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Traditional Knowledge of Medicinal Plants in Tribes of Khandesh: Need of Time to Preserve for Prosperity of Mankind

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Abstract

In the Maharashtra state, northern region is known as 'Khandesh' mainly known for tribal population. These tribal peoples have sound knowledge about various plants and their preparations for the effective treatment of many diseases. Their knowledge is passed from generation to generation by oral communication and much of traditional knowledge is kept in secret from outside world. The present study was carried out to collect, document and preserve the traditional knowledge from tribal medicine men like '*Vaidus'* and elder people of tribal community of this region. During the same, the plant specimens were collected as directed by resource person in the flowering and fruiting conditions. In this study, information of 16different medicinally important plants was collected. The reported plants were arranged according to their scientific name, family, tribal name and method of preparation. In all, tribal health workers use these medicinal plants particularly to treat health issues like headache, jaundice, anemia, fever, etc. So an attempt was done to collect, document and preserve the traditional knowledge for the prosperity of mankind.

Keywords: Khandesh, Tribal, Traditional knowledge, Health issues, Plants

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Introduction

Various tribes located in different parts of India possess huge traditional information about the plants available in their vicinity (Mukherjee et al. 2013). Out of this Central India is considered to be major contributor as it is covered by tropical forest and many medicinally important plants are found in this

region (Jain et al. 2010). As the fifth largest tribal populated state, Maharashtra is home to 47 tribal communities in the state's hilly area. In northern Maharashtra (known as *Khandesh*), satpuras spread over Dhule and Nandurbar district which comprises;

'Pawara', 'Bhil', 'Gavit' tribes among the major tribal communities. (Patil and Bhaskar, 2006). These tribal peoples have sound knowledge about various plants and their preparations for the effective treatment of many diseases. Their knowledge is passed from generation to generation by oral communication and much of traditional knowledge is kept in secret from outside world. The present study was carried out to collect, document and preserve the traditional knowledge from tribal medicine men like *Vaidu* and elder people of tribal community of this region.

Need of Study

It is evident that tribal health workers (well known as Local healers) are sound enough with their folklore knowledge. Their knowledge is passed from generation to generation by oral communication only and some of them keep this as secret.

The present study was carried out to collect, document and preserve the traditional knowledge from tribal medicine men and elder people of tribal community of this region so that it can utilized for the benefit of mankind.

Methodology

The said study was conducted in the tribal region of Dhule and Nandurbar district during the academic year 2018-19. With the help of tribal community student of the institute, initially different *Padas* of this region were regularly visited and only relation building with these tribal community health workers and selected elderly persons was focused. Afterwards, in next few visits, documentation of their indigenous knowledge was done through the discussion in their own language with the help of student. During the same, the information from 6 *Vaidus* and 10 elderly persons were collected. Using suggested methodology, ethnobotanical data relating to the mentioned plant was collected (Jain, 1964). The plants mentioned were arranged according to their scientific name (i.e. botanical name), family, tribal name and method of preparation and dose (Table 1).

Nomenclature of plant specimens obtained during the study was preserved in the Pharmacognosy department of H. R. Patel Institute of Pharmaceutical Education and Research, Shirpur (Nadkarni, 2002; Thakur, 1989; Agharkar, 1991; Jain, 1981).

Table 1: Medicinal Plants used by Tribes

Plant Name	Local/Tribal Name	Biological Source	Used In	Preparation method	Dose
Crown flower	Rui/Aakadu	*Calotropis gigantea*, Apocynaceae	Headache	In small mouthed earthen vessel, place ripened leaves (yellow) and common salt. Smear a cloth with wet mud and close the mouth of the vessel tying it firmly. Dig a pit big enough and deep enough to hold cow dung cakes under and around the vessel so that its mouth is level with the ground. Cover the vessel too with cow-dung cakes. Burn the cakes. Content of the vessel is cooled.	One pinch in the morning
Silk Cotton	Laal Savaar/ Havara	*Salmalia Malabarica*, Malvaceae	Pimples	Dry thorn are ground fine and then strained through a muslin cloth. The resulting powder is mixed with milk and the paste applied on the pimples.	once a day
Neem	Nimb	*Azadirachta indica*, Meliaceae	Swelling Body	Leaves are ground to fine paste, which is warmed, applied on the swelling and bandaged.	Paste applied in the morning
Moringa	Kodvo, Hegvo	*Morinaa concanensis*. Moringaceae	Intestinal worm	One cup of bark is crushed and boiled in 4 cups of water. When one cup of water remains, the decoction is strained, cooled and taken.	One cup per day
Henna	Mehandi	*Lawsonia inermis*, Lyrthaceae	Burning feet	Fresh leaves are crushed and the juice applied to the soles of the feet.	Every evening for 7 day
Cotton	Kapus/ Kahapa	*Gossypium herbaceum*, Malvaceae	Jaundice	Roots are crushed and then kept in a glass of water for 15 minutes. The water is then strained.	Half glass per day
Shatavari	Shatavari	*Asparagus racemosus*, Liliaceae	Reduced breast milk	Tubers are washed and the paper-thin skin is peeled off. The tubers are then crushed and juice removed. This is mixed with sugar and taken.	One cup juice per day
Catechu	Khair	*Acacia catechu*, Leguminosae	Cuts on feet	One glass of bark is ground fine and boiled in four glasses of water, until only two glasses remain. The decoction is strained off and the water again boiled till thickness to gumminess. This is applied to the cuts.	Applied paste every night
Palas tree	Palas/Palhu	*Butea*	Whooping	The seeds are burnt till black	One seed

		monosperma, Fabaceae	cough	ash is obtained. This is mixed with honey and taken.	ash with honey per day
Coriander	Kothmeer	*Coriandrum sativum*, Umbelliferae	Yellowish urine	In a new earthenware vessel half cup of seeds and four glasses of water (about one litre) are kept overnight. When thirsty, the next day, this water is strained and taken. The seeds are changed every day.	One cup per day
Papaya	Papaya/ Ondakakodo	*Carica papaya*, Caricaceae	Muscle cramp	Four finger long pieces of roots is rubbed on a stone to prepare a paste	Paste applied
Bahera	Behada/ Bedo	*Termenalia balerica*, Combretaceae	Grey hair in young people	Oil is prepared from seed kernels.	Oil applied to hairs
Nirgundi	Nirgudu/ Nirgodyo	*Vitex negundo*, Lamiaceae	Pain in arms and legs	One cup of roots crushed and put in four cups of water. On boiling, the water is reduced to one cup, cooled and taken.	One cup thrice a day
Gooseberry	Amla	*Emblica officinalis*, Euphorbiaceae	Anemia	When ripe fruits are available, they are cut into bits and spread to dry in the shade. When dry, they are spread one day in the sun and then packed in an air tight container. This can be used for 12 month.	Thrice a day
Tinospora	Amarvel	*Tinospora cordifolia*, Menispermaceae	Fever	About eight long stem are taken and paper-thin bark removed. The stem is then crushed, cut into bits and a decoction prepared.	One cup for thrice a day
Pongam	Karanja	*Pongamia pinnata*, Fabaceae	Dog bite	One cup of roots is crushed in four cups of water till one cup decoction is ready to use.	One cup per day

Conclusion

This study along with many previous studies confirmed that in the tribal population, there is crucial role of natural resources for their medicinal properties to treat many human diseases. They are using these medicinal plants particularly to treat health issues like headache, jaundice, anemia, fever, etc. Proper training to these tribal health workers will assist them in preparing medicines according to standard protocols and preserving natural wealth. Along with this, sale of these medicines will support them through additional income source.The present investigation has immense significance as it recovers and registers the tribe's fading-out traditional knowledge, which can be applied to immediate pharmacological testing for the development of successful finished formulations for the prosperity of mankind.

Conflict of interest

The authors declare no conflicts of interest.

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