



Indigenous Knowledge on Medicinal Plants and their Socio-Economic Condition of the Hakkipikki Tribal Population of Western Ghats Areas, Karnataka, India.

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KEYWORDS

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ABSTRACT

This article is on the Folk and indigenous knowledge system of the tribal community of Western Ghats of Karnataka particularly on medicinal plants and their socio-economic dependence on forest. There are numerous herbs available in their surrounding where the tribes are living and that herbs are used by the tribal communities as food and as medicine for curing their diseases. The traditional healers of Hakkipikki are having good knowledge on medicinal plants, we come across many species of medicinal plants used for common ailments. The traditional healers are on the decline because the younger members of the tribe have started moving towards the towns and cities and are not willing to practice this form of medicine. There is danger as the knowledge of these medicinal plants will also die with them therefore, it is necessary to document the plants and take efficient steps to conserve them.

Introduction

Karnataka has a rich diversity of flora and fauna. It has a recorded forest area of 38,720 km² (14,950 sq mi) which constitutes 20.19% of the total geographical area of the state. Western Ghats is a biodiversity hotspot, includes the western region of Karnataka. Western Ghats is home for many tribe's Hakkipikki are one of the Primitive tribes among the tribes of Western Ghats of Karnataka.

It is accepted fact that the tribes all over the world owning their own culture based on that they developed their own system of medical practices, which are being addressed as folk and ethno-medicines, there are numerous herbs available in their surroundings and that herbs are being used by tribal community as food and medicine for curing their diseases they have been continued to live in forest environment since from many generations and developed their own knowledge on flora and fauna of the forest that knowledge are known as folk or indigenous knowledge.

At the same time they have also developed their own folk beliefs based on their traditional practices which would help them in curing various forms of diseases. The beliefs and practices related to curing disease which are based on unwritten knowledge are carried from generation to generation through the practitioner.

The common beliefs, customs, practices related to health and disease in turn influence the health seeking behavior of the community. Tribal groups are homogeneous, culturally firm, have developed

strong magico-religious health care system and they wish to survive and live in their own way (Basu, 1993).

The traditional medicine as identified by the World Health Organization (WHO) “Sum total of knowledge, skills and practices based on the theories, beliefs and experiences indigenous to different cultures, whether explicable or not, used in the maintenance of health as well as in the prevention, diagnosis, improvement of treatment of physical and mental illness” (Srinivasa, 2010)

During the last three decades anthropologists have increasingly turned their attention towards the problems of health and diseases of the people they studied. As a consequence a specialization known as medical anthropology came into being. This sub-discipline is engaged in carrying out research in the field of health and its abuse, definition of health and diseases, ethno medicine, nutritional concepts, ethno physiology, doctor-patient relationship, preventive medicine and so on.

Medical anthropology can be shortly defined as “the branch of anthropological research studying the factors that cause, maintain or contribute to disease or illness and the strategies and practices that different human communities have developed in order to respond to disease and illness” (Singer and Susser, 1997). Medical Anthropology represents the general conceptual frame of ethno-medical studies.

Since the end of the second world war, anthropologists both socio-cultural and biological, have turned in increasing numbers to the cross-cultural study of medical systems and to the bio ecological and socio-cultural factor that influence the incidence of health and disease both now and throughout human history. Motivated by the belief that anthropological research techniques, theories and data should be used in programmed designs to improve health care in both develop and developing nation. Medical anthropology should not be thought of as two loosely joined fields, the biological and the socio-cultural because at innumerable points the problem of both required intrusion of data and theory from the other. Mental illness, examples cannot be studied solely in term of physiological and biological factor or as psycho-socio-cultural phenomenon. (Foster and Anderson 1978).

Illness and death are significant events for people everywhere no one is spared so it should not be surprising that how people understand the causes of illness and death, how they behave and what resources they marshal to cope with these events are extremely important parts of culture. Some argue that we will never completely understand how to treat illness effectively until we understand the cultural behaviors, attitudes, values, and the larger social and political milieu in which people live, others argue that society and culture have little to do with the outcome of illness. The reason that people die needlessly is that they do not get the appropriate medical treatment.

But anthropologists’ particularly medical anthropologists, who are actively engaged in studying health and illness, are increasingly realizing that biological and social factors need to be considered if we are to reduce human suffering. For instance, some populations have an appalling incidence of infant deaths due to diarrhea. The origin of this situation is mostly biological, in the sense that the deaths are caused by bacterial infection but why are so many infants not protected to those bacteria. Usually, the main reason is a socio-economic condition the affected infants are likely to be poor because they are poor, they are likely to live with infected drinking water. Similarly, malnutrition may be the biological result of a diet poor in protein, but such a diet is usually also a cultural phenomenon,

reflecting a society with classes of people with very unequal access to the necessities of life. In many ways, therefore medical anthropology is developing in the direction of a bio-cultural synthesis.

But medical anthropology is part of this developing synthesis indeed; the growth of jobs in medical anthropology is one of the more striking developments in contemporary anthropology. Medical anthropology has developed into a very popular specialty and the society for medical anthropology is now the second largest unit in the American Anthropological Association (Ember and Ember 1999).

Methods Used for This Study

Anthropological studies are one which is characterized by the holistic approach of study and based on First-hand information collected in field work. Fieldwork is the method of data collection which gives an anthropologist data based on first hand information and direct contact with the people to under study.

The present study is carried out in Western Ghats of Karnataka by administering the anthropological tools and techniques such as observation, interview and case study method. An in depth anthropological field work was conducted on Hakkipikki tribal population to understand their indigenous knowledge on medicinal plants, preparation of medicines and methods of using them for curing their various diseases. For the present study 100 samples has been collected from Hakkipikki tribal population. Including common man, patients and traditional healers has been interviewed and collected information.

Study Area

The Western Ghats also known as the Sahyadri Mountains is a mountain range along the western side of India. It runs north to south along the western edge of the Deccan Plateau, and separates the plateau from a narrow coastal plain along the Arabian Sea. The Western Ghats block rainfall to the Deccan Plateau. The range starts near the border of Gujarat and Maharashtra, south of the River Tapti and runs approximately 1600 km through the states of Maharashtra, Goa, Karnataka, Tamil Nadu and Kerala ending at Kanyakumari, at the southern tip of India. About sixty percent of the Western Ghats are located in the state of Karnataka.

Karnataka has a rich diversity of flora and fauna. It has a recorded forest area of 38,720 km² (14,950 sq mi) which constitutes 20.19% of the total geographical area of the state. The Western Ghats, a biodiversity hotspot, includes the Western region of Karnataka. Two sub-clusters in the Western Ghats, viz. Talacauvery and Kudremukh, both in Karnataka, are on the tentative list of World Heritage Sites of UNESCO. The Bandipur and Nagarhole National Parks, which fall outside these sub clusters, were included in the Nilgiri Biosphere Reserve in 1986, a UNESCO designation. Karnataka has five national parks: Anshi, Bandipur, Bannerghatta, Kudremukh and Nagarhole. The Hakkipikki settlements are scattered over a number of hamlets and these hamlets are situated in the interior forest and tiny hilly side. As a result of large scale deforestation and indiscriminate shooting and illicit poaching, tribal have been deprived of their basic requirement of honey and other forest produces their traditional practices and rituals are slowly disappearing. The government is restricting their entry inside the National park and forest. They are slowly shifted to new colony, rehabilitation or resettlements. The study was undertaken in tribal resettlement haadi/colonies in Hunsur taluk .

Pakshirajpura and Vijaygiri haadi of Hunsur taluk, Mysore district of Karnataka State..

Study Population and their Socio-Economic condition

The Hakkipikki tribes are said to be semi nomadic and the tribe has four clan divisions namely the Gujratia, Kaliwala, Mewara and Panwara. Among these clans Gujratia is considered as being the highest status clan whereas Mewara is considered as the lowest one.

As far as the languages are concerned, these Hakkipikki tribal communities converse with each other in the beautiful dialect of the language of Gujaratia. The origin of these Hakkipikki tribal communities also has got a rich history behind it. As per the records of the anthropologist of the Indian subcontinent, the Hakkipikki tribal community has claimed to establish relation with the legendary Ranapratap Singh. Further, it has been said that this Hakkipikki tribal community is a Kshatriya or warrior tribal community who had to migrate downwards towards the southern part after being defeated by the famous Mughal kings.

The Hakkipikki's, a tribal population of Mysore district are known by different names in different regions. In their own dialect the Hakkipikki's call themselves as Rajpardhi. They are now settled in Mysore, Kolar, Shimoga and Hassan districts. Their concentration is at Chinthamani in Kolar District, Channagiri and Hebanahalli in Shimoga District, Pakshirajpur (Hunsur Taluk) and Tiger Block in (H.D. Kote Taluk) Mysore District.

Certain information too has been provided. In order to sustain their livelihood, these Hakkipikki tribal communities have taken up occupations like hunting. In fact it has been said that the unique name of the community is Padi Rajputh or Melshikari, as this Hakkipikki tribal community have developed expertise in hunting airborne creatures. For some inquisitive reason, the name Hakkipikki was assigned to the community and has remained with it since then. In fact, in the official documents, the community has been recorded as Hakkipikki. They speak a dialect known as vaghri, which is a mixture of Gujarati, Mewari and Rajashtani, Kannada, Tamil and Hindi and some also speak Malayalam and Telugu languages among themselves, but with an outsider, most of them can talk more than one language (Mann, 1980). Constitutionally they are classified as Scheduled Tribe in Karnataka State.

The Hakkipikki's are non-vegetarian. They eat a variety of meat, but do not eat beef. Some of them eat the buffalo meat and offer it (particularly he-buffalos) as sacrifice to their deities. Their staple food is rice, ragi, wheat and jowar. They also eat variety of pulses. They also consume roots, which they collect from the forest in the course of their trapping and hunting. They chew betel and use snuff.

Apart from coffee, tea and milk, alcoholic drinks are a must for men and women. Males, females, young and old are habitual drinkers. On festive and ritualistic occasions, they prepare meethakhana or sweet dishes.

Cross-cousin marriage is the most preferred by the Hakkipikkis. Junior levirate and sororate are prevalent. The usual age at marriage for a boy is 22 years and above, for girls it is 18 years and above. Sometimes, marriages are settled at an early age by the parents. Monogamy is the norm, with the exception of a few cases of polygamy. The consummation ceremony takes place at the bridegrooms's house after the marriage.

Divorce after social approval is quite frequent among them before the birth of children. Either spouse can divorce on grounds of maladjustment or adultery. One of the reasons for divorce is quarrelling between daughter-in-law and mother-in-law. Both nuclear and joint families exist among Hakkipikki's. Property is shared by all sons and social status is inherited by the eldest son. The Hakkipikki women participate in all economic activities. Their status is rather low as women; they are not allowed to participate in certain rituals, worship and the mechanisms of social control. Women also contribute to the family income, but family expenditure is always controlled by men.

Pre-delivery rituals are not observed among the Hakkipikki's. Pre-delivery restrictions, however observed. The first delivery usually takes place in the parental house of the women. The Hakkipikki's celebrate a ceremony known as pulawanti to mark adulthood among girls. They observe one month of puberty pollution.

Forest is the main natural resource of the Hakkipikki's. Trapping of birds and animals forms a part of Hakkipikki's life and selling them in their traditional occupation. They also sell herbs collected in the forest. Now, they are also cultivating their own land, given by the government. They are also engaged as labourers. Child labour is prevalent. Payment of wages is made both in cash and kind.

The Hakkipikki's are usually Hindus. The village deity is patamma. Their community deity is maramma. Apart from these deities, they also worship Shiva, Parvathi and Maruti. (Mann, 1980)

They celebrate all Hindu festivals such as Ugadi, Gowri-Ganesh, Deepavali, Sankrathi and Holi. They prepare vegetarian dishes on festival days, followed by non-vegetarian dishes in the next day. Generally the boys study up to the secondary school level and girls up to primary level. They use both traditional and modern medicine. They are aware of family planning but do not practice it.

Following the tradition of most of the nomadic tribal communities, these Hakkipikki tribal communities to follow the rules of matriarchy. When the male member of the Hakkipikki family is out for most part of the year, a woman of the Hakkipikki tribal community maintains the family. Many of the Hakkipikki tribal community women also take a trip selling beads. Hakkipikki females in general execute skillful jobs like polishing beads, organizing decorative flowers and vases amongst the tribal communities. Religion has got an ardent faith in the numerous gods and goddesses. Every clan of the community has their own deities and marriage of the worshippers of the same deity is strictly prohibited. Amongst the numerous deities these Hakkipikki tribal community is the ardent followers of the Goddess Chamundeshwari. They consider 'Dadaji' as their supreme God. Apart from these gods, they worship Jogan, Vikhli, Nokor, and Dugao-Kalka. They are considered as believers of Hindu religion and apart from these their religious beliefs encompass some other religious beliefs, rituals and ceremonies, rites etc.

Some of the Hakkipikki tribe use to go abroad for business they have the habit of travelling. They are masters in making crafts, they use to make tiger skin carpet from cattle's skin they are having good knowledge in making tigers nails from the nails of dead dogs etc. They use to hunt birds and use it as food, trees are very scared for them they use to do meeting under the tree any important discussion like marriage and any property disputes are made under the banyan tree as they believe that god and goddess lives in that tree, that god will be the witness of their discussions.

Belief's and Practices by Hakkipikki Tribe

Diseases due to wrath of the supernatural and Disease caused by Supernatural agencies are cured by offering Pujas (Rituals). For Dysentery, mental diseases, cancer. Deo Propitiated by sacrificing two red cocks, one red hen, and one egg, besides other items of feast. Arrangement is made in the forest. For Asthama, Mental Disease, cancer they use to workship Lord of water Jalkhai puja, worshipped by sacrificing one white duck and other items of feast, rice, salt, vegetables, etc.

Accident, Sudden Illness

No sacrifice are made, only raw items for e.g. gram, rice, powdered rice, etc are offered to propitiate and are thrown on road sides of their houses.

For Gastritis, Ancestral Spirits

Ai puja (ghost), no sacrifice is made except offering of raw articles, powdered rice, gram with betel nut and leaves. For Epidemic and natural calamities they use to work ship mother goddess Community level worship by arranging bhur-utuwa puja. One pair of betel nut and leaf is offered from each family. One red duck is offered on behalf of the villagers all the offered articles are placed under a tree.

For Epidemic and large scale death of men and animals they use to work ship Mother Goddesses of forest.

A goat is a must for the Puja besides other offering.

Conclusion

The Hakkipikki tribes are said to be semi nomadic and being capable of finding one's path in forests. This is characteristic of Hakkipikki they are born in nature's lap, Hakkipikki share a symbiotic relationship with mother earth they reside in the hills and are one among the oldest adivasi tribes. Hakkipikki are specialist in traditional herbal medicine and healing practices. Hakkipikki vaidyas (doctors) are more women, they practice traditional healing system they treat several new-age diseases with a high success rate. Hakkipikki natural products are made from medicinal plants grown in a pure unpolluted environment, no pesticide, no fertilizers. There products are a culmination of the powerhouse of knowledge of medicinal herbs of the Hakkipikki, that forms a part of their rich heritage. The total number of species of plants used by the Hakkipikki community people is based on the ethno medical field survey these plants are used to treat several wide ranges of discomforts. The Hakkipikki knew the names of trees and also where seeds could be collected, and also turned out to be good at locating species which nobody else knew grew in the region. They possess a vast knowledge bank related to medicinal plants, Hakkipikki cures and preventives are widely sought and used. They are nevertheless a unique habitat and have their own traditional domain. They have careful, conservative- minded style of using the forest, such as using only regenerative plants and

never up-rooting rare medicinal plants. The growing disinterest in the use of the folk medicinal plants and its significance among the younger generation of the tribes may lead to the disappearance of this practice as it was reported by several previous workers. Those who have the knowledge of traditional medicine are involved in collection of medicinal plants throughout the year but the amount of collection is based on immediate requirements only. The study reveals that of the species have become increasingly rare and are no longer available locally and sometimes this makes them travel deep in to the forest for collection of herbs. The untapped knowledge on the varied use of the medicinal plants, their availability and extent of distribution weakens the efficient use of forest resources besides, due to the penetration of the market economy. Break down to the community based institutions, acculturation and rapid degradation of forest resources.

Plant-based traditional knowledge has become a recognized tool in search for new sources of drugs and nutraceuticals. The traditional use of plants has declined due to the scarcity of species, which is caused by human activities and over grazing by animals therefore, it has become essential and need of the hour to focus on conservation of these plants this tribal population has good knowledge about the use of many plants. They believe that all afflictions are caused by supernatural forces traditional healers use their eyes, ear, nose and hands to diagnose the diseases, this way of diagnose is interesting because they live in interior areas and lack the use of modern scientific equipment for treatment. Herbal medicines prescribed by tribal healers are either preparation based on single plant part or a combination of several plant parts. The forests of Nagaraholle are rich in medicinal plants, many are still not known to us. Our effort helped identify of commonly used plants. Further, studies have to be carried out to identify the numerous medicinal plants and the most important thing would be to conserve these plants.

This article highlights on Medicinal knowledge of Hakkipikki Tribe and their medicinal plants which are utilized for the greater benefit of mankind. This article is based on the field exploration conducted in Western Ghats of Karnataka and documented the process of preparing medicines and administering the medicines. There are numerous herbs available in their surroundings and are being used by the tribal communities as food and medicine some of the medicinal plants obtained through the process of trial and error experiences and that herbs are used for curing their diseases, the indigenous knowledge of tribal people may throw light on the modern plural medicinal systems and it may help the modern society to make use of that knowledge to address their medical problems. Dissemination of the knowledge of medicinal property would improve the socioeconomic status of the Hakkipiki tribe; traditional healers are on the decline because the younger members of the tribe have started moving towards the towns and cities and are not willing to practice this form of medicine. There is danger that the knowledge of these medicinal plants will also die with them. It is therefore, necessary to document the plants and take efficient steps to conserve them.

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Appendix

MEDICAL PLANTS AND THEIR ETHNOMEDICAL USE BY HAKKIPIKKI TRIBE

Sl. No.	Diseases	Local name of Medicinal Plant	Botanical Name (family)	Parts Used	Plant/ Herb	Method of Using
1	Hair fall	<i>Garuda soppu</i>	Ecliptaprostrate.	Leaves	Herb	<i>Grind the leaves and used as oil</i>
2	Graying of hair	<i>Japa.</i>	Malvaceae, hibiscus rosa-sinensis	Flowers	Plant	<i>Flower is crushed and used for coloring hair</i>
3	Liver disease	<i>Parangi</i>	Carica papaya	Fruit	Plant	<i>Raw or ripe Papaya and banana with pigeon meat as medicine</i>
4	Pain in ear	<i>Tulsi</i>	Ocimum sanctum	Leaves	Plant	<i>Juice is boiled and drops are drop in to earache</i>
5	Asthma	<i>Indrani gida</i>	Verbenaceae, vitex negundol.	Root and leaves	Plant	<i>Dried leaf and root are crushed and mixed in milk and drunken</i>
6	Fever	<i>Nimbu</i>	Citrus auran tifolia	Fruit	Plant	<i>Juice is mixed with sugar applied on forehead to cure fever</i>
7	Diarrhea	<i>Bettanelli</i>	Emblica officinalis	Fruit	Plant	<i>Powder is mixed with black salt and cold water for diarrhea</i>
8	Jaundice	<i>Kabbu, Sugar cane, Parangi</i>	Saccharum officinarum, Carica papaya	Stem, fruit	Plant	<i>Sugar cane juice is prescribe to take twice daily, boiled raw papaya is used for curing disease</i>
9	Nose bleeding	<i>Daalimbe</i>	Punica granatum Linn	Flower	Plant	<i>Flower is crushed and 3-4 drops is used to stop immediate nose bleeding</i>
10	Tonsils	<i>Hippe, silikba, turmeric</i>	Sponolias mangifera, Mysoballum, purcuma domestica	Seeds, seeds, rhizome	Plant	<i>Seeds of amara 1 seed of silikba, piece of turmeric is mixed and juice is extracted used for gargle to relief from tonsils</i>
11	Worms	<i>Nimbu</i>	Citrus auran tifolia	Lemon seeds	Plant	<i>Seeds are crush mix with water taken in empty stomach for worms</i>
12	Worms	<i>Chirata</i>	Swertia chirata	Twigs	Plant	<i>Twigs are soaked overnight and its water is prescribed to take in empty stomach for worms.</i>
13	Scabies	<i>Nimbu, neem, chirata</i>	Citrus aurantifolia, Azadirachta officinarum, Swertia chirata	Fruit, leaves, twigs	Plant,	<i>Lemon juice is mixed with coconut oil and applied for curing scabies. To remove scabies they take bath with hot water in which leaves of Neem. Twigs of Chirata (Swertia chirata) are crushed into paste with water to be used as an ointment and applied on the skin. Chirata water is prescribed to drink in the morning in empty stomach</i>
14	Blood vomiting	<i>Carrot</i>	Dancus carota	Conical tuber	Herb	<i>Juice of carrot is mixed with honey</i>

