



Indigenous Herbal Medicine Practices among the Tribal People of the Kendujhar district in Odisha

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Abstract

This Article explores the indigenous herbal medicinal practices of the Tribal People, an ancient indigenous community in Odisha. The importance of medicinal plants in traditional healthcare is now well known, as they help in new research and support biodiversity conservation. However, in many remote parts of the Kendujhar district, information about how people use these plants for medicine is still limited. To collect this information, questionnaire surveys, direct observations, and field visits were carried out to learn about the different plants used for treatment. The findings highlight the significance of traditional medicinal knowledge in sustaining livelihoods and preserving ecological balance. However, the Tribal People faces several challenges, including land displacement, cultural erosion, environmental degradation, marginalization, and limited access to resources. Addressing these issues requires collaborative efforts to protect indigenous knowledge and rights, promote cultural diversity, and integrate traditional practices into sustainable development strategies.

Keywords: Indigenous, Herbal, Medicine, Tribal, People, Kendujhar, District, Odisha.

1. Introduction

The Tribal Peoples, also known as the Tribe, is one of the largest and most ancient indigenous communities residing in the hilly and forested regions of Odisha, India. With a population of over twelve million, the Tribal people have a rich cultural heritage deeply rooted in their close relationship with nature and traditional way of life. Their livelihoods primarily depend on agriculture, forest resources, and traditional handicrafts. The Tribal People has a distinct language, rituals, customs, and social structures that have been passed down through generations. Their indigenous knowledge systems serve as valuable repositories of wisdom, accumulated over centuries through close interaction with their environment. These knowledge systems encompass traditional ecological knowledge, herbal medicine, spiritual beliefs, and modern medicinal influences within the Tribal People of Kendujhar district. Indigenous knowledge is important not only for the culture and well-being of indigenous people but also offers valuable ideas to solve today's major global problems like climate change, environmental damage, and sustainable development. The

purpose of this article is to explore the traditional knowledge system of the Tribal People in Odisha, with a particular focus on their herbal medicinal practices, spiritual beliefs, and social organization. Additionally, it aims to highlight the challenges the Tribal People faces in preserving their indigenous knowledge systems.

2. Objectives of the study

1. To study the herbal Medicinal Practices of the Tribal People.
2. To identification of Plant species, parts used and treating diseases of Tribe.
3. To study the historical background of the traditional Herbal medicine used by the Tribal People.

4. Methodology of the study

In the present study, fieldwork was conducted using specialized methods to collect information from the tribal People regarding various traditional medicinal practices. Several villages were selected as the study area, and both qualitative and quantitative data were gathered through observations, questionnaires, interviews, and purposive sampling. Secondary data was collected from university libraries, literature surveys, and online sources.

5. Physical aspects of the District

Kendujhar district in Odisha covers 8,240 square kilometers. It is located between 21°1' and 22°10' North latitude and 85°11' to 86°22' East longitude. The district is surrounded by West Singhbhum of Jharkhand in the north, Jajpur in the south, Dhenkanal and Sundargarh in the west, and Mayurbhanj and Bhadrak in the east. The land has a mix of waterfalls, rivers, streams, mountains, and hills. According to the 2001 census, the population was 1,561,990, including 771,954 females. Out of the total population, 1,348,967 lived in rural areas and 213,023 lived in urban areas.

Administratively, the district has three sub-divisions, eight tahsils, thirteen blocks, fifty revenue circles, 286-gram panchayats, six towns, three municipalities, and 2,135 villages. The district is about 145 km long from north to south and 65 km wide from east to west. Kendujhar has two main regions: Lower Kendujhar, which has valleys and lowlands, and Upper Kendujhar, which has hilly and mountainous areas. Nearly half of the district, about 4,043 square kilometers, is covered with forests. These forests are northern tropical moist deciduous and include trees like sal and asan. The Baitarani River begins from the Gonasika hills and flows in the northern direction.

6. Use of Folk Medicine by the Tribe

The *Kabiraj*, also known as the village healer or medicine man, provides herbal treatments for many common illnesses. They have their own traditional ways to identify diseases. The Kabiraj in the village treats malaria, jaundice, stomach pain, fever, skin problems, cough, and other illnesses. He goes to the forest to collect different roots, fruits, and plants and prepares medicines based on his traditional knowledge.

Some common medicinal plants used are:

- ❖ **Neem (*Azadirachta indica*):** Almost every part of this tree is useful. The bark is bitter and used for fever and as a tonic. Oil from the seeds is used to treat skin infections and wounds. The bark, leaves, and seeds are also used for snake bites and scorpion stings.
- ❖ **Bel (*Aegle marmelos*):** The ripe fruit is cooling and helps digestion. The unripe fruit is used for stomach pain and diarrhea.
- ❖ **Pipal (*Ficus religiosa*):** The bark is used for skin diseases, the fruit acts as a laxative, the seeds are cooling, and young leaves help in cleansing the stomach.
- ❖ **Mahua (*Madhuca indica*):** The bark acts as a tonic and helps increase appetite. It is used in cough treatment and believed to be good for general health.

The tribal people also believe that some diseases are caused by supernatural forces, witchcraft, or past life sins. For long-lasting illnesses like stomach pain, high fever, or tuberculosis, they think the patient is suffering due to a goddess's curse. In such cases, they visit the *Pujari* or *Gunia* for rituals. To please the village deity and ancestors, they may sacrifice a hen or goat and organize a feast for villagers.

Table No.1: Traditional uses of plants against various diseases

SL. No.	Local Name/ Original Name	Scientific Name	Parts Used	Preparation of Medicine	Diseases
1	Peepal	<i>Ficus religiosa</i>	Bark, leaves, fruits,	The bark, leaves, and fruits of the Peepal tree are crushed into a paste and applied directly to the infected area.	Skin diseases, neuralgia constipation and gynecological diseases
2	Behera	<i>Terminalia bellirica</i>	Fruits,	Upper part of the fruit is directly consumed	Stomach problem
3	Jamu	<i>Syzygium cumini</i>	Fruits, Bark	Bark is grinded but fruits are directly used	diabetes
4	Bela	<i>Aegle marmelos</i>	Leafs	A handful of leaves are boiled and the water is given to the patient. The leaves are also crushed and given to the patient to drink.	Cholera, Diarrhea, Diabetes
5	Bhainneem	<i>Andrographis paniculata</i>	Leafs	The leaves of Bhainneem are boiled, filtered, and the water is given to the patient.	Malaria fever, worm, cough, digestive problem, weakness

6	Kayar/ mango	Magnifera indica	Bark	Mango bark is crushed, and the extract is given to the patient to drink.	Loose motion
7	Neem	Azadirachta indica	Leaves, oil, fruits	A paste made from the leaves is applied to treat skin diseases. The leaves are also boiled, and the boiled water is used to clean wounds.	Skin diseases, chicken pox, cleaning wounds
8	Tulsi	Ocimum saccharatum	Seeds and leaves are mixed with honey.	It can be taken directly or used to make tea.	Breathing problem, skin diseases, cold, dengue fever
9	Lajkuli	Mimosa pudica	Leaves	A handful of leaves are crushed with sugar, mixed with water, and the liquid is taken once. After taking it, the patient should not walk fast, run, or eat hot food.	Snake bite
10	Mint (Pudina)	Mentha piperita	Leaves	It should be consumed directly.	Head ache, swollen and pain area
11	Kaincha(gunj)	Abrus precatorius L.	Root, Seed	To be used on skin	Cough and cold White mark, wound, hair fall
12	Beriari	Sida cordifolia	Leaves	The leaves are powdered and mixed with Talmisri. The paste is taken to treat jaundice.	Jaundice
13	Saragi	Shorea robusta	Gum of the tree	The gum of the Sal tree is crushed, mixed with curd, and given to the patient to drink.	Diarrhea
14	Jada	Ricinus communis	Leaves	Castor leaves are crushed and mixed with castor oil, then applied to the swollen area.	Hydrosil
15	Tetal	Tamarind	Roots	A small tamarind root is placed on the ear of the woman.	Difficulty in delivering baby
16	Kuler	Bauhinia purpurea	leaves	A handful of leaves are crushed into a paste and mixed with a little salt.	Piles

17	Ortono	Terminaliat omentosa	Resin	The tree is pierced with a sharp object to collect the resin, which is then applied to the eyebrow.	Eye infection, Reddening of eye
18	Vejibaigan	s.xanthocar pum	Seeds	Seeds are burnt and smoke is inhaled	Teeth ache

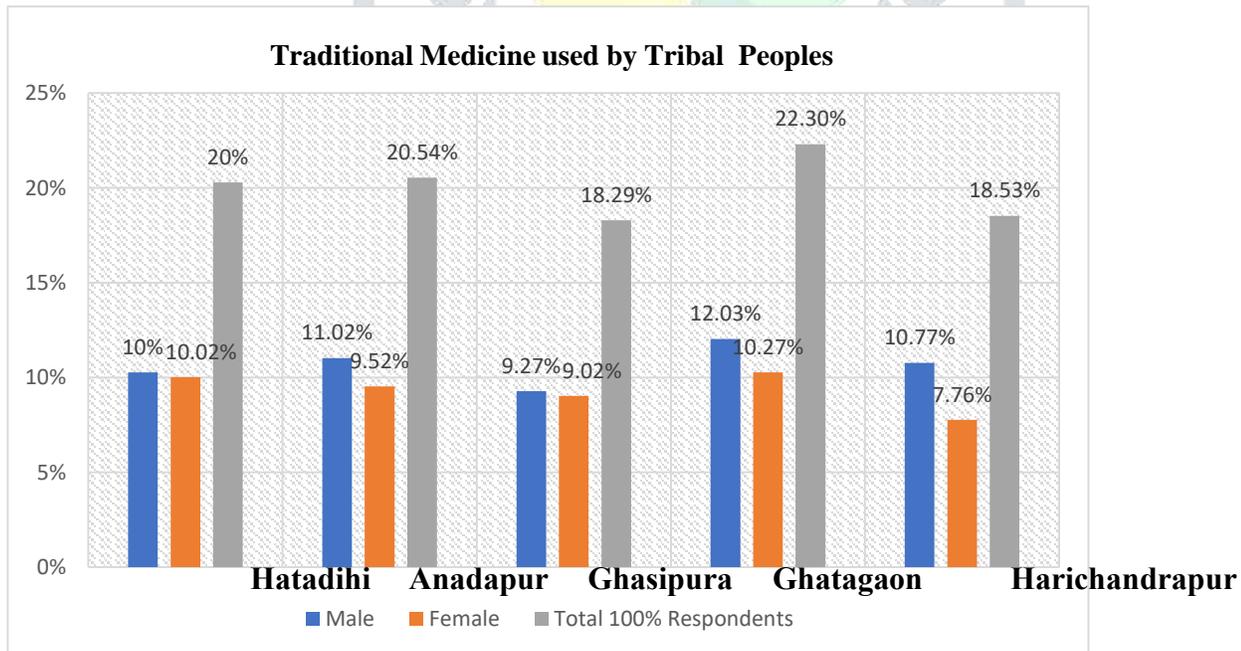
Source: Primary Data

S.I. No.	Blocks	Male	Female	Total 100% Respondents
1	Hatadihi	10%	10.02%	20%
2	Anadapur	11.02%	9.52%	20.54%
3	Ghasipura	9.27%	9.02%	18.29%
4	Ghatagaon	12.03%	10.27%	22.30%
5	Harichandrapur	10.77%	7.76%	18.53%

Table No.2: Traditional Medicine used by Tribal Peoples

Source: Primary Data

Figure No.1: Traditional Medicine used by Tribal Peoples



Source: Primary Data

The table presents data on the usage of traditional medicine among the tribal people across different blocks, with percentages of male and female respondents. The highest overall participation is observed in Ghatagaon, where 22.30% of the respondents reported using traditional medicine, followed by Anandapur at 20.54% and

Hatadihi at 20%. On the lower end, Ghasipura (18.29%) and HarichandraPura (18.53%) have the least engagement in traditional medicine practices. Gender-wise, males generally exhibit a higher rate of participation, particularly in Ghatagaon (12.03%) and Anandapur (11.02%), whereas female participation is notably lower in Harichandrapur (7.76%) and Ghasipura (9.02%). Despite some variations across blocks, the data suggests that traditional medicine remains a significant practice among the Tribal People, with cultural and regional factors likely influencing these patterns.

7. Treatment among the Tribal People

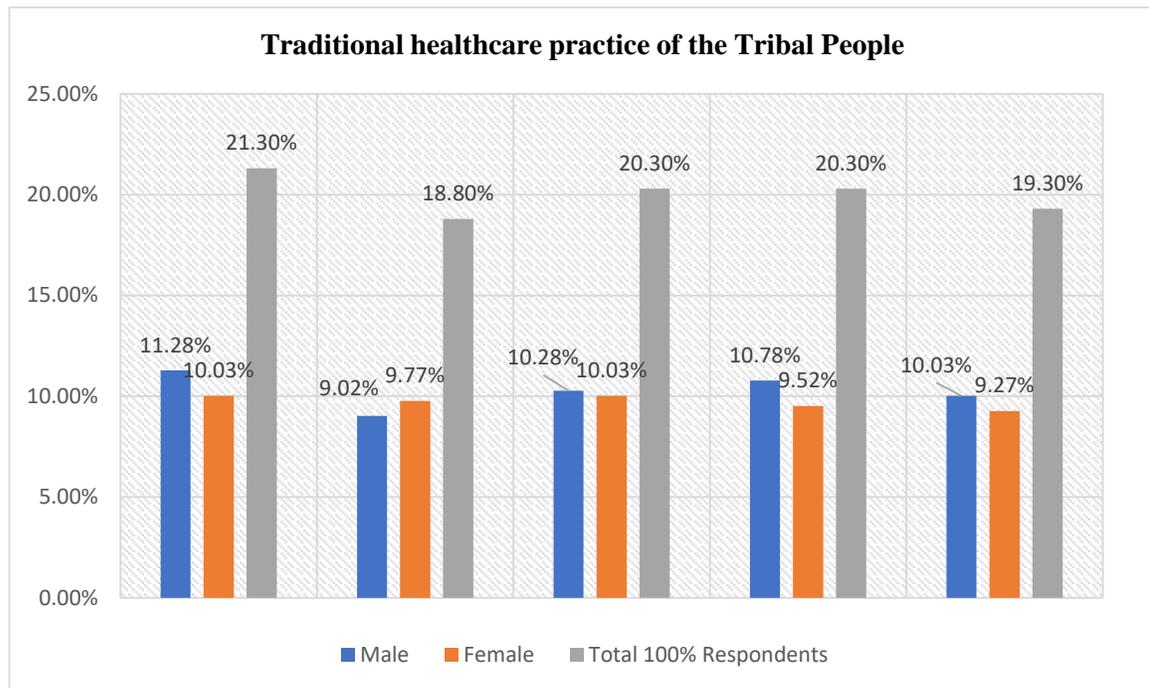
Traditional medicine was practiced in India for a very long time, but it started to lose importance when modern medicine became popular. With the rise of chemical products and synthetic medicines, people began to rely less on herbal treatment. However, when science showed that synthetic medicines can cause serious side effects and are often expensive for ordinary people, the value of traditional herbal medicine began to rise again. Today, it is becoming important worldwide, especially in developing countries. In India, many rural and underdeveloped communities still depend on traditional healers and their herbal knowledge.

Table No.3: Traditional healthcare practice of the Tribal People

Sl. No.	Blocks	Male	Female	Total 100% Respondents
1	Hatadihi	11.28%	10.03%	21.30%
2	Anadapur	9.02%	9.77%	18.80%
3	Ghasipura	10.28%	10.03%	20.30%
4	Ghatagaon	10.78%	9.52%	20.30%
5	Harichandrapur	10.03%	9.27%	19.30%

Source: Primary Data

Figure No.2: Traditional healthcare practice of the Tribal People



Source: Primary Data

The table presents data on the percentage of male and female respondents across different blocks in the Tribal People who engage in traditional healthcare practices. The highest participation is observed in the Hatadihi block, with 21.30% of the total respondents, followed by Ghasipura and Ghatagaon, both accounting for 20.30%. In contrast, the lowest participation is recorded in Anandapur at 18.80%. Gender-wise, male respondents slightly outnumber female respondents in most blocks, with Ghatagaon (10.78%) and Ghasipura (10.28%) showing the highest male participation, while the lowest female participation is in Harichandrapur (9.27%). Despite these minor differences, the gender gap remains relatively small, indicating that traditional healthcare practices are embraced almost equally by both men and women. The overall distribution suggests that traditional healthcare is consistently followed across the region, with variations possibly influenced by cultural beliefs or access to modern medical facilities.

8. Ethno-Medicine

Ethno-medicine is important in the healthcare of tribal people and shows their cultural beliefs and traditional knowledge. Plant extracts, decoctions, and powders made from various plant parts are utilized by the Tribal people to treat ailments, showcasing the significance of traditional ethno botanical knowledge in tribal healthcare. Healing practices are often guided by consultations with traditional healers, highlighting the reliance on oral transmission and the preservation of indigenous knowledge for medicinal purposes. Despite advancements in modern healthcare, traditional medicine continues to be preferred in remote areas due to factors such as lack of communication, geographical remoteness, and limited access to modern healthcare facilities. The ethno-medicines utilized by the Tribal People encompass a wide range of plant-based remedies, representing the intersection of cultural beliefs, environmental knowledge, and therapeutic practices.

9. Concept of Disease among the Tribal People

The tribal people believe that good health depends on proper food, nutrition, cleanliness, hygiene, and clean drinking water. They also connect health with their physical work and daily habits. According to their experience, diseases are caused by magical or religious reasons, lack of nutrition, or imbalance in the environment. *Baiga* and *Vaidhraj* are the traditional healers in the community, and people usually visit them for diagnosing and treating illnesses.

Spiritual Beliefs

The Tribal People's spiritual beliefs are deeply rooted in animism, emphasizing reverence for nature and the worship of various gods, goddesses, spirits, and natural objects. Magico-religious practices, including rituals and festivals, form an integral part of Tribal culture, strengthening unity and integrity within the community. In their villages, the Earth Goddess (Dharni Maa), along with Budha Deo and Janga Deo, is revered as the supreme deity and is worshipped on various occasions and festivals. Jhankar, Jani, and Mati Guru are some of the magico-religious specialists in their villages. Rituals involve sacrifices, dance, music, and drinking, further fostering communal unity. Villagers collect and maintain sacred items such as wine, Arua rice, Jhuna, eggs, turmeric, and gourd, reinforcing their connection with the divine realm.

10. Issues and Challenges

The study identifies several challenges affecting the herbal medicinal practices of the tribal People in Kendujhar district, Odisha. One major issue is the lack of documentation, as most traditional knowledge is passed down orally, making it vulnerable to loss over generations. Modernization and lifestyle changes have led to a decline in the younger generation's interest in traditional healing practices. Additionally, deforestation and habitat destruction pose a significant threat to the availability of medicinal plants, leading to resource scarcity. The absence of scientific validation and official recognition further limits the integration of these practices into mainstream healthcare. Moreover, intellectual property concerns and the risk of exploitation by commercial industries create challenges in safeguarding indigenous knowledge. Addressing these issues requires systematic documentation, conservation efforts, policy support, and awareness programs to preserve and promote the Tribal People's valuable medicinal heritage.

11. Finding of the study

The study highlights the Tribal People's deep-rooted tradition of herbal medicine in Kendujhar, Odisha, with knowledge passed down through oral traditions. They use diverse local plants to treat ailments, guided by traditional healers (Vaidyas or Disaris). However, challenges such as lack of documentation, modernization, and biodiversity loss threaten these practices. Integrating indigenous medicine into formal healthcare can enhance accessibility and conservation. The study emphasizes the need for systematic documentation, policy support, and sustainable efforts to preserve the Tribal People's rich medicinal heritage.

12. Suggestions

An ethno botanical survey should be conducted to document the medicinal plants used by the Tribal People, including their local names and traditional preparation methods. Active community engagement is essential, involving collaboration with local healers and elders to gain insights into their herbal medicinal knowledge while ensuring ethical documentation. Additionally, the identification of medicinal plants should be carried out with the help of botanists to scientifically classify these plants and analyze their active compounds for potential pharmaceutical applications. To preserve this traditional knowledge, it is crucial to develop strategies such as written records, digital documentation, and cultural programs that safeguard indigenous medicinal practices for future generations.

Conclusion

The Tribal People of Odisha embodies a profound relationship with their environment, reflected in their traditional knowledge systems. Today, countries like India need to properly document traditional knowledge about the use of medicinal plants in remote and independent communities, many of which are still not well studied. Recording the plants used in traditional medicine can help improve healthcare, protect forests, and support research on the environment. Using these medicinal plants in primary healthcare can also be useful because people trust local remedies, and these treatments are much cheaper than modern medicines. Furthermore, the sustainable use of medicinal plants can create economic opportunities for indigenous communities through herbal medicine trade and eco-tourism. Strengthening the integration of traditional healing practices with modern medical systems can enhance healthcare accessibility in remote areas where conventional medical infrastructure is limited. It is also essential to protect the intellectual property rights of indigenous healers and communities to ensure that their knowledge is preserved, respected, and fairly compensated. Encouraging scientific validation and collaboration between researchers and traditional practitioners can further support the conservation and responsible utilization of these valuable natural resources.

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