Studies on Indigenous Herbal Remedies in Cure of Fever by Tribals of Madhya Pradesh

Rajiv Rai

Abstract

Madhya Pradesh is situated in heart of India and has largest concentration for tribal population, i.e. about 28% of the total state's population. In the state, about 1100 medicinal and aromatic plants are found, out of which 500 plants are in category of potential use. A large number of ethnic groups such as Baiga, Bhariya, Birhor, Gond, Korku, Pardhi exists in Satpura plateau. The nature has bestowed Satpura plateau with enormous plant wealth. The present investigation has been carried out in Dindori and Shahdol districts which have pre-dominance of Baiga tribe. Bhariya tribe has pre-dominance in Patalkot valley of Chhindwara district of Satpura plateau and Gond tribe have pre-dominance in districts of Seoni, Chhindwara, Hoshangabad, Betul, Sehore and Bhopal districts. A large number of traditional herbal healers exist belonging to the tribal community and are utilizing local plants in ethno-medicinal practices prevalent in the valley. The methodology followed in the present study were by organizing field trips in different season to record floristic diversity in different localities of the tribal pocket, recording observations for occurrence of plant species, their local names, plant parts used, formulations and dosages through interview and discussions held from elderly persons of Baiga, Bhariya and Gond communities. The study emphasized the need to document indigenous herbal remedies prevalent in tribal pockets pertaining to use of wild plants in cure of fever and malarial fever. The tribal communities in state of Madhya Pradesh possess excellent indigenous knowledge on plants and their parts and their use in folk medicines with different formulations

Introduction

India has centuries old heritage of medicinal plants and herbal medicines for curing human illness and promotion of health in tribal and rural areas. Medicinal plants are often, the only easily accessible health care alternative for the most of our population and traditional medicines remained a part of our integral health system. Indigenous people have shown evidences of historical continuity of resource use and possess a broad base knowledge of the complex ecological system existing in the vicinity of their habitat. Thus there exists an intensive relationship between the two entities i.e. forest and tribals. This relationship has been more static. It is always in flux of change. The life, tradition, culture of tribals have remained almost static since last several hundreds of years .The knowledge accumulated by them through a long series of observations from one generation to another is transmitted oral communication for power possessed by medicinal plants in cure of various diseases and ailments. The state of Madhya Pradesh is situated in heart of Indian Peninsula and has largest concentration for tribal population, about 28% of the total state's population. In the state, about 1100 medicinal and aromatic plants are found, out of which 500 plants are in category of potential use. A large number of ethnic groups such as Baiga, Bhariya, Birhor, Gond, Korku, Pardhi inhabit in Satpura plateau in the state of Madhya Pradesh. Most of the tribal pockets

are undulating, densely covered with thick forest cover and tribal are inhabited at hill tops, foot hills since last several hundreds of years (Saxena, 1988; Rai et.al, 2002; Rai et al, 2003; Rai et al, 2004 a, 2004 b and 2004 c).

Living close to nature, the tribal people have acquired knowledge on the natural resources that exists around their habitat in the forest eco-system. These people have unique knowledge on use of different plant parts and their use in cure of ailment. These communities are using different formulations made out of plant parts in cure of ailments in primary health care . Keeping in view of vastness of forest area and richness of vegetation, systematic efforts to exploit the valuable potential is still lacking with exception to sporadic attempts being made as evident by review of literature being done for investigators earned in Madhya Pradesh on traditional health care by numerous ethno- botanists such as Bhalla et. al. (1992), Jain (1963, 1975, 1981), Maheshwari (1989 & 1996); Maheshwari and Dwivedi (1988), Oomachen and Srivastava (1996), Ram Prasad et. al. (1990), Rai et. al. (1996), Rai et. al. (2002), Rai et. al. (2003), Rai (2004), Rai et.al. (2004a), Rai et.al (2004 b), Rai et.al.(2004 c), Rai and Nath (2005), Saxena and Shukla (1971), Saxena (1988) and Tewari (1984). The present study is subjected to scientific study on use of herbal plants in cure of fever and malarial fever by Baiga, Bhariya and Gond tribes of Madhya Pradesh.

Material and Methods

The present study has been conducted in tribal dominated pockets in state of Madhya Pradesh. Field trips were conducted in different seasons in each quarter of the year for a period of two years from year 2003 onward in the selected villages of Baiga, Bhariya, and Gond tribes of Madhya Pradesh to record floristic diversity and their ethno-medicinal uses.

Field trips were conducted in Dindori, Shahdol , Seoni, Chhindwara, Hoshangabad, Betul, Sehore and Bhopal districts . The tribal villages were surveyed through periodical tours in tribal localities. Special attention was paid to record information from local vaids, ojhas and traditional herbal healers. The information was documented involving field study by contacting and interviewing vaids, ojhas for plants used to cure various types of fever.

Knowledgeable persons of tribal communities and traditional herbal healers were contacted and information were collected through interviews, observations and discussions held during field survey. The discussions revealed local name of species, plant part used, formulation of herbal drugs used by traditional healers and tribal communities. The species were scientifically identified with their botanical names and author index. The identified record plants from local taxonomist and herbarium prepared were further verified with flora. The information recorded in field was further screened in laboratory as per work pertaining to Indian ethno-botany and plants recorded by Chopra et.al. (1982), Nadkarni (1982), Jain (1981, 1991) , Jain (1996), Sathpathy and Panda (1992) to distinguish the information already known, reported and published by taxonomists and ethno-botanist and little known and hitter unknown and unpublished work. The information recorded in the present investigation is presented below.

Results and Discussion

The investigation carried out in tribal pockets of Madhya Pradesh revealed utilization of medicinal plants being used in cure of fever and malarial fever in tribal health care are tabulated for Baiga, Bhariya and Gond tribes below.

a). Plants used by Baiga tribe in cure of malarial fever : The Baiga tribes is one of the most primitive tribe pre- dominant in Madhyka Pradesh. The tribe has characteristics viz. high extent of isolation, very low literacy level, developing pre-agricultural stage of economy and still having the habits of gathering food from forest and hunting with bows and arrows. Baigas have excellent knowledge of medicinal plants for their collection and harvest of plants for indigenous use. Following four plants are most commonly used by the tribe in cure of malarial fever and other fever

Table 1: Plants used by Baiga tribe in cure of fever

S. No	Scientific Name	Family	Local Name	Part used	Used for remedial measures
1	*Achyranthes aspera Linn.*	Amaranthaceae	Chirchitta	Whole plant	Paste is prepared for curing fever along with headache.
2	*Ecilipta prostrata* Linn.	Asteraceae	Bhringraj	Leaves	Leaves are chewed for control of malarial fever.
3	*Pterocarpus marsupium Roxb.*	Fabaceae	Bija Sal	Gum	Gum is applied for cure of toothache in fever .
4	*Terminalia arjun (Roxb) Wgt. &Arn.*	Combrataceae	Arjun	Bark	Bark decoction is used as tonic and in cure of malarial fever

b). Plants used by Bhariya Tribe in cure of fever / malarial fever: Bhariyas are Dravidian tribe who have settled in Patalkot region of Satpura foot hills in Chhindwara district . Around 1510 AD they migrated from Mahoba to Bandhavgarh to Nagpur and finally onfined at Patalkot. Patalkot is situated in Satpura plateau between 22º-24¢-45” north of east to 22º- 29¢-15” north latitude and is extended from 78º- 43¢-45” to 79º-50¢-35” east longitude. The Patalkot area is a bowl shaped formation like a horse shoe nail surrounded by three sides by hilly ridges and opens in north west side towards Dudhi river valley It is surrounded by hilly ridges on three sides and has river Dudhi in the valley end.

c). Plants used by Gond tribes in cure of fever & malarial fever: The Gond tribe belongs to Dravidian clan of tribes. The clan is one of the most important non-aryan community living in forests of Central India since ancient period. The community has migrated in Central India in different regions in state of Madhya Pradesh, Chhattisgarh, Maharashtra, Andhra Pradesh and Orrissa and grouped into different groups based on regional basis. In state of Madhya Pradesh the Gond tribes are setteled in Narbada valley and its adjoining places in small pockets situated in districts of Jabalpur, Mandla, Seoni, Chhindwara, Hoshangabad, Harda, Khargone, Katni, Umariya, Shahdol, Dindori etc. The tribe is spread over in Satpura plateau, Vindhya Range, Bundelkhand region and in Chambal Valley in Madhya Pradesh. The tribe use a number of plants as mentioned below in cure of fever and malarial fever.

Table 2: Plants used by Bhariya tribe in cure of fever / malarial fever

S. No	*Scientific Name*	Family	Common Name	Plant Part Used and Formulation	Dose & Cure of ailment
1	*Aspragus racemosas* Willd	Liliaceae	Satawar	Root : decoction	Roots collected are dried in sun and decoction is prepared and is given to cure high fever with thrust
2	*Bauhinia purpurea* Linn.	Caesalpiniaceae	Keolar bhaji, Kaliar	Stem and bark : decoction	Stem and bark decoction is orally administered 15-20 ml 2-3 times a day in acute fever.
3	*Cassia tora* Linn	Caesalpiniaceae	Chikoda Apaamar	Root: decoction	Root decoction is prepared and administered orally
4	*Cuscuta reflexa* Roxb.	Cuscutaceae	Amarbeal	Plant : decoction	Plant decoction is prepared and vapours are inhaled to reduce swelling and to control fever.
5	*Ocimum sanctum Linn*	Labiatae	Tulsi	Leaf : juice	50 ml. of Leaf juice is extracted and is orally administered twice a day for a period of two to three days to patients suffering from high fever .

Table 3: Plants used by Gond tribes in cure fever & malarial fever

S. No	Botanical Name	Local Name	Family	Plant part used as	Remark
01.	*Alangium salvifolium* (Linn.)Wang	Ankol	Alangiaceae	Root : Juice	Root juice is orally administered 5 ml. thrice a day for a period of 8 – 10 days to relieve patient suffering from malarial fever.
02.	*Andrographis paniculata* (Burm.f.) Wall ex. Neees	Kiryat (Kalmegh)	Acanthaceae	Leaf: Powder	5-10 gms of leaf powder is orally administered empty stomach for 4-6 days to cure malarial fever.
03.	Azadirachta indica A. Juss.	Neem	Meliaceae	Stem bark: Decoction	Stem bark decoction is prepared and orally administered twice a day (morning/evening) for 10-12 days to cure malarial fever.
04.	*Bacopa monnieri* (Linn.) Pennell	Brahmi	Scrophulariaceae	Leaf: Juice	Leaf juice is extracted and orally administered 5-10 ml. twice a day (morning /evening) for a period of 8- 10 days to cure chronic fever and malarial fever .
05.	*Allium sativum* Linn.	Jangli lahsun	Liliaceae	Seed	10 g. of seeds are crushed and mixed with 5ml. each with of castor oil and Neem oil and is externally applied two to three times in cure of body pain to patients suffering from intermittent high fever ..
06.	*Ocium tennifolium* Linn.	Tulsi	Lamiaceae	Leaf: Decoction	Leaf decoction is prepared and 20 ml. is orally administered twice a day to cure fever with body pain and swelling.

It has been told during field visits that many of these plants are depleting at faster rate on account of interference from outside people .Hence concerted efforts should be made to protect these plants and conserved for future use.

Conclusion

In the wake of findings of this study, it is desirable to document these indigenous herbal remedies prevalent in tribal pockets in cure of fever and malarial fever looking at the faster depletion of these plants.

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