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Review Paper

Tradition Healing Wisdom: A Study on Tribal Medicine Practices and Medicinal Plant Usage in South India

DR. T. K. V. Kesava Rao, A. Venkateswara Rao, V. Kasi Viswanadham*, S. Lakshmi Kavya, S. Divya Sruthi

Pydah College of Pharmacy, Patavala, Yanam Road -Kakinada-533461

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ABSTRACT

Tribal medicine represents one of the oldest healthcare systems, deeply rooted in the traditions, cultural beliefs, and environmental knowledge of indigenous communities. This study explores the traditional medicinal practices of various tribal groups across South Indian states Kerala, Andhra Pradesh, Tamil Nadu, Karnataka, and Telangana. Based on ethnobotanical surveys and secondary literature, the research highlights the tribe's profound understanding of plant-based remedies, diagnostic methods, and healing rituals. Common treatment forms include herbal pastes, decoctions, oils, infusions, juices, smoke, and steam therapies. Each state exhibits unique tribal communities such as the Kani, Kurichiyar, Chenchu, Irula, Seliga, and Lambadi, who continue to preserve age-old knowledge of medicinal flora like *Adhatoda vesical*, *Centella asiatica*, *Phyllanthus Niruri* and *Bacopa Monnier*. These plants are employed in curing respiratory ailments, skin infections, digestive disorders, and musculoskeletal problems. Despite their significant contributions to healthcare and biodiversity conservation, much of this indigenous knowledge remains undocumented and endangered. The study emphasizes the urgent need for documentation, conservation, and scientific validation of these ethnomedicinal practices to integrate valuable tribal wisdom into modern healthcare systems while ensuring sustainable use of forest resources.

INTRODUCTION

According to the WHO, tribal medicine encompasses a variety of health practices, knowledge, and beliefs that include plant, animal, and/or mineral-based medicines, spiritual

therapies, manual techniques, and exercises. These methods can be used alone or in combination to treat, diagnose, or prevent illness. The phrase "tribal medicine" describes methods of preserving and regaining health that were used prior to the development of modern medicine. This

***Corresponding Author:** V. Kasi Viswanadham

Address: Pydah College of Pharmacy, Patavala, Yanam Road -Kakinada-533461

Email ✉: Kasiviswanadham2003@gmail.com

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information is transmitted from one generation to the next.

The survey of medicinal plants is pertinent for the conservation of the traditional medicinal plants of any particular landscape [fig.1.] The information

thus generated about the medicinal use of the plants from the tribal healers can also be utilized in clinical practices as well as in research for the proposition of effective treatment modalities for the prevalent diseases.



Figure-1: MAP OF THE STUDY AREA SHOWING LOCALITIES SURVEYED.

Since antiquated times people utilized plants for their daily needs, they practice the plant-based medicine to cure different ailments. These concerns are now asserted by modern civilization as “Ethnobotany” defines the study of interaction between plants and people.

The ancient people like tribes utilized plants for food, fodder, dyes, Fibers and medicinal purposes collected from forests without any destructive way, they gave up holy respect to the plants and conserved in the form sacred groves.

The process of documenting the above-mentioned actions except medicinal knowledge, practiced by various ethnic groups which apply the methods of

ethnobotany and medical anthropology are known as ethnomedicine scientists¹⁻³.

CONVENTIONAL KNOWLEDGE FRAMEWORK:

Ethnobotany, spiritual healing, and environmental knowledge are all combined in tribal medicine. Orally passed down through the centuries, knowledge is frequently protected by skilled tribal healers called Vaidya’s, Manthradis, or Ojachs. Kerala has a large population of tribal communities settled in various districts.

Among their techniques of treatment are:

1. Pastes, infusions, and decoctions made with herbs.

2. Plant resins and oils for bone setting and wound healing.
3. Smoke and steam treatments using fragrant botanicals Utilizing seasonal cycles to gather

plants and guaranteeing their potency Chants and rituals thought to drive out curses or malevolent spirits⁴⁻⁶.

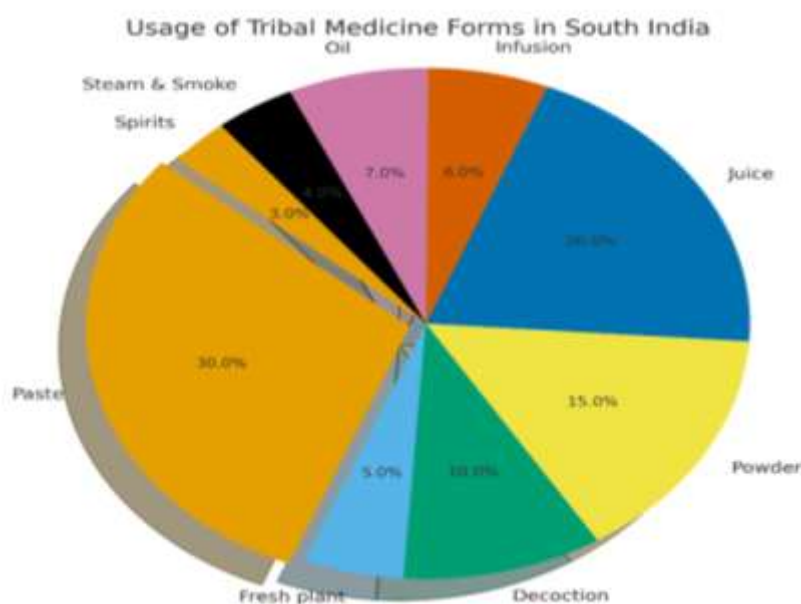


Figure-2: Pie chart showing techniques of treatments forms

IMPORTANT TRIBAL COMMUNITIES AND HEALING METHODS:

KERALA:

Kerala is home to numerous indigenous groups and is rich in unique natural resources. Traditional medicine and techniques have been widely used by Kerala's rural communities since ancient times. The tribes are members of the minority group and lack economic, social, and literacy advancement. However, their understanding of medicinal herbs is extensive.

Kerala is called "God's Own Country" due to a combination of its stunning natural beauty, deep mythological roots, rich cultural and religious

harmony, and its use as a highly successful tourism tagline.

- **Massage therapy:** Herbal oils are used for rheumatism, paralysis, and muscle pain.

1. There are many indigenous communities in Kerala, spread across different districts.
2. These tribal tribes are members of different ethnic groups. Kerala is home to between 36–40 indigenous clans.
3. The Kani, Kurichiyar, Kani, Kurumar, and Kattunayakan are Kerala's principal tribes. These indigenous groups possess extensive knowledge regarding the utilization of flora and fauna⁷⁻⁸.



Figure-3: Therapies of Kerala

Since most of the tribal or ethnic or communities don't have their own script and written language, the information about prescription, pharmacology, attitude towards diseases, diagnosis, etc. of the old age tribal medicine system are lying unclaimed. The people belonging to modern societies are not fully aware of this traditional knowledge system. In our national agenda, documentation, conservation, preparation of databases of medicinal plants and their cultivation are now priority issue. Researches are focusing mainly on ethnobotanical and ethnomedicinal investigation to fulfil the increasing demand of herbal products.

The traditional knowledge of herbal medicine is much enriched here in the district due to its diversified plant wealth and this valuable knowledge which is still surviving in the tribal culture has to be documented immediately before it gets lost forever. Thus, it has become imperative to collect the information related with ethnomedicine and documented the same for further scientific studies⁹.

FORMATED ETHANOMEDICINAL PLANT TABLE:

Plant Name (Scientific)	Local Name	Plant Part Used	Family	Uses
<i>Abrus Precatorius</i>	Gulaganji	Seeds	Papilionaceae	Paralysis, fever, cold
<i>Boerhaavia Diffusa</i>	Punarnava	Leaves, Roots	Nyctaginaceae	Diabetes, Jaundice
<i>Centella asiatica</i>	Ondelaga	Leaves	Apiaceae	Burns, eczema, psoriasis
<i>Clerodendrum Inerme</i>	Vishamadari	Roots, Leaves	Verbenaceae	Snake bite, bronchitis, coughs
<i>Cocos nucifera</i>	Thengu	Tubers	Arecaceae	joint pain, topical oil or oral water

THE STATE OF ANDHRA PRADESH:

Many scheduled tribes, such as the Yenadis, Chenchus, Bagatas, Gadabas, Koya's, Konda Reddis, and Savara's, live in Andhra Pradesh. Located mostly in areas like Nellore, Chittoor, and Prakasam, the Yenadis are one of the state's major tribal tribes. Many of these tribes, like the Chenchu

and Konda Reddi, have historically lived in steep areas and relied on hunting and gathering.

The districts of Nellore, Chittoor, and Prakasam are home to one of the state's biggest tribal tribes. Kurnool, Prakasha, and Guntur districts are home to a traditional hunting and food-gathering tribe in the Nallamala highlands. The Visakhapatnam

district is home to this ethnically prominent group. a tribe residing within the agency areas. This group which has a large population in Andhra Pradesh, is a branch of the Gond tribe¹⁰⁻¹¹.



Figure-4: Medicinal herbs from the forests

The "grandma medicines" are known to the women of the hill tribe. For some of these women,

it is their profession. They keep their patient care private out of fear that it will negatively affect them or that their medication won't work as intended. The older women stopped working in this field due to their advanced age, so they confided in their friends or next of kin to keep it from being forgotten.

Chenchus, Koya's, and Yanadis are known to treat arthritis, chronic wounds, gastric ulcers, and similar conditions. These people collect medicines from plants and herbs and either use them for treatment or sell them in the market The Eastern Ghats' Chenchus, Savara, Konda Reddy, and Yerukala tribes use herbal medicine that is closely linked to forest resources. Fever and infections are treated with *Andrographis paniculata* (Kalmegh). Diabetes is managed by *Gymnema Sylvestre* (Podapatri), *Piper longum* and *Zingiber officinale* (ginger) are utilized for digestive and respiratory issues. *Aegle marmelos* is used to treat dysentery and diarrhea¹²⁻¹³.

FORMATED ETHANOMEDICINAL PLANT TABLE:

PLANT NAME [SCIENTIFIC]	LOCAL NAME	PLANT PART USED	FAMILY	USES
<i>Hemidesmus Indicus</i>	Sugandhi Paala	Root, Tuber	Apocynaceae	Digestive, carminative agent, used for diarrhea and loss of appetite
<i>Mirabilis Jalapa</i>	Chandra kantha Puvvu	Tuber	Nyctaginaceae	Used to treat conditions like inflammation, genitourinary diseases, boils
<i>Plumbago Indica</i>	Yerra chitramulam	Root	Plumbaginaceae	Used to treat headaches, toothaches and rheumatism
<i>Piper Longum</i>	Pippali Modi	Root, Fruit	Piperaceae	Used to treat bronchitis, asthma, cough and cold, indigestion
<i>Bixa Orellana</i>	Jafra chettu	Seed	Bixaceae	Antimicrobial and anti-inflammatory properties, natural dye

TAMIL NADU:

Many medicinal plants are used by tribes including the Irula, Toda, Kota, and Paniya in the Nigiri and Western Ghats. Customary Medical Procedures:



An Overview of Tamil Nadu's Rich Tribal Medicine.

2. Asthma and cough are treated with {*Adhatoda vasica*.}
3. Skin infections are treated with {*cassia alata*.}

4. Pirandai, or *Cissus quadrangularis*, is well known for its ability to cure bone fractures. The Irulas, who are skilled with snakes, treat dangerous wounds and bites using herbal remedies.



Figure-5: Tribal hospital located in Tamil Nadu

Tribal medicine has a long history in Tamil Nadu, a state known for its many cultures and age-old customs. Numerous indigenous groups have flourished in the state's hills and forests for millennia, gaining a profound knowledge of the therapeutic qualities of the native plants and animals. The foundation of their healthcare system

is this ancient knowledge, which has been passed down through the generations and provides treatments for a variety of illnesses¹⁴⁻¹⁵.

FORMATED ETHANOMEDICINAL PLANT TABLE:

PLANT NAME [SCIENTIFIC]	LOCAL NAME	PLANT PART USED	FAMILY	USES
<i>Adina cordifolia</i>	<i>Manjal kadambai</i>	Root, Tuber, Bark	<i>Rubiaceae</i>	<i>Reduces Pain and Swelling.</i>
<i>Toddalia asiatica</i>	Masiha chedi Bark	Tuber, Bark	Rutaceae	Diarrhea, Cancer, Necrosis.
<i>Cardiospermum halicacabum</i>	Thatu putu	Leaves	Sapindaceae	Reduce anxiety, stress, Epilepsy.
<i>Ziziphus oenoplia</i>	<i>Churipala chedi</i>	Fruit, Bark	Rhamnaceae	Sore throats, wounds, Ascaris.
<i>Mimosa pudica</i>	<i>Thota sinungi</i>	Leaves	Mimosaceae	Heal stomach ulcers.

KARNATAKA:

Forest plants are used as medicine by the Soliga, Jenu Kuruba, and Koraga tribes. Triphala is a digestive tonic made from *Terminalia bellirica*, *Terminalia chebula*, and *Embllica officinalis*.

One of the earliest medical practices in Karnataka is tribal medicine. It illustrates the close relationship that exists between people and their surroundings, with plants, animals, and even spiritual forces playing a role in the healing process¹⁶⁻¹⁷.





Figure-6: Herbal ingredients for oil

Since their forefathers were forest dwellers, the tribal people engage in "pashupalak," or animal rearing. They survived by raising animals, and they had a close ancestral connection to the woodlands. They are now referred to as semi-nomadic tribal groupings. The Chitra Durga range is located in southern India. In Karnataka state's regional backward areas, the range increases. The majority of individuals in this district are accustomed to working in agriculture.

Karnataka has around 50 recognized tribal groups, many of which have distinctive medical systems based on local ecology. The main communities include:

- **Soles and Siddis (Uttara Kannada District):** Known for their use of Western

Ghats herbs, especially for fever, skin infections, and digestive issues.

- **Jenu Kuruba and Betta Kuruba (Kodagu and Mysuru Districts):** Forest-dwelling honey gatherers who use plant-based poultices for wounds and forest-bite treatments.
- **Hakki-Pikki and Iruliga (Ramanagara and Shivamogga):** Famous for bone-setting and snakebite remedies.
- **Koraga (Dakshina Kannada):** Use roots and barks for respiratory and skin diseases, often accompanied by ritual songs¹⁸⁻¹⁹.

FORMATED ETHANOMEDICINAL PLANT TABLE:

PLANT NAME [SCIENTIFIC]	LOCAL NAME	PLANT PART USED	FAMILY	USES
<i>Santalum Album</i>	Chandana	Heart wood	Santalaceae	Acts as an antiseptic, soothe skin, aromatic, cosmetic.
<i>Centella Asiatica</i>	Ondelaga	Leaves	Apiaceae	Used in healing of wounds, burns, scars.
<i>Boerhavia Diffusa</i>	Punarnava	Leaves, Roots	Nyctaginaceae	Reduces swelling and inflammation. Used in treatment of night blindness.
<i>Cuscuta Reflexa</i>	Swarnalatha	Whole plant	Convolvulaceae	Used to treat constipation, flatulence and liver complaints.
<i>Dioscorea Bulbifera</i>	Heggenasu	Bulbils, Tubers	Dioscoreaceae	Used to treat ulcers, boils, cuts, wounds, abscesses.

TELANGANA:

Southern India's Telangana state has a long history of tribal medicine that is firmly anchored in the customs and expertise of its native populations. By utilizing the local flora and natural resources, some tribes have managed to retain traditional healing techniques.

It has been discovered that some regions of the state are dominated by specific tribes. For example, Lambadi and Koya tribes are

predominant in the districts of Erstwhile Warangal and Khammam, Chenchu, Erukala, and Lambadis are predominant in the Nallamalai of Mahabubnagar, and Gond, Naikpods, and Lambadis are prevalent in Nirmal Dist. These tribal people have extensive traditional knowledge of medicinal herbs because of their isolated location and reliance on trees. They also make a living by collecting medicinal plants. It has been noted that they are typically reluctant to share their expertise for three primary reasons²⁰⁻²²:



Figure -7: The indigenous doctors and Healers of Chhattisgarh

The concern of overusing plant species, the misuse of medications, and the fear of losing their standing in the community. Therefore, before engaging, appropriate information, previous consent, and goal should be made apparent²³.

FORMATED ETHANOMEDICINAL PLANT TABLE:

PLANT NAME [SCIENTIFIC]	LOCAL NAME	PLANT PART USED	FAMILY	USES
<i>Phyllanthus Niruri</i>	Nela_Usiri	Entire_shoot	Euphorbiaceae	Used to treat digestive problems, diabetes, and kidney stones
<i>Ficus benghalensis</i>	Marri Chettu	Leaves, Root	Moraceae	Used to treat wounds, burns, and rheumatism
<i>Tridax procumbens</i>	Gaddi Chamanthi	Entire plant	Asteraceae	Prevents bleeding and promotes tissue repair
<i>Amaranthus spinosus</i>	Mulla Thotakura	Roots, Leaves	Amaranthaceae	Used as a laxative, diuretic, and to treat digestive issues and diarrhea

<i>Rubia cordifolia</i>	Manjistha	Root	Rubiaceae	Effective in treating arthritis and skin conditions like acne, eczema, psoriasis
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Usage of Plant Parts in Tribal Medicine:

Most of the important drugs over the past 50 years, which have revolutionized modern medicinal practice, have been isolated from plants. The graph shows that tribal communities in South India primarily rely on leaves for medicinal purposes, owing to their wide availability and high therapeutic value. Roots and bark are also significantly used, especially for treating digestive disorders, inflammation, and wounds. Seeds,

fruits, flowers, and whole plants contribute moderately to traditional remedies, supporting treatments for skin ailments, immunity enhancement, and reproductive health. Although resin, latex, gum, and rhizomes appear less frequently, they serve important specialized roles in addressing respiratory issues, fungal infections, and joint pain. Overall, the distribution reflects a strong ethnobotanical knowledge system in which plant-part selection is based on both medicinal efficacy and accessibility²⁴⁻²⁷.

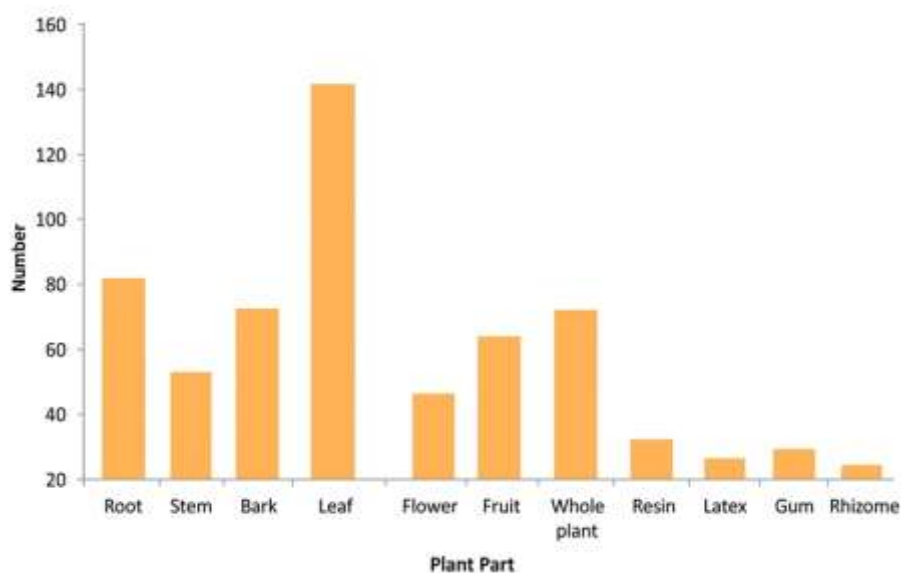


Figure-8- Graph showing usage of plant part

CONCLUSION:

The tribal communities of South India possess a remarkable wealth of ethnomedicinal knowledge that reflects a deep understanding of their environment and a harmonious relationship with nature. Their practices passed down orally through generations demonstrate an integrated approach to health that combines physical, spiritual, and ecological dimensions. However, the rapid loss of biodiversity, modernization, and declining interest

among younger generations pose serious threats to the survival of this knowledge. It is therefore crucial to document, preserve, and scientifically validate the medicinal plants and treatment methods practiced by tribal healers. Collaborative efforts between traditional practitioners, researchers, and policymakers can pave the way for sustainable healthcare solutions that honour indigenous wisdom while contributing to modern medicine and biodiversity conservation.



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