

7. Ethno-Medical Knowledge of Plants used by the Hill Korwa Tribe in Lundra and Batauli Blocks of Surguja District, Chhattisgarh, India

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ABSTRACT

Ethno-medicine is the cultural interpretation of health, disease, and illness, including patients' processes for seeking health care and health practitioners' methods used for providing treatment. The paper deals with collecting information on the Hill Korwa tribe of Surguja district, Chhattisgarh. Surguja has a great wealth of medicinal plants and traditional medicinal knowledge. Medicinal plants have played an important role in the primary health care system among the local people of the Surguja region. The present research focuses on the indigenous knowledge of different Ethno-medicinal plants used in the Chhattisgarh-Surguja region. Ethno-medicinal uses of various medicinal plant species, along with botanical names, parts used, and modes of treatment, are given in this study. During the fieldwork, knowledgeable persons, Baiga and Vaid, were interviewed and information was recorded. The data indicate the uses of 16 ethno-medicinal plants used to cure different diseases. The Hill Korwa tribe residing in the forest continues to utilise their traditional system of cure, which is still effective, and these plants have great socio-economic importance. There are so many other plants other than those mentioned, and there is a need to record the maximum amount of information.

KEYWORDS: Hill Korwas, indigenous Knowledge, Ethno- medicinal Plants, disease, and treatment.

INTRODUCTION

Ethno-medicine is the area of Anthropology that studies cultural views on medicine. The concept of disease and health is not purely a biophysical phenomenon. It can't be isolated from the socio-cultural milieu. The perception of disease and its cure assumes different dimensions in different societies. The study of different societies' notions of health and illness, including how people think and act about well-being and healing, comes under the view of ethnomedicine. According to Foster and Anderson (1978), ethno-medicine denotes the totality of health, knowledge, values, beliefs, skills, and practises of indigenous people, including all the clinical and non-clinical activities that relate to their health needs. Hughes (1968) refers to ethnomedicine as "those beliefs and practises relating to disease that are the product of indigenous cultural development and are not explicitly derived from the conceptual framework of modern medicine.

Ethno-medicine is the cultural interpretation of health, disease, and illness, including patients' processes for seeking health care and health practitioners' methods used for providing treatment (Pieroni et al. 2005).

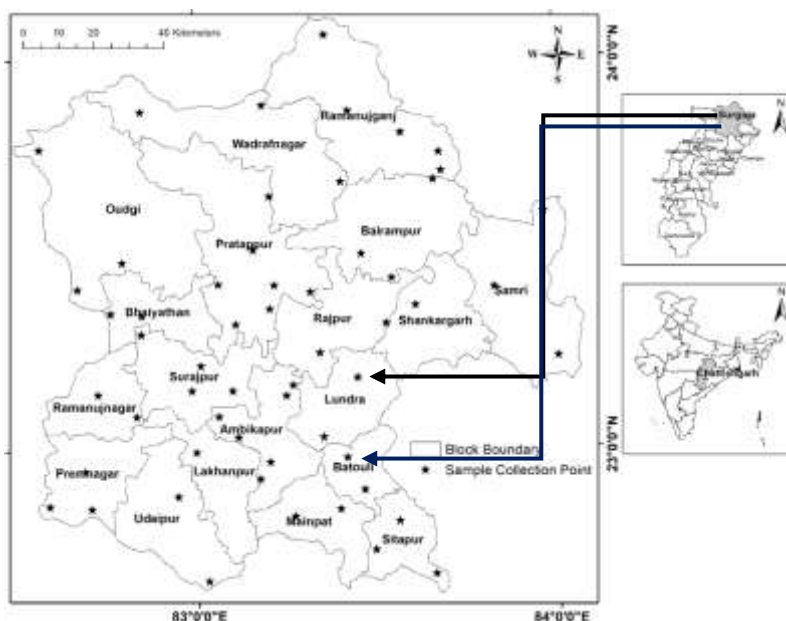
The objective of the present study is to provide information and documentation on medicinal plants used by Hill Korwas in the various villages of Lundra and Batauli blocks of Surguja in Chhattisgarh state. Surguja district distinctive geographical features, with its different microclimates and ecosystems, have nurtured a rich flora, which has given rise to a large array of medicinal plants. The verdant woodlands are home to rare and endemic species, some of which have enormous medical potential. The discovery and protection of medicinal plants in Surguja district are becoming increasingly important as the world recognises the value of traditional knowledge and natural cures.

Local healers have knowledge and understanding of a wide range of medicinal plants that are used to cure common ailments. In particular, they highlight cures pertinent for skin diseases, stomach disorders, respiratory infections, fever, piles, itching, etc., among others. The Surguja Region is one of the richest reservoirs of natural diversity in the country and is considered a storehouse of valuable medicinal plant varieties. The population of the Surguja Region consumes biodiversity in various forms, i.e., medicine, food, fuel, fodder, and timber. Medicinal plants have played a fundamental role in the healing of diseases. The local people of this district have been using these resources for various ailments in their daily lives since time immemorial. The Surguja have a great wealth of medicinal plants and traditional medicinal information. Medicinal plants have played an important role in the primary health care system among the Hill Korwa people of the Surguja area. As the local people are settled far from the town area, they cannot take advantage of modern health care facilities, so they are totally reliant on traditional medicinal practises for their primary health care. The Hill Korwas people of this region are incompletely or completely dependent on forest resources for medicine, food, and fuel, and medicinal species are progressively diminishing due to anthropogenic activities. The Surguja Region covers the new district and provides admirable opportunities for studying Traditional Knowledge Systems.

MATERIAL AND METHOD

The present study was based on extensive fieldwork in Hill Korwas in the Surguja district of Chhattisgarh. Extensive and intensive fieldwork was carried out during 2015-16 in various villages of Lundra and Batauli blocks of Surguja district of Chhattisgarh.

Hill Korwa, a subgroup of the Korwa tribe, was identified as a Particular Vulnerable Tribal Group (PVTG) during the fifth five-year plan (Ota, 2005). They are distributed in the Surguja, Jashpur, Balraampur, Shankargarh, and Korba districts, and their total population is 34,122 (TRTI, 2004). According to an anthropological description of families, they belong to the Austro-Asiatic family (Srivastava, 2007). The samples were selected by the purposive sampling method. For the present study, three stages of stratified sampling, i.e., village, block, and district, have been taken as a unit. Information about a traditional medicine man who is the custodian of the traditional system of medicine for his community, their address, etc. has been collected from local people in the sampled villages. The present study was carried out mainly in two blocks, namely Lundra and Batauli, of Surguja district in Chhattisgarh. In this study, 16-gram panchayats comprising 26 villages were covered, where Hill Korwas are predominately residing.



Study Area: The map shows location of the study area in of Surguja district in Chhattisgarh, India

To collect the primary data about ethno-medical practices and cultural factors associated with diseases, interview-cum-schedule and observation methods have been used. In addition to that, case study and genealogy methods have also been used for in-depth analysis of the cultural factors associated with diseases. Besides that, focused group interviews and group discussions and in-depth interviews have been taken in sampled villages of the blocks to find the cultural beliefs of diseases and validate the ethno-medical knowledge. Then it was identified by secondary sources like published literature, with the help of botanists, the forest department, etc. The botanical name of each plant is followed by a local name, family, used plant part, ethnomedicinal importance, habitat, and study sites.

COLLECTION OF MEDICAL PLANTS

The information of Hill Korwaas traditional healers was collected from them and it was clear that the use of plants was discovered by them and their forefathers through trial and error methods which slowly gained momentum over times through their expertise in it. They treat the patients with medicinal plants, which they collect from the forest. 'Baiga' collects the required medicinal plants whenever they are needed for treatment. Sometimes they purchased some medicinal plant parts from Surguja, which are unavailable in their village. They maintain secrecy in the collection of medicinal plants and usually perform certain rituals and chant mantras.

RESULTS:

The present study details information on the traditional practises of 15 major medicinal plants used by the Hill Korwa tribe of Surguja district. The tribe still uses several plants to cure different diseases. Here 16 plants belonging to different families, with their botanical names, families, vernacular names, flowering months and indigenous uses of the medicinal plants have been listed in Table 1.

Table 1: Medicinal plants of Lundra and Batauli blocks of Surguja district with information collected on the basis of interviews with Korwa tribe members and local people

Species	Family	Vernacular name	Parts used	Medicinal uses	Figures of individual plants cited
<i>Abrus precatorius</i> L	Fabaceae	Gunj, Ratti	White seeds, Leaf	Preventing conception. Swelling in the body parts. Headache.	
<i>Woodfordia fruticosa</i> L.	Lythraceae	Dhawai	Flower, Bark	Entire flower is taken thrice in a day in dysentery. Bark paste is applied on fresh wound to stop bleeding	
<i>Tephrosia purpurea</i> L.	Fabaceae	Sarphonk	Flower, Root	Root powder is used for blood purifier. Flower juice is taken to increase blood.	
<i>Butea monosperma</i> Lamk.	Fabaceae	Palash, Parsa	Flower, Bark, Seed	Contraceptive, scabies The flower is used in the dialysis process. The seeds are used for piles and urinary discharge. The seed is used for the skin diseases as well.	

<i>Boswellias errata</i> Roxb.	Burseraceae	Salai	Tree	Gum is used in rheumatism, nervous and skin Diseases.	
<i>Cassia tora</i> Linn	Cesalpiniaceae	Amaltas Sennator a	Medium-sized tree.	It is eaten as nutritive food. Presence of protein in it. Its seed, root and leaves are used as medicine. Its root is used for the Paralysis. Seeds and leaves are used for Skin disease.	
<i>Rauwolfias serpentina</i> Benth	Apocynaceae	Serpghan dha	Undershrub	The plant is referred as antidote to snake bite and for the treatment of high blood pressure.	
<i>Chlorophytum tuberosum</i> Roxb.	Liliaceae	Koijhari bhaji, safedmuli	Tuber	Tuber powder is taken for stamina. Tuber powder is taken in urinary problem	
<i>Bambusa arundinacea</i> Retz.	Poaceae	Bans	Leaf	Boil, irregular menstruation.	

<i>Madhucalolongifolia</i> J.F. Macbr	Sapotaceae	Mahua	Flowers	Flowers of Mahua are crushed and applied over the affected part and Mahua liquor is given to drink (Scorpion bite) The bark of the tree is used to treat diabetics. Bark is boiled in nearly 10-12 glasses of water and then it is reduced to 3 glasses of water.	
<i>Gloriosa superba</i> L.	Liliaceae	Kalihari	Tuber, seed	Tuber paste is applied and taken to promote labour pain. Seed powder is wormicidal (in minute quantity). Tuber powder is taken in stomach ache	
<i>Centella asiatica</i> L.	Apiaceae	Bengsaa gbramhbuti	Whole plant	Increase hungriness. It is also used to treat skin diseases such as Leprosy and psoriasis.	
<i>Solanum xanthocarpum</i> Schard	Solanaceae	Kantkari, Rengani	Root, fruits	Respiratory problems. A few drop of the Juice of the fruit is put in the nose of an epilepsy patient. The patient is asked to smoke in the form of cigar.	

<i>Dioscorea bulbifera</i> L.	Dioscoreaceae	Agitha	Tuber	Tuber – edible, famine food. The tuber is used also to heal wounds and inflammation.	
<i>Achyranthes aspera</i>	Amaranthaceae	Chirchitta	seed	Snake-bites The root of the plant is used to stop vomiting. The root is washed and grounded and made into small tablets and consumed morning and evening one each. In case of problem in delivery the root of the plant is put on the hair or in their waist. Precaution needs to be taken in not giving to the first delivery mother. Roots needs to be removed immediately, in case of delay in removing the root the womb may come out.	
<i>Alangium alvifolium</i> (L;F)	Cornaceae	Thelkajari	Whole plant	Male Impotency Its seed and leaf is used for the treatment of mad dog bite. The bark of it is used to treat high blood pressure.	

Conservation Practices for Medicinal Plants' Rich Biodiversity must be researched

In our research, we discovered that medicinal plants are being gathered from wild environments for domestic and commercial purposes with no explicit conservation strategy in place. This lack of effort to safeguard these sustainable resources may lead to their loss of natural habitats, and there have been no quantitative assessments available to produce these therapeutic plants up until now. There is no information available on the amount consumed by the local populace or sold at marketplaces. Efforts to scientifically manage these therapeutic plants are impeded by increased biotic demand on forests, which leads to deforestation and degradation.

So far, increasing the production of these products from forests and other lands is critical for conducting studies on ecological and socioeconomic aspects, and there is also a great need to raise awareness among indigenous communities about the dangers of overexploited medicinal plants.

DISCUSSION

The study of ethno medical systems and plants as therapeutic agents is important in addressing the health problems of traditional communities. The wealth of tribal knowledge on medicinal plants points to a great potential for research and the discovery of new drugs to fight diseases, including diabetes. Some of these plant-derived medicines, however, offer the potential for cost-effective management of diabetes through dietary interventions, nutrient supplementation, and combination therapies with synthetic drugs in the short term and as the sole medication from natural sources over the long term.

Tribal cognition of disease and their health care is never in tune with the modern-day medicine. Their rationality and pragmatism operate between the values of their culture (Mitra, 2009). The primitive tribal means of treatment often provide us a formidable challenge to the present world for us to go for further research. Very few anthropologists have studied primitive tribes like Hill Korwa (Nandy & Mukherjee, 1990). Almost no or very few works have been done in Chhattisgarh on the various plants of indigenous origin which serve as medicines for the tribals. It is a faith that excepting a few diseases which are cured, others are caused by supernatural power.

The practice of socio-religious customs imposing restrictions on the use of plants plays an important role in their conservation of genetic traits. Similar studies have also been documented by Shukla (2018) and Shrivastava & Kanungo (2013) while working with Korwa tribes of Chhattisgarh. Enhancing the production of the forest products through scientific management will help in deforestation and fragmentation of the forests. Individual treatment of diseases with specific plants and their outputs can be a way forward for this present study. Indigenous traditional knowledge is a base for all scientific outputs and hence such study of flora along with their application should be made aware in modern medication as these have no side effects and are cost effective (Soni, 2018).

CONCLUSION

The present study found that important knowledge of medicinal plants gathered by the Hill Korwa tribe needs to be determined in order to develop plans for their protection, improve awareness, and properly document indigenous knowledge about the plants used by them. The

study area is rich in medicinal plants, and due to the rich forest cover and diversity, many important plants are found, but due to a lack of identification and improper knowledge, they are not utilised. So there is a need to create awareness and motivate the local people to cultivate medicinal plants and other economic species that can play an important role in the economic development of the area. Efforts have been undertaken in recent years to combine traditional wisdom with scientific research, revealing the secrets of these miraculous plants and paving the road for evidence-based herbal medicine. Researchers have worked with local populations to study the therapeutic characteristics of diverse plants, validate traditional uses, and investigate their potential use in modern medicine. These initiatives have not only aided in the study of these plants' therapeutic potential but have also contributed to the region's sustainable management and protection of biodiversity. In this study of medicinal plants, research and conservation efforts should be focused on the resources of the area, and collected information should be utilised to improve the production of medicinal and other useful plants in this area.

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