetting a son. The second category, called *Abhichara*, consists of malevolent mantras intended to cause disease, bring bad luck, prevent a woman from marrying, destroy a man's virility, and more. Similarly, Tantric texts contain a set of mantras known as the Tantrik *Satkarmas*, which include mantras for *Maron* (killing), *Mohan* (attraction), *Vasikaran* (subjugation), *Stambhan* (immobilization), *Uccahton* (tormentation), and *Vidvesana* (dissension). These traditional knowledge practitioners are known by different names across the region, few of which are *Ojha*, *Sadhak*, *Tantrik*, *Bej*, *Vaidya*, *Dhanantari*, etc. (Goswami, 2013).

These diverse forms of traditional knowledge play a crucial role in the traditional healthcare practices, a reality still evident in various parts of Northeast India. From a pragmatic perspective traditional healer in North-Eastern Region (NER) can be seen as a valuable workforce that could be better trained to deliver traditional or alternative medicinal resources as part of holistic healthcare for its citizens. In this context, the spiritual aspect can either be considered relevant or used as a tool to promote traditional medicine. Secondly, from a post-colonial perspective, this discourse can be viewed as a reaction to the colonial regimes, missionaries, and public health planners' perception of local healers as superstitious obstacles to scientific modernity. Traditional medicine and its healing practices are a marker of ethnic identity in various households and communities across NER. Here, spiritual healing practices symbolized an ineffable essence linking a community to its collective identity, offering a path towards an equal or even superior alternative to Western modernity. Thirdly, from a commercial perspective, indigenous medicinal knowledge can be seen as a source of active ingredients that could be marketed as herbal remedies and food supplements across nations. Spirituality provided a powerful symbolism to distinguish these products in the competitive transnational market for alternative health products.

OBJECTIVE OF THE STUDY

1. To investigate best practices of traditional medicine system of North-East India
2. To examine possible areas for promotion of traditional medicine system in present day context.

LITERATURE REVIEW

Traditional healing practices in the North Eastern region of India, encompassing Ayurveda and Unani, are deeply ingrained in the local culture and continue to be widely practiced (Ramashankar, 2015). Traditional healing, the oldest structured method of treatment, is deeply rooted in a philosophy and set of principles that have guided its practice for millennia. As the foundation from which all later forms of medicine, including Western practices, have evolved, traditional healing was an integral part of tribal societies. Archaeological evidence dates back to around 6000 BC, but its origins likely precede the end of the last Ice Age. Despite some regional differences in principles and philosophy, traditional healing practices share many fundamental similarities due to a profound understanding of natural laws and their influence on living things, common to all traditional healers (Shankar, Lavekar, Deb, & Sharma, 2012)

The North-Eastern Region (NER) of India is home to numerous tribal groups of various ethnicities. Limited connectivity with mainland India until the 1990s has resulted in many areas still lacking modern healthcare facilities. Consequently, the ethnic communities of this region largely depend on the ethno-medicinal practices of the Traditional Healthcare System. These communities are rich in traditional knowledge and have practiced traditional healing for centuries. Ethno-medicinal practices involve the use of plant, animal, and mineral-based medicines, along with spiritual therapies, manual techniques, and exercises to diagnose, treat, and prevent illnesses, maintaining health. These systems are crucial for the healthcare of local communities worldwide, who primarily depend on folk medicines, often derived from wild

medicinal plants. Traditional knowledge of folk medicine has evolved through word of mouth, observation by traditional healers, and passing down from one generation to the next. The region is abundant in medicinal plants, which serve as the foundation of its traditional medicine (Satayu Devi, 2022). Documentation shows the use of over 800 plant species for wound care, particularly focusing on aerial parts such as leaves (A. Ghobadi, 2023). Indigenous technical knowledge is also leveraged in sustainable agriculture, encompassing weather forecasting and soil fertility management (DC, 2022). These practices underscore the region's rich heritage in traditional medicine and present significant potential for further research and development.

In many remote parts of NER, modern medical facilities are insufficiently available due to geographical distance, inadequate infrastructure, and logistical support. Consequently, traditional medicine remains the most affordable and accessible option for treating various diseases such as fever, cold and cough, bone fractures, arthritis, jaundice, malaria, diarrhoea, dysentery, asthma, diabetes, high blood pressure, and urinary diseases, among the rural population in the region. Traditional healing practices often include ritual sacrifices to pacify ancestors, ritual and magical strengthening, spiritual sanctification, steaming, inhaling substances, making cuts, wearing charms and piercing.

There are three main types of traditional healers in NER: herbalists, diviners, and traditional birth attendants (Ramashankar, 2015). Herbalists, common in every state of the region, are knowledgeable in ethno-medicines but do not necessarily possess mystical powers. Herbalists mostly use plants and are also worshipped as divine for the protection and betterment of their lives. Indigenous societies of NER were eco-friendly green societies where plants played a pivotal role in livelihood, serving as sources of food, medicine, and sometimes shelter. Several tribes have the tradition of worshipping different trees on various occasions, preserving these customs through folklore. They honour their deities from birth to death, performing specific rituals with offerings. They can diagnose and prescribe indigenous herbal medicines for common ailments. Parts of plants such as bark, twigs, leaves, flowers, fruits, and seeds, are offered to gods and goddesses. These plants (used for rituals) are often grown in gardens or religious institutions, which they consider sacred. Some herbalists, however, have mystical incantation abilities, believed to prevent or alleviate misfortune, protect against witchcraft, and bring prosperity and happiness. Certain ethno-medicines are thought to have magical properties, making mystical techniques part of the healing process.

Diviners, found primarily in remote villages of Assam, Arunachal Pradesh, and Manipur, serve as mediators between humans and the supernatural. They diagnose unexplainable illnesses by analyzing events and interpreting messages from ancestors, providing medication, and offering prayers for treatment. Traditional birth attendants are prevalent in isolated and remote areas where modern healthcare services are unavailable. Even in urban and semi-urban communities, despite the availability of modern healthcare, people often prefer the services of traditional birth attendants. Traditional Indian Medicine (TIM) is deeply rooted in spirituality, emphasizing the holistic healing and balance of mind, body, and spirit (K. Kimbrough, 1991). This spiritual foundation is evident in the Northeast Indian tribes' practice of using herbal medicine for wound healing, which is integral to their traditional healthcare systems (Bordoloi, 2023). The Lushai

tribe employs a wide range of medicinal plants, focusing primarily on aboveground plant parts, to address various health conditions (Albert L. Sajem, 2010). The rich ethnobotanical knowledge of these tribes, particularly their expertise in medicinal plant use, serves as a valuable resource for further research and the promotion of traditional herbal medicine (B. Dutta, 2005). Additionally, there is a prevalence of using insects as traditional medicine by healers in various parts of NER.

KEY COMPONENTS OF TRADITIONAL MEDICINE SYSTEMS OF NER

North East Region of India, with its rich biodiversity and varied climatic conditions, is home to a vast array of medicinal plants and herbs. The traditional knowledge of these plants has been passed down from one generation to the other since ages and is still widely prevalent. Here is a detailed review of some notable medicinal plants and herbs found in this region, along with their medicinal properties:

Sl No	Name of the medicinal plant	Medicinal Property	Uses
1	Acorus calamus (Sweet Flag)	known for its sedative, analgesic, and antispasmodic properties	Commonly used to treat digestive disorders, fever, and respiratory conditions.
2	Centella asiatica (Gotu Kola)	Gotu Kola is famed for its wound healing, anti-inflammatory, and cognitive-enhancing properties.	Used to treat skin conditions, improve memory, and reduce anxiety.
3	Zingiber officinale (Ginger)	Ginger has potent anti-inflammatory and antioxidant effects.	Used to relieve nausea, treat indigestion, and reduce muscle pain and soreness
4	Ocimum tenuiflorum (Holy Basil)	Also known as Tulsi, this plant has antimicrobial, adaptogenic, and anti-inflammatory properties.	Used to boost immunity, manage stress, and treat respiratory infections.
5	Phyllanthus emblica (Indian Gooseberry or Amla)	Amla is rich in vitamin C and has strong antioxidant properties	Used to boost the immune system, improve digestion, and promote heart health.
6	Curcuma longa (Turmeric)	Turmeric is well-known for its anti-inflammatory, antioxidant, and anticancer properties	Used to treat arthritis, skin conditions, and digestive disorders.
7	Andrographis paniculata (King of Bitters)	This herb has strong anti-inflammatory, antiviral, and	Used to treat infections, boost the immune

		antibacterial properties.	system, and improve liver function.
8	Adhatoda vasica (Malabar Nut)	Known for its bronchodilator and expectorant properties	Used to treat respiratory ailments like asthma, bronchitis, and cough.
9	Tinospora cordifolia (Guduchi or Giloy)	Guduchi has immunomodulatory, anti-inflammatory, and antipyretic properties	Used to boost immunity, treat fever, and manage diabetes.
10	Terminalia chebula (Haritaki)	Haritaki has strong antioxidant and anti-inflammatory properties.	Used to improve digestion, promote weight loss, and manage diabetes.
11	Rauvolfia serpentina (Indian Snakeroot)	Known for its antihypertensive and sedative properties.	Used to treat high blood pressure, anxiety, and insomnia.
12	Houttuynia cordata (Chameleon Plant)	Houttuynia has antiviral, antibacterial, and anti-inflammatory properties	Used to treat respiratory infections, improve digestion, and enhance immune function.
13	Justicia adhatoda (Vasaka)	Known for its expectorant and bronchodilator properties.	Used to treat asthma, bronchitis, and other respiratory disorders.
14	Swertia chirayita (Chirayata)	Chirayata has antimalarial, antipyretic, and anti-inflammatory properties.	Used to treat fever, malaria, and digestive disorders.
15	Murraya koenigii (Curry Leaf Tree)	Curry leaves have antioxidant, antimicrobial, and hepatoprotective properties.	Used to promote digestive health, control diabetes, and improve hair and skin health.
16	Adenostemma lavenia (Sohbyrthit)	Leaves paste is applied to cuts and wounds	Used to treat bites of poisonous insects and caterpillars.
17			

Source: compiled by author from various sources

HEALING PRACTICES AND TECHNIQUES

(Ramashankar, 2015) explores the diverse roles and specialties among traditional healers in Northeast India, highlighting their varied diagnostic methods and therapeutic practices. The region is characterized by a spectrum of traditional healing practitioners, including herbalists, diviners, and traditional birth attendants, each contributing distinct expertise to healthcare. This

diversity is rooted in local traditions and the transmission of knowledge across generations, manifesting in the use of home remedies that integrate spices, vegetables, and other common items, often valued for their cultural significance and perceived efficacy, including placebo effects.

Research by (Shankar, Lavekar, Deb, & Sharma, 2012) underscores the extensive use of approximately 55 herbs among the Mishing tribe in Assam's Dhemaji and North Lakhimpur districts. Traditional healers in Northeast India provide comprehensive healthcare solutions, addressing a wide array of health concerns with accessible and economical treatments. Their holistic approach combines curative, protective, and preventative measures, employing natural remedies, rituals, and a blend of both, tailored to the underlying causes of illnesses.

Practices include ritualistic actions such as ancestral sacrifices for spiritual balance, enchantments for personal and communal fortification, purification rituals like ceremonial cleansing and the administration of therapeutic substances, as well as physical treatments like incisions, the use of protective amulets, and piercing techniques. These traditions reflect a rich cultural heritage and offer avenues for further investigation into their efficacy and adaptation in modern healthcare contexts.

CONSERVATION OF TRADITIONAL MEDICINAL KNOWLEDGE AND PRACTICES IN NORTHEAST INDIA

Traditional medicinal knowledge and practices in Northeast India are under severe threat due to factors such as habitat fragmentation, unrestricted exploitation, and the dwindling number of knowledge holders (Ranjay Singh, 2010). Current conservation efforts include grassroots initiatives, the promotion of traditional knowledge-based products, and the documentation of the ethnomedicinal importance of endangered plant species (Ranjay Singh, 2010) (Das Amar Jyoti, 2013). Despite these initiatives, there is an urgent need for robust multi-level networks and a scientific approach to effectively explore, utilize, and conserve these valuable medicinal plants (R. Chakrabortya, 2012)

GOVERNMENT INTERVENTIONS AND INITIATIVES TO PROMOTE TRADITIONAL MEDICINE SYSTEM

1. Academic Collaborations: To promote Indian Systems of Medicine and Ayurveda globally, the Ministry of AYUSH has signed 13 MoUs with foreign universities, establishing AYUSH Academic Chairs for teaching, training, and research. Additionally, 23 Country-to-Country MoUs focus on cooperation in Traditional Medicine and Homeopathy, encompassing research, education, and training.
2. Fellowship and Scholarship Programs: The Ministry offers 104 annual scholarships to eligible foreign nationals from 99 countries for undergraduate, postgraduate, and Ph.D. courses in AYUSH systems at premier Indian institutes, aiming to achieve global recognition for Indian traditional medicine systems.

3. **Certification and Yoga Promotion:** The Ministry's Voluntary Certification Scheme for Yoga Professionals, managed by the Yoga Certification Board (YCB), aims to ensure quality and uniformity in Yoga practices globally. This certification promotes Yoga as a preventive and health-promoting therapy.
4. **Celebratory Events and Conferences:** To highlight the importance of Indian medicine, Ayurveda Day, Unani Day, and Siddha Day are celebrated annually in India. The International Day of Yoga, observed in 190 countries, and Ayurveda Day, celebrated in over 35 countries, further enhance global awareness. The Ministry has organized the International Yoga Conference annually since 2015.
5. **National AYUSH Mission:** The National AYUSH Mission (NAM) promotes AYUSH systems through State and Union Territory governments. The AYUSH Gram concept encourages AYUSH-based lifestyles, training village health workers in local medicinal herb use, and providing AYUSH health services.
6. **Information, Education, and Communication (IEC):** Under the IEC Scheme, the Ministry organizes AROGYA fairs, multimedia campaigns, and distributes promotional materials. The Ministry also supports seminars and conferences and incentivizes AYUSH industry participation in fairs, utilizing digital platforms extensively during the COVID-19 pandemic.
7. **International Cooperation:** The Ministry promotes AYUSH systems globally through the International Cooperation (IC) Scheme, deputing experts for international meetings and supporting research presentations. Incentives are provided for participation in international exhibitions and registering AYUSH products abroad. Over 50 products have been registered in eight countries.
8. **AYUSH Information Cells and International Assignments:** Thirty-three AYUSH Information Cells in 31 countries disseminate authentic information about AYUSH systems. Experts have been deputed to Malaysia's Ministry of Health under the ITEC Programme.
9. **Integrative Health Policy and Inter-Ministerial Collaborations:** The NITI Aayog's Advisory Committee on Integrative Health Policy is developing a framework for inclusive, evidence-based healthcare. The Ministry of AYUSH has partnered with the Ministry of Railways and the Ministry of Defence to integrate AYUSH services in their health establishments. (Delhi, 2020)
10. The first ever All India institute of Ayurveda (AIIA) was set up in Delhi along the lines of All India institute of Medical Sciences (AIIMS) in 2017.

ENHANCING THE AYUSH SECTOR IN NORTHEAST INDIA: RECENT INITIATIVES AND DEVELOPMENTS

In an effort to strengthen the AYUSH sector in Northeast India, Union Minister of AYUSH and Ports, Shipping & Waterways, Shri Sarbananda Sonowal, has launched a series of significant initiatives on 12 January 2024 at Guwahati, Assam. These developments include the inauguration of new facilities and the laying of foundation stones for future projects, aimed at integrating traditional and modern medical practices to enhance healthcare delivery in the region.

1. **Panchakarma Block at CARI:** A dedicated Panchakarma block was inaugurated at the Central Ayurveda Research Institute (CARI), marking the first of its kind in Northeast India. This facility will provide comprehensive Panchakarma therapies at affordable rates and serve as a center for scientific validation of these treatments. Additionally, a Panchakarma Training Course will be offered to train technicians, ensuring the availability of skilled professionals in the AYUSH market. The building, covering an area of 9453.30 square feet and constructed at a cost of ₹7.72 crores, is equipped with specialized rooms and instruments for various Panchakarma therapies.
2. **Pharmacology and Biochemistry Laboratory:** The inauguration of a state-of-the-art Pharmacology and Biochemistry laboratory at CARI represents another significant advancement. This facility, the first in the AYUSH sector in Northeast India, is designed for drug standardization and the evaluation of the safety and efficacy of Ayurvedic formulations. The lab will focus on scientifically validating the therapeutic potential of classical Ayurvedic formulations and ethnomedicinal plants, particularly those native to the region. The lab, built at a cost of ₹6.42 crores, includes advanced equipment such as High-Performance Thin Layer Chromatography (HPTLC), High-Performance Liquid Chromatography (HPLC), and Gas Chromatography-Mass Spectrometry (GC-MS).
3. **Regional Research Institute for Homoeopathy (RRIH):** The foundation stone for the permanent campus of the Regional Research Institute for Homoeopathy (RRIH) was laid in Azara, Guwahati. The new campus, covering 18,610 square feet and estimated to cost ₹53.89 crores, will feature a 50-bed inpatient department, outpatient services, specialty clinics, a clinical lab with state-of-the-art equipment, an emergency unit, and a minor operation theatre. The project is slated for completion by 2026.
4. **Integrated AYUSH Wellness Centre:** The foundation for India's first Integrated AYUSH Wellness Centre was also laid, which will offer treatment and outpatient facilities across multiple traditional medicine streams including Ayurveda, Yoga & Naturopathy, Unani, Siddha, and Homeopathy. This center will incorporate Panchakarma, Naturopathy, Unani, and Siddha therapies, and will include a herbal garden. This initiative aims to provide holistic healthcare services and promote the integration of various AYUSH practices.
5. **Regional institutes dedicated to traditional medicine** play a pivotal role in promoting and preserving indigenous healthcare practices in Northeast India. Two prominent institutions, the North Eastern Institute of Ayurveda & Homoeopathy (NEIAH) in Shillong, Meghalaya, and the North Eastern Institute of Folk Medicine (NEIFM) in Pasighat, Arunachal Pradesh, have significantly advanced the cause of traditional medicine in the region

CONCLUSION

The traditional medicine systems of Northeast Indian tribes, rooted in centuries-old knowledge and cultural heritage, highlight their profound connection with local biodiversity and health practices. This study has underscored the pivotal role of traditional healers in preserving and passing down medicinal knowledge through oral traditions and empirical observations. Despite their resilience, these traditional systems face challenges such as habitat loss, diminishing

knowledge holders, and the encroachment of modern medical practices. To address these challenges, concerted efforts are needed to document and safeguard traditional knowledge, promote sustainable practices in herbal medicine harvesting, and integrate indigenous healthcare into mainstream systems. Moving forward, collaborative partnerships between tribal communities, researchers, and governmental bodies are essential to validate and incorporate traditional medicine into modern healthcare frameworks. This approach not only enhances healthcare accessibility and efficacy but also supports biodiversity conservation and cultural diversity in Northeast India.

In conclusion, embracing Northeast India's traditional medicine systems within a framework of cultural sensitivity and ecological stewardship offers promising pathways to bridge traditional wisdom with contemporary healthcare needs, fostering a more inclusive and sustainable approach to health in the region and beyond.

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