Ethno-Medicine and Health Care Practices among Tribal Community in Bastar District of Chhattisgarh, India

Swapan Kumar Kolay

Author Affiliation: Associate Professor & Head, School of Anthropology & Tribal Studies, Bastar University, Jagdalpur- 494001, District- Bastar, C.G.

Reprint Request: Swapan Kumar Kolay, Associate Professor & Head, School of Anthropology & Tribal Studies, Bastar University, Jagdalpur- 494001, District- Bastar, C.G. E-mail: kolay.swapan@gmail.com

Abstract

The traditional knowledge prevailing among the tribes as well *traditional herbal healers/Baigas/Guinias* in Bastar district of Chhattisgarh regarding use of various plants for different ailments. Ethno-medicine developed gradually having its origin in the indigenous medicinal practices. The main purpose of the study was to make survey of plants that have ethno-medicinal value and investigate the uses and management practices.

The traditional knowledge from local tribal people as *traditional herbal healers/Gunias/Baigas* has been documentation during the studies. The information was collected by interviewing local *traditional herbal healers/Gunias/Baigas* in Bastar district. They have immense knowledge about plants and drugs are being utilized by tribals since long back by collecting plants and their parts to prevent for different ailments. Ethno-medicinal information of medicinal plants were obtained from informants by semi-structured interview, observations, focus group discussions and case study.

95 medicinal plant species were documented, which are used to treat 38 human diseases. The category of medicinal plant species includes shrubs, herbs, trees and climbers etc. Roots, leaves, fruits and flower are the most frequently used plant parts. The method of preparation is by crushing, powdering and mixing with cold water to serve as a drink and chewing.

Tribal People of Bastar are knowledgeable about the plants, their distribution, medicinal use and management. Indigenous practices somehow contributed to the sustained use, management and conservation of medicinal plants. Knowledge of medicinal plants is wider among elderly women and men. The results of this study indicated significant contribution in efforts directed towards conservation and sustainable harvesting of medicinal plant resources.

Keywords: Traditional Knowledge; Ethno-Medicine; Conservation and Sustainable Harvesting.

Introduction

India has 16 Agro climatic zones, 45000 different plant species out of which 15000 are medicinal plants. The Indian Systems of Medicine have identified 1500 medicinal plants, of which 500 species are mostly used in the preparation of drugs. The Indian Systems of Medicine, particularly Ayurveda, Siddha, Unani, & Homoeopathy medicine largely use plant base materials, minerals, metals, marine and products of animal origin. Our ancient texts had documented medicinal uses of a large number of plants. These plants are being used for preparation of medicines for centuries (Verma, D.M., Balkrishna, N.P. & Dixit, R.D., 1993).

India has century's 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 14

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 (Smvastar, S., 1996). Thus there exists an intensive relationship between the two entities i.e. forest and tribals. The life, tradition and 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.

Almost all the countries of the world have started documenting their traditional knowledge on herbal medicines. This requires documenting each and every knowledge from every look and corner. These efforts have although succeeded in documenting such knowledge from many areas but there are still several areas from where the traditional knowledge has to be extracted and documented (Oommachans, M. & Shrivastava, J. L., 1996). Chhattisgarh state is one of the areas enriched with the plants of medicinal value. There are several areas in state, difficult to approach as well as several tribes which are difficult to communicate and these are the areas and tribal people their knowledge required to be documented. The Bastar District is abundantly and richly endowed with forest resources. The various types of trees found in Bastar forests are Teak, Sal, Sirsa, Bijasal, Kusum, Palas, Mahua, Imli, Tendu, Harra, Kanha, Salai, Achar, Dhowara, Bhulra, Rohni, amla, Khair, Samar etc (Bhalla, N.P., Sahu, T.R., Mishra, G.P. & Dakwala, R.N., 1982).

Halba, Muria, Maria, Bhatra and Gond are found in Bastar district of Chhattisgarh. They live in remote, dense forest area. The forest cover is about 44 percent, 3rd maximum in country. Herbal medicines are being investigated with more interest. This is not because they are cheaper but because the type and variety of medicines available in herbal medicine than the scientists all over the world together can synthesize in their laboratory. Bastar district of Chhattisgarh state is one of the districts very rich is variety of plants. So far, very little documentation is available for the medicinal plants. Similarly, the primitive tribes, their socio-economic condition, knowledge of medicinal plants and livelihood security are still to be documented. Present studies, therefore bear special significance, to be first of its kind to document the traditional knowledge of the tribes of Bastar, Chhattisgarh as well as in India, with a systematic recording the tribal knowledge.

Methodology

Tools

- Household surveys (viewed as the main component of the field work).
- Oral histories (based on open discussions with widely recognized knowledgeable elders).
- Focused Group Discussions with mothers at local health centers.
- Local market surveys.
- Questionnaires administered to high school students and teachers.
- Structured interviews with (both modern and traditional healers/Baigas/Gunias) professional health practitioners.

Materials and Methods

The methodology covers two types of survey namely:

- Field Survey
- Literature Collection

Method Followed for the Study

Data have been collected from major two levels of sources i.e. primary and secondary. Primary information with reference to selected tribal communities has been collected with the help of structured questionnaire followed by interview and observation. Secondary information pertaining to relevant Government records and other facts has collected from various records and reports and related research journals, bulletin and herbaria.

To collect information from primary and secondary level sources have been analyzed and tabulated with the help of simple method of statistical tools and techniques for writing the final article.

Sampling

Purposive sampling design has been drawn to decide the size of the sample by taking into consideration the following criteria.

- Concentration of the tribal population in the selected region.
- Communities have been selected from village which has far away from urban area by taking into consideration the existing infrastructure facilities.

• Communities also have been selected on the basis of who are residing near the forest area.

Altogether 450 households are taken for this present study.

Table	1:	Study	villages	with	surveyed	household
-------	----	-------	----------	------	----------	-----------

State	District	Block	Village	Surveyed
				Household
Chhattisgarh	Bastar	Bastar	Kachira	55
0			Dhurguda	55
			Kurandi	55
			Jamguda	55
			Mundapara	55
			Badepara	55
			Arabal	60
			Hatguda	60
	Tota	1		450

Area of Study

For the present study researcher carried out the field work at least 15 to 20 percent of villages under one block namely- Bastar in Bastar district of Chhattisgarh on the basis of higher/ rich biodiversity of medicinal plants used by Baigas or Gunias. The field study was carried out in the villages and forest villages of the Kachira, Dhurguda Kurandi, Jamguda, Mundapara, Badepara, Arabal and Hatguda forest area of Bastar District (C.G).

Objectives of Study

- (i) To examine the various types of indigenous herbal drugs practices among the different tribal groups of Bastar district of Chhattisgarh.
- (ii) To study and record their unique knowledge about herbal plant name, plant part used their mode of preparation, doses and others related relevant information.

Result and Discussion

All the tribals have their dependence on forest resource for health security and livelihood; therefore, they have rich knowledge of plants and its utilization. This knowledge is transferred from one generation to another by oral discussion. Rich traditional knowledge of medicinal plants amongst local people was studied by various researchers. These plants are used by tribals either independently as crude drugs or in combination with other plants. This knowledge of tribals is gradually vanishing; hence an attempt has been made in this research work to record such knowledge for future generation. The tribes of Bastar region are known for their unique and distinctive tribal culture and heritage in all over the world. Each tribal group in Bastar has their own distinct culture and enjoys their own unique traditional living styles.

Health Institution in Bastar

Table 2 shows that there are lots of Health institution in Bastar district such as Allopathic dispensary 0.80 percent, Ayurvedic dispensary 9.54 percent, Unnani dispensary 0.20 percent; Sub Centre 73.96 percent, PHC 12.72 percent, CHC 2.58 percent and District Hospital one. The Chhattishgarh state is also served by state sponsored medical system in which Primary Health Centres (PHC) are the key units for curing different diseases. However, these centres are not adequate in the state/ and each PHC caters more than 31,000 populations against the stipulated norms of 20,000 for the hilly region. Apart from this inappropriateness in availability of PHCs in Chhattishgarh state the cost of modern medicines times higher than the cost of indigenous medicine. The low cost of herbal medicine is one of the reasons that discourage younger generation to adopt the traditional healers/ Guinias/ Baigas as a profession. There is a sharp decline in the number of recognized traditional healers/ Guinias/ Baigas in the study area, however, there are number of women and men in the villages who know the healing properties of some of the medicinal plant species. The survey indicates that the loss of knowledge on preparing medicine was due to the decline in number of traditional healers/ Guinias/ Baigas coming forward to adopt this traditional healing practice professionally.

Table 2: Different types of health institution in bastar district

Types of Institution	No.	%
Allopathic Dispensary	4	0.80
Ayurvedic Dispensary	48	9.54
Unani Dispensary	1	0.20
Sub Centre	372	73.96
РНС	64	12.72
CHC	13	2.58
District Hospital	1	0.20
Total	503	100

Source: CMO, District Hospital, Bastar, 2013

Indian Journal of Research in Anthropology / Volume 2 Number 1 / January - June 2016

Table 3: Types of common disease among villagers

Types of Physical Problems	No.		%
Pain / Ache	86		3.71
Cough	192		8.28
Cold	116		5.00
Fever	72		3.10
Cough & Cold	222		9.57
Gastric Problems	121		5.22
ENT Problems	41		1.76
Gynaec Problems	242		10.44
TB	32		1.38
Malaria	118		5.09
Typhoid	45		1.94
Measles	18		0.77
Jaundice	265		11.43
Skin Disease	119		5.13
Leprosy	89		3.83
Small Pox	142		6.12
Chicken Pox	176		7.59
Others	222		9.57
Total	2318		100
Table 4: Status of traditional healer			
Variables		No.	%
Inheritance from elderly person		395	87.77
Accidental detection gift from God		15	3.33
Training from the Specialist		19	4.22
Others		21	4.66
Total		450	100

Common Disease

It is clear from the table 3 that so many bacterial and viral diseases find out in Bastar where Jaundice (11.43 percent), Gynaec Problems (10.44 percent) and Cough & Cold (9.57 percent) are common.

Status of Traditional Healer

The study of ethnomedical systems and herbal medicines as therapeutic agents of a paramount importance in addressing health problems of traditional communities and third world countries as well as industrialized societies. A traditional method of using plants as a medicine was found to be prevalent in Bastar. Table 4 shows that 87.77 percent population answered that healing is inheritance from elderly person where 3.33 percent peoples opinions are accidental detection gift from God, 4.22 percent said that training from the specialist and others 4.66 percent.

Treatment was found to be done by the *traditional healers/Guinias/Baigas* and medicine man by collecting various plants and plant parts from surrounding of the forest and use them as a medicine. The drug preparation method was also found to be very orthodox despite they have treatments for all kinds of diseases people commonly suffer in Bastar. In present investigation tribals, *traditional healers/* *Guinias/ Baigas* and medicine man traditional knowledge was documented about the information of 118 plants for curing diseases was documented.

Seeking Traditional Healer

It's observed from table 5 that villager's first preference is to seek traditional healer for treatment (73.33 percent). Hemadri, Koppula & Rao, S.S., 1989 reported that about 163 species of plants were used as wound healing plants in Indian system of medicine such as Ayurveda, Siddha , Unani and folk medicine. Of these only four plants like *Aloe vera*, *Semicarpus anacardium*, *Abutilon indicum* and *Macuna pruriens* were found to be used by tribals of Bastar in wound healing. Majority of young generation do not know many plants and their medicinal values.

Present study revealed such type of situation in district Bastar, therefore scientific cultivation, conservation and sustainable use of plant species by ethnic communities would be highly advantageous for socio-economic growth, in conservation of rare and endangered plants species and the indigenous knowledge for the future generations. Table 6 shows that Villagers consult to a traditional healer for Genetical Disease (0.23 percent), Gynaec Problems 8.76, Sexual Disease 4.26, Phycial Disabilities 30.33, Mental Disabilities 0.17, Body Pain 5.09, Cough 5.09,

Swapan Kumar Kolay / Ethno-Medicine and Health Care Practices among Tribal Community in Bastar District of Chhattisgarh, India

Table 5: Seeking traditional healer for treatment

Status	No.	%
Yes	339	75.33
No	111	24.66
Total	450	100

Table 6: Diseases generally villagers consult to a traditional healer/baiga/gunia

Diseases	No.	%
Genetical Disease	4	0.23
Gynaec Problems	168	8.76
Sexual Disease	72	4.26
Phycial Disabilities	512	30.33
Mental Disabilities	3	0.17
Body Pain	86	5.09
Cough	92	5.45
Cold	116	6.87
Fever	26	1.54
Cough & Cold	87	5.15
Gastric Problems	93	5.50
ENT Problems	37	2.19
ТВ	12	0.71
Leprosy	89	5.27
Malaria	23	1.36
Typhoid	45	2.66
Measles	18	1.06
Jaundice	105	6.22
Skin Disease	59	3.49
Constipation	42	2.48
Others	19	1.12
Total	1688	100

Cold 6.87, Fever 1.54, Cough & Cold 5.15, Gastric Problems 5.50, ENT Problems 2.19, TB 0.71, Leprosy 5.27, Malaria 1.36, Typhoid 2.66, Measles 1.06, Jaundice 6.22, Skin Disease 3.49, Constipation 2.48 and Others (1.12 percent).

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 Chhattisgarh on traditional health care by numerous ethno- botanists such as Oomachen and Srivastava (1996).

Drug Preparation Method and Administration, Practiced by Tribal in Bastar

In present study survey was done for documentation of drug preparation and its administration method. The information regarding the drug preparation and administration was collected from 50 traditional healers/Gunias/Baigas, knowledgeable tribal women of 8 villages in Bastar district. The information was collected with the help of questionnaire and personal interview. The drug was found to prepare from independent plant or from plant parts in combination. In some of the drugs other ingredients like honey, camphor, salt and fresh milk, butter milk, curd, ghee, coconut oil, jaggery and sugar and molasses was also mixed for the drug preparation. Most of the drugs were prepared by using traditional methods like pastels and mortals. Tribals didn't found to have any modern facilities for drug preparation like grinder mixer, juicers, pulverisers and distillation unit. Drug preparation and administration method for 39 diseases have been documented.

The drug preparation methods were very old and traditional. Most of the drugs were found to be prepared either by making fine powder in pastel and mortal or paste or decoction or extract from plants were noted to be used directly. In some of the drugs it was noted that they mix other ingredients like honey, milk, curd, ghee, butter milk, jaggery, sugar, molasses, camphor, oil etc. use of similar ingredients in administration of ethno-medicine. The administration of drug was found to be oral and in some drugs it was observed to be applied over the diseased part for quick relief. The cost of preparation for the different drugs was different, however it was observed to be less than the other methods of treatment like allopathic treatment done outside the village. The doses were noted different for 39 diseases investigated during the present study. The time taken for complete relief from the disease was also noted different for all the studied diseases. In some diseases restriction was also noted for intake of sweet, sour, cold, spicy and oily food during the period of treatment. Many drugs were advised to take in empty stomach, before and after the meals. In case of snake bite, scorpion bite and onset of pregnancy, fever and hydrocel nerve examination was found to be done by the Baidyas. Leaf chewing tests was noted for presence and absence of poison in case of snake and scorpion bite.

In view of the importance of traditional medicine which provides health services to 75-80 percent of the world population, increased demand of herbal drugs by the pharmceauticals and depleting natural plant resources, it is high time to document the medicinal utility of less known plants available in remote areas of the country.

Table 7: Drug preparation methods of ailments

1. Body ache

Common name of plant: Mahka

Botanical name: Aegle marmelos

Parts of plant: Bark

Dosage & preparation: The fresh fruit pulp and bark of custard apple are taken in equal proportion and dried under sunlight. Fine powder is prepared with the help of grinder or mortal and pastel. 1 tea spoon of powder is taken with one cup of hot water after the meal, twice in a day, for 3-4 days. During this treatment consumption of the cold substance like cured is not allowed.

Common name of plant: Bis tendu

Botanical name: Diospyros ontana

Parts of plant: Root bark

Dosage & preparation: The root bark of the Bistendu and fruit are dried in sunlight, and then fine powder is made and directly consumed with the salt twice in a day after the meal for 3-4 days. During this treatment period curd should not be eaten.

2. Chest pain

Common name of plant: Kahua/ Kurma

Botanical name: Terminalia arjuna/ Lecucas aspera

Parts of plant: Bark/ Wholeplant

Dosage & preparation: Freshly collected bark of arjun is used for preparation of extract. Equal portion of the arjun bark extract and fresh plant extract of *Lecas aspera* are boiled together for 5-10 minutes in low temperature, and then small amount of jaggery is added. This drug is consumed for chest pain, 2 tea spoons twice a day for 3-4 days for complete relief.

3. Cough and Cold

Common name of plant: Pilikateri/ Ber

Botanical name: Argemone exicana/ Ziziphus jujube

Parts of plant: Flower/ Bark

Dosage & preparation: The 10-15 dried flowers of *Argemone mexicana* and equal quantity of dried bark of *Zizphus jujube* is mixed and boiled with 1:3 water. Later it is filtered in cotton mesh. Three tea spoons filtrate with one tea spoon of honey is taken, twice a day, for two days. It gives relief from cold and cough.

Common name of plant: Adusa

Botanical name: Adhatoda vasica

Parts of plant: Leaves

Dosage & preparation: 10-15 fresh leaves of *Adhatoda vasica* are crushed and extract is stored with equal quantity of honey in bottle. Two tea spoon extract is taken twice in a day morning and evening) for 5-6 days.50 leaves of *Adhatoda vasica* is boiled in one litter of water, volume of water is reduced to one glass and half glass of cow ghee is mixed with it. 1 tea spoon of above mixture is taken for a week interval to get complete relief from cold and cough.

Common name of plant: Tulsi

Botanical name: Ocimum sanctum

Parts of plant: Leaves

Dosage & preparation: 25-30 fresh leaves of *Ocimum sanctum* (Tulsi) is crushed and extract is stored. One tea spoon of extract with one tea spoon of honey is taken, twice a day, for 3-5 days for complete recovery.

4. Cuts & wounds

Common name of plant: Ghritkumari

Botanical name: Aloe vera

Parts of plant: Pulp

Dosage & preparation: 25-30 fresh leaves of *Ocimum sanctum* (Tulsi) is crushed and extract is stored. One tea spoon of extract with one tea spoon of honey is taken, twice a day, for 3-5 days for complete recovery.

Common name of plant: Bhelawa

Botanical name: Semicarpus nacardium

Parts of plant: Bark

Dosage & preparation: The fresh root bark of Bhelava is cleaned and crushed and same proportion of pulp of *Aloe vera*, is mixed to form a paste, then it is applied over the cuts and wounded part of the body thrice a day, for 3-4 days to get complete relief.

Common name of plant: Kanghi/ Kewanch

Botanical name: Abutilonon indicum/ Mucuna pruriens

Parts of plant: Roots/ Leaves

Dosage & preparation: The roots of *Abuliton indicum*, is burnt and mixed with the equal proportion of dried leaves powder of the *Macuna pruriens* and equal quantity of coconut oil and camphor is mixed in a clean pot to form a paste. This paste is applied over the cut and wounded part of the body for thrice a day, for 5-6 days for complete healing of wounds.

5. Diabetes

Common name of plant: Dhawra

Botanical name: Anogeissuss latifolia

Parts of plant: Bark

Dosage & preparation: Fresh bark and seed of above plant is taken in equal proportion and cleaned with the water.Both are crushed in pastel and mortal with some water, then filtered in cotton mesh. Heated over low temperature for 15 minuets then again filtration is done. Two spoons of the black salt is added and preserved in a clean bottle for two days. After two days, it is used as medicine for diabetes. Two tea spoons of this formulation twice a day with 1 cup of cold water before meal is taken for 15 days to get relief.

Common name of plant: Jamun Botanical name: Syzygium cuminii

Parts of plant: Seeds

Dosage & preparation: The fresh seeds of *Syzygium cumini*, (Jamun) is washed in clean water and crushed in a pastel and mortal, then dried under the sunlight for three days. Again it is grinded and meshed in cloth to get fine powder. Little amount of jaggery is added to the preparation, then tablets of 2 grams each is formed and again dried in sun light and stored in clean bottles. Take 2 tablets twice a day in empty stomach is taken for 15 days for getting relief.

Common name of plant: Dumar

Botanical name: Ficus glomerata

Parts of plant: Fruit and bark

Dosage & preparation: The fresh fruit and bark of *Ficus glomerata* (Dumar) is dried to form powder of fruit and bark. One tea spoon of powder with half cup of cold water is taken empty stomach in morning once in a day for 15 days.

Common name of plant: Gudmar

Botanical name: Gymnema sylvestre

Parts of plant: Stem and leaves

Dosage & preparation: The dried stem and leaves of gudmar is powdered with the help of pastel and mortal.Later, it is filtered by cloth and added with liquid pulp of *Aloe vera*. The tablets are prepared and dried in the sunlight. Two tablets with half cup of hot water are taken twice a day after the meal for 15 days.

6. Delivery problem

Common name of plant: Rasna

Botanical name: Blepharispermum subsessile

Parts of plant: Roots

Dosage & preparation: The fresh roots of Rasna is taken and cleaned with water, then it is crushed in pastel and mortal to form a paste and paste is applied over the abdomen before delivery period. The roots of Rasna are tied over the fore head before 2 days of the delivery. Some times roots are wearing like neck less.

Common name of plant: Bach

Botanical name: Acorus calamus

Parts of plant: Fresh milk

Dosage & preparation: The dried powder of *Acorus calamus* and fresh milk 1:3, boiled in low flame, small quantity of sugar is added. This mixture is preserved in a cool place. One tea spoon of this medicine is taken once in a day before going to bed for 5-10 days before the delivery.

7. Dysentery

Common name of plant: Bhuiamla

Botanical name: Phyllanthus niruri

Parts of plant: Whole plant

Dosage & preparation: Extract of whole plant is extracted by crushing the plants in pastel and mortal, and then it is filtered in cotton mesh. Filtrate is used as a medicine. One tea spoon of filtrate is taken with honey, twice a day for 2-3 days for complete relief.

Common name of plant: Kudai

Botanical name: Holarrhaena antidysenterica

Parts of plant: Stem bark

Dosage & preparation: Fresh fruits of Amla are boiled in water for 5 minutes and the pulp is removed from the seed. The one part of the fruit pulp and one part of the honey is mixed well and taken thrice a day (morning evening and noon), for three days for recovery.

Common name of plant: Aithi **Botanical name:** *Helicteres isora*

Swapan Kumar Kolay / Ethno-Medicine and Health Care Practices among Tribal Community in Bastar District of Chhattisgarh, India

Parts of plant: Seeds

Dosage & preparation: The roots of the Rasna jadi collected from the forest is cleaned with help of hot water, then crushed in pastel and mortal in order to make paste. Half spoon of paste is added with one cup of the hot water and taken twice a day for two days.

Common name of plant: Amla

Botanical name: Emblica officinalis

Parts of plant: Fruits

Dosage & preparation: Equal number of leaves of each plant is crushed in pastel and mortal to extract juice.Extracted juice is used as ear drop thrice in a day, for three days. During the medication cold food items consumption is avoided.

Common name of plant: Rasna Jadi Botanical name: Blepharispermum subsessile

Parts of plant: Roots

Dosage & preparation: The roots of the Rasna jadi collected from the forest is cleaned with help of hot water, then crushed in pastel and mortal in order to make paste. Half spoon of paste is added with one cup of the hot water and taken twice a day for two days.

8. Ear ache

Common name of plant: Harra/ Bad

Botanical name: Terminalia chebula/ Ficus religiosa

Parts of plant: Fruits/ Leaves

Dosage & preparation: Equal number of leaves of each plant is crushed in pastel and mortal to extract juice.Extracted juice is used as ear drop thrice in a day, for three days. During the medication cold food items consumption is avoided.

Common name of plant: Dhatura/ Andi

Botanical name: Datura alba/ Ricinus communis

Parts of plant: Seeds/ Fruit

Dosage & preparation: 50 gm seeds of Dhatura grinded with 100 gm of Ricinus oil, heated 10-15 minutes in low temperature. Later it is filtered in a cloth and the oil is stored in bottle. 2-3 drops of oil is used thrice a day for complete relief from ear ache. During this treatment constipating excessive pulses, exposure to sun, and intake of water soon after exposure to sun are avoided.

9. Epilepsy

Common name of plant: Mahka

Botanical name: Aegle marmelos

Parts of plant: Fruit

Dosage & preparation: Fruit pulp of Aegle marmelos is added with same proportion of milk and mixed thoroughly. Sugar is added as per the taste. 2 spoons of the formulation are given twice a day (morning and night) for 15 days.

Common name of plant: Brahmi/ Jhadrin/ Shankpushpi

Botanical name: Bacopa monnieri/ Gloriosa superb/ Evolvulus alsinoides

Parts of plant: Leaves/ Leaves/ Leaves

Dosage & preparation: Bacopa monnieri (Brahmi), Evolvulus alsinoides (Shankpushpi), Gloriosa superb (Jhagrahin) and cardemon is taken in equal proportion and grinded in patel and mortal. This mixture is stored in a bottle. 1/2 -1 gm of mixture with 50 gm of honey or ghee is taken twice in a day for 20 days to get substantial relief.

Common name of plant: Satawari

Botanical name: Asparagus racemosus

Parts of plant: Roots

Dosage & preparation: The roots of Asparagus racemosus (Satawari) are grinded and taken with sugar for 60 days. If a person is under attack of epilepsy, few drops of extract of root is poured in nose. The patient becomes normal

10. Eye problems

Common name of plant: Choulai bhaji

Botanical name: Amaranthus virdis

Parts of plant: Leaves

Dosage & preparation: The leaves of the plant are crushed and extract is filter in cotton mesh. The two drops of extract is applied in eye before sleeping in night for 5-10 days to get relief from eye problem and blindness. Some times the paste of the Amoranthus virdis leaves are used over the eyes before sleeping in night.

Common name of plant: Ghritkumari

Botanical name: Aloe vera

Parts of plant: Leaf pulp

Dosage & preparation: The leaf pulp of Aloe vera is applied directly over the eye in many eye problems and one tea spoon of pulp with one teaspoon of honey is mixed and taken once a day in night, for 20-25 days to get relief.

11. Eczema

Common name of plant: Atanjari/ Bhuikumhara

Botanical name: Helicteres isora/ Pueraria tuberose

Parts of plant: Leaves/ Leaves

Dosage & preparation: An equal quantity of leaves of Helicteres isora (Atanjari) and Pueraria tuberose (Bhuikumhara) are dried in the sunlight and grinded to make a fine powder. Later it is mixed with cow ghee and pinch of camphor is also mixed to make a paste. Prepared paste is applied over the affected part of the body. It gives relief in a week interval.

12. Fever

Common name of plant: Bach/ Giloy

Botanical name: Acorus calamus/ Tinospora cordifolia

Parts of plant: Root/ Stem

Dosage & preparation: The bach root and Giloy stem are taken in the same proportion and dried in sun light. Fine powder of above is made in pastel and mortal. Take half tea spoon of the powder with hot water, twice in a day (morning and evening) for three days to get relief.

Common name of plant: Bantulsi/ Adusa/ Bhuileem

Botanical name: Eranthemum pullchellum/ Adhatoda zeylanica/ Andragrophis paniculata

Parts of plant: Leaves/ Leaves/ Leaves

Dosage & preparation: 50 gm leaves each of *Adhatoda zeylanica, Androgrophis paniculata and Eranthemum pullchellum* is grinded in 100 ml of water and jaggery is added as per the taste. Take one tea spoon of leaves extract daily morning and evening for 2-3 days. *Eranthemum pullchellum* fresh leaves extract is applied over the fore head for immediaterelief from fever.

13. Fracture

Common name of plant: Anantmool/ Harsingar

Botanical name: Hemidesmus indicus/ Nyctanthes arbortristis

Parts of plant: Entire plant/ Leaves and fruits

Dosage & preparation: The entire plant part of the *Hemidesmus indicus* crushed in pestle and mortal to for paste then mixed with mustard oil. The prepared paste of is applied over fracture part. Bamboo stick is tightly tied over the fracture part as plaster. After 5-6 days plaster is removed. Same way plaster is done thrice over fracture part for complete relieve. While applying plaster in fracture part, the leaves and fruits of *Nyctanthes arbor tristis*, dried in the sunlight and fine powder is prepared, then some sugar is added. Two tea spoons of powder with half tea spoon of cow ghee mixed and taken orally twice a day for 15 days till the removal of plaster.

Common name of plant: Hadjod

Botanical name: *Cissus quadrangularis*

Parts of plant: Stem

Dosage & preparation: The name of the plant is hadjor which literally means joining of bones. The stem portion of the plant is collected and cleaned with the water. Paste is prepared by crushing in pastle; a little amount of camphor is added. The hairs are removed over the affected part and fractured bone is properly joined and paste is applied. Later plaster of bamboo sticks is tied over affected area. After 5-6 days plaster is removed. Similarly plaster is done in 15 days approximately. Bone is broken in to 15-20 pieces can be joined in this way.

14. Giddiness

Common name of plant: TulsiB

otanical name: Ocimum basilicum

Parts of plant: Entire plant

Dosage & preparation: The above plant is dried under sun light and powdered. This powder is dipped in one glass of water for whole night, in morning it is filtered by using cotton mash and waste part is removed. One cup of filtrate is taken in empty stomach, for thrice a day, for 5-6 days.

15. Head-ache

Common name of plant: Keokand

Botanical name: Costus speciosus

Parts of plant: Rhizomes

Dosage & preparation: The rhizomes of keokand collected from forest are crushed in pastel and mortal and extract is stored in the bottle. One tea spoon extract is taken with honey twice a day for two days to get complete relief. Some times paste of fresh leaves is applied over forehead for getting instant relief.

16. Hydrocel

Common name of plant: Jangli haldi/ Bhelava

Botanical name: Curcuma amada/ Semicarpus anacardium

Parts of plant: Rhizomes/ Seeds

Dosage & preparation: The rhizomes of *curcuma amada* are crushed and extract is heated with same proportion of mustard for one hour. The mixture is applied over the affected part, twice a day for five to seven days. Simultaneously, the seeds of the *Semicarpus anacardium* (Bhelava) is heated with mustard oil and tied over the left or right arm for seven days the size reduces. The sour substances like tomato and curd are strongly restricted in during the period of treatment.

Common name of plant: Arandi

Botanical name: Ricinus communis

Parts of plant: Leaves

Dosage & preparation: The mature leaves of *Ricinus communis* is heated with Karanji oil. These leaves are directly applied in affected area for 10-15 times in evening for three days. During this treatment half teaspoon of *Ricinus communis* seed oil is also consumed with jaggery for three days to get relief.

17. Irregular Menses

Common name of plant: Dhawai/ Gudahal

Botanical name: Woodfordia fruticosa Dhawai/ Hibiscus rosa-sinensis Gudahal

Parts of plant: Corolla/ Flower

Dosage & preparation: An equal portion of fresh corolla of Dhawai and Gudahal is crushed to make a paste. One tea spoon of the paste is dissolved in one cup of hot milk and some sugar is added and taken twice in a day for 15 days to overcome the problem.

18. Itching

Common name of plant: Chitrak/ Nirgundi

Botanical name: Plumbago zeylanica/ Vitex negundo

Parts of plant: Entire plants/ Entire plants

Dosage & preparation: Both the plants are crushed to get extract and are mixed with mustard oil and pinch of camphor. This mixture is applied on affected part of the body, twice a day for a week to get complete relief.

19. Jaundice

Common name of plant: Muli/ Amar bel

Botanical name: Raphanus sativus/ Cuscuta reflexa

Parts of plant: Leaves/ Leaves

Dosage & preparation: Raphanus sativus (Muli) leaves are grinded with same portion of Cuscuta *reflexa* plant in pastel and mortal and extract is collected in the bottle. One tea spoon extract with pinch of sugar is taken twice in a day for 7 days to get relief from jaundice.

Common name of plant: Bhui Amla/ Saan/ Chirchita

Botanical name: Phyllanthus nirurai/ Crotalaria sericea/ Achyranthes aspera

Parts of plant: Whole plant/ Leaves/ Roots

Dosage & preparation: Whole plant of *Phyllanthus nirurai* (Bhui Amla) and leaves of *Crotalaria goreensis* (Saan) are powdered and tablets are prepared by mixing molasses. Two tablets are taken with half cup of curd in empty stomach in morning and evening for 7 days to get relief from the Jaundice. The roots of *Achyranthes aspera* is tied over the neck for 7-8 days for early recovery from jaundice.

Common name of plant: Mehandi/ Mahaleem

Botanical name: Lawsonia alba/ Melia azadirach

Parts of plant: Leaves/ Bark

Dosage & preparation: The leaves of Lawsonia inermis (mehandi) and bark of Melia azedarach 1:1 is taken for the preparation of decoction. Decoction is kept for the whole night and taken in the morning and evening with some sugar for 7 days to get relief from jaundice.

Common name of plant: Char/ Kahava

Botanical name: Buchanania lanzan/ Terminalia arjuna

Parts of plant: Bark/ Bark

Dosage & preparation: The bark of two plants are taken in same proportion and dried in sun light then it is powdered in pastel and mortal. The half tea spoon of this powder is taken with one teaspoon of curd, twice in a day (morning and evening), for ten days.

Common name of plant: Sarpokha/ Mahua

Botanical name: Tephrosia purpurea/ Madhuca latifolia

Parts of plant: Whole plant/ Bark and seed

Dosage & preparation: Mix the *Tephrosia purpurea* whole plant and bark and seed cake of *Madhuca latifolia* 1:1:1 and dried under sun light. A fine powder is prepared by grinding in pastel and mortal. One teaspoon of the powder is taken with one cup of buttermilk, once in a day in empty stomach for seven days to get complete relief.

20. Joint Pain

Common name of plant: Shatavari

Botanical name: Asparagus racemosus

Parts of plant: Roots

Dosage & preparation: The roots of shatavri were collected from forest and cleaned with hot water. The central part of root is removed and chopped in to small pieces. One portion chopped root with three portion water is boiled till the volume reduces to half, then jaggery or sugar is added as per the taste and consumed orally 2-3 tea spoons daily with milk for 15-16 days.

Common name of plant: Nirgundi/ Karanji

Botanical name: Vitex negundo/ Pongamia pinnata

Parts of plant: Root, stem and leaves/ Root, stem and leaves

Dosage & preparation: Root, stem and leaves of the plants are freshly collected and cleaned with water, plant parts are grinded with help of pestle and mortal, and then it was filtered with the help of cotton cloth. The filtrate is boiled along with equal portion of pongamia oil for 15-30 minutes till the formation of vapor, the extract of plant mixes in oil. Camphor is added to avoid bitter smell. This oil is applied over the joint of the body twice in a day for one month.

Common name of plant: Keokand

Botanical name: Costus speciosus

Parts of plant: Rhizome

Dosage & preparation: The rhizome of Costus is collected from the forest and washed with water, then it is grinded with the help of pestle and mortal. Grinded rhizome is filtered with the help of cotton mesh. 2-3 spoon filtrate of the plant is consumed twice a day for 10-15 days.

21. Kidney Stone

Common name of plant: Pathribhaji

Botanical name: Boerhaavia diffusa

Parts of plant: Leaves

Dosage & preparation: The leaves extract of *Boerhavia diffusa* is directly taken by the person in empty stomach, in morning, after one hour 1-2 glass of fresh water is consumed for dissolving stone. This treatment is done for 15 days. The kidney stone is completely get dissolved.

Common name of plant: Kulthi

Botanical name: Mycrotyloma uniflorum

Parts of plant: Seeds

Dosage & preparation: The plant part of Kulthi is crushed and extract is taken out. One tea spoon of extract with one tea spoon of water is taken twice a day, for 10-15days. Simultaneously the kulthi seeds are boiled with water and filtered in cotton mesh. The filtrate is taken one glass in empty stomach, in morning, for 30 days.

22. Leucorrhoea

Common name of plant: Palas/ Anar

Botanical name: Butea monosperma/ Punica granatum

Parts of plant: Flowers/ Flowers

Dosage & preparation: An equal proportion palas and anar flowers are dried in sun light and powdered in pastel and mortal. The powder is preserved in a pot with a little portion of black salt. One tea spoon of the powder with one tea spoon of cow ghee is taken once in a day before sleeping in night, for 6-8 days for relief.

Common name of plant: Ramdatun

Botanical name: Smilax macrophylla

Parts of plant: Stems

Dosage & preparation: The fresh stems of *Smilax macrophylla*, (Ramdatun) is cut in to small pieces and dried in sun light. Dried stem is powered and boiled with 3:1 water. Volume is reduced to one part then honey is added as per the taste. This decoction is used three spoons twice a day in empty stomach for five days.

23. Malaria

Common name of plant: Bhuineem/ Giloy/ Neem

Botanical name: Andrographis paniculata/ Tinospora cordifolia/ Azadiractaindica

Parts of plant: Whole plant/ Stem/ Bark

Dosage & preparation: Take the equal proportion of Bhuineem whole plant, Giloy stem and bark of the Neem. 3 times of water is added and boiled over the low flame, till the volume is reduced to 1 portion. After cooling it is filer in a cotton cloth. Half cup of this extract with sugar or honey is taken in morning for five days for complete relief. This formulation is also consumed in the form of tablets, popularly known amongst tribal as malariya goti. The method of preparation of malaria goti is same. The 3-5 tablets are taken with the hot water or milk for five days for recovery from malaria.

24. Male Impotency

Common name of plant: Thelka/ Tejraj

Botanical name: Alangium salviifolium/ Peucedanum nagpurense

Parts of plant: Entire plants/ Entire plants

Dosage & preparation: The plant parts of these plants are taken in equal proportion and crushed to make paste. One tea spoon of paste with one cup of cow milk is taken twice a day for 5-10 days for getting relief.

25. Milk secretion

Common name of plant: Anantmul/ Satawri

Botanical name: Hemidesmus indicus/ Asparagus racemosus

Parts of plant: Roots/ Fibre

Dosage & preparation: The fresh roots of *Asparagus racemosus* and *Hemidesmus indicus* is cleaned with the water and central fibre of the satawri is removed and chopped in to small pieces then boiled for half an hour. The boiled root and its extract in water is directly taken with one cup of fresh milk and sugar, twice a day (morning and evening) for 5-10 days. In two to three days of consumption milk secretion increases.

Common name of plant: Dudhi

Botanical name: Euphorbia hirta

Parts of plant: Whole plant

Dosage & preparation: The whole plant of the Dudhi is cleaned with fresh water and extract of the plant is added with the same proportion of fresh milk and honey. This formulation is taken by the lady once in a day before sleeping in the night, for 5-6 days to get increase in milk secretion.

26. Onset of Pregnancy

Common name of plant: Keokand

Botanical name: Acorus calamus

Parts of plant: Roots

Dosage & preparation: The roots of *Acorus calamus* are dried under sun light and powdered in pastel and mortal. One tea spoon powder is given with half tea spoon ghee to both males and females by the baidya in Devguri (sacred place) outside the village. The powder is taken once in a day before going to bed for 10-15 days.

27. Painful menses and excessive blood discharge

Common name of plant: Mahka/ Satawri

Botanical name: Aegle marmelos/ Asparagus racemosus

Parts of plant: Root/ Root

Dosage & preparation: The dried root of *Asparagus racemosus* equal proportion of dried fruit pulp of *Aegle marmelos* powdered in pastel mortal. One tea spoon of powder is taken with one cup of hot milk once in a day for 5-6 days. The cost of treatment is Rs. 50/ episode.

Common name of plant: Jhagrin

Botanical name: Gloriosa superb

Parts of plant: Root

Dosage & preparation: The small pieces of Jhagrin root dipped in to butter milk for two days, then roots are removed from honey and dried in the sunlight. The one piece of dried root is taken with one cup of milk, twice in a day for 5-6 days.

Consumption of cold water and food, excessive intake of sweet and sour food are avoided.

Consumption of cold water and food, excessive intake of sweet and sour food are avoided.
28. Paralysis
Common name of plant: Akarkara
Botanical name: Spilanthes oleracea
Parts of plant: Entire plants
Dosage & preparation: The plant parts of Akarkara are crushed with water and extract is collected. One tea spoon extract is
taken with honey twice a day, for one month to get complete recovery.
Common name of plant: Siris/ Sehra
Botanical name: Albizzia lebbek/ Bauhinia retusa
Parts of plant: Barks/ Barks
Dosage & preparation: Barks of above two plants are taken in equal proportion and powdered in pastel and mortal. One tea
spoon of the powder is taken with one cup of hot water, twice a day (morning and evening) for one month for getting relief.
29. PilesCommon name of plant: Tillai/ Bargad
Botanical name: Wendlandia exserta/ Ficus benghalensis
Parts of plant: Barks/ Fruits
Dosage & preparation: The bark of Tillai and dry fruits of Bargad in equal proportion is powdered. The one tea spoon of this powder is taken with one cup of butter milk, twice in a day for 15 days. It gives complete relief to patients of chronic piles.
Common name of plant: Farsa/ Modga
Botanical name: Butea monosperma/ Lannea grandis Parts of plant: Gum/ Bark
Dosage & preparation: The gum of the Lannea grandis, (Modga) and Butea monosperma (Farsa) bark is taken in equal
quantity, dried under the sun light and powdered. The powder is mixed with cow ghee to form paste. This paste is applied over
the knots of piles for a week. The knots are dissolved and patient gets quick relief.
Common name of plant: Tillai/ Fatera
Botanical name: Wendlandia exserta/ Gardenia turgida
Parts of plant: Bark/ Bark
Dosage & preparation: The bark of Tillai and Fatera is powdered. Powder and cow ghee is mixed to make paste. The paste is
applied over the knot of piles and tied by thread. In a week interval patient gets relief from piles. The cost of treatment is Rs.
70/ episode.
Common name of plant: Zimikand
Botanical name: Amorphophallus paeonifolius
Parts of plant: Root
Dosage & preparation: Dried root of zimikand is powdered and a pinch of black salt is mixed. Equal quantity of molasses
(sugar cane juice) is added to make tablets of 5 gm each. 3 tablets are taken twice a day for one month to get complete relief.
30. Respiratory Disorder (Asthma)
Common name of plant: Amla/ Amarbel
Botanical name: Emblica officinalis/ Cuscuta reflexa
Parts of plant: Fruits/ Fruits
Dosage & preparation: The fruit pulp of Emblica officinalis and Cuscuta reflexa in equal quantity is dried in the sunlight for three
days, then grinding is done to prepare fine powder. One tea spoon of this powder is taken with one tea spoon of honey; twice
in a day (morning and evening) for 10-15 days gives quick relief.
31. Stomach Pain
Common name of plant: Bargad
Botanical name: Ficus religiosa
Parts of plant: Leaves and fruits
Dosage & preparation: The fresh leaves and fruits of bargad, is boiled with 1:4 water over low flame, then it is cooled and
sugar is added. One tea spoon of this decoction is taken with one glass of water in empty stomach for three to five days to get
complete relief.
32. Swelling
Common name of plant: Nirgundi
Botanical name: Vitex negundo
Parts of plant: Entire plants
Dosage & preparation: The plant parts of Nirgundi is crushed with water and boiled for 15 minutes, and then it is filtered by
using cotton mesh. Now in same proportion of filtrate, Karanji oil is heated in a pot and filtrate is mixed and boiled till the
formation of vapours then, pinch of camphor is added and stored in clean bottle. This Nirgundi oil applied over the affected
part with the help of soft hands or with cotton cloth. This is done twice a day for 3 days, swelling gets disappeared.
33. Snake bite
Common name of plant: Bhuileem / Sarpagandha
Botanical name: Andrographis paniculata/ Rauvolfia serpentina
Parts of plant: Entire plants/ Roots
Dosage & preparation: An equal quantity of Andrographis paniculata plant and fresh roots of Rauvolfia serpentina is crushed
with water to make paste. One part of paste is used directly, while second part is boiled with water for 15 minutes. One cup
of this decoction is taken and paste is applied over the snake bite part of the body. Simultaneously baidya perform snake bite
test by giving the fresh leaves of the <i>Rauvolfia serpentina</i> for chewing, if it tastes bitter then poison has completely excreted from the body and if it does not taste bitter the poison is in the body. This treatment is done by the Baidya for snake bite of poisonous
The body and it it upes not laste differ the poison is in the body. This treatment is done by the baldva for shake bife of poisonous

the body and if it does not taste bitter the poison is in the body. This treatment is done by the Baidya for snake bite of poisonous

of Bastar take leaves of *Madhuca indica* (Mahua) and rub over the snake bite person from top to bottom for 5-10 times, this also gives relief in case of snake bite.

Common name of plant: Gunji/ Khas

Botanical name: Abrus precatorius/ Vetivera zizanoides

Parts of plant: Whole plant/ Whole plant

Dosage & preparation: The whole plant of *Abrus precatorius* and *Vetivera zizanoides* are crushed with water to remove extract. One tea spoon of extract is taken with hot water in every half an hour interval; it gives relief in case of snakebite.

Common name of plant: Jhagrin

Botanical name: Gloriosa superba

Parts of plant: Roots

Dosage & preparation: Fresh roots of *Gloriosa superba* is chopped in to small pieces and boiled with the water and filtered in cotton mesh. Filtrate is mixed with sugar /jaggery. One tea spoon of this decoction with one tea spoon of ghee, in interval of one hour. Snake poison is completely getting removed within the 2-3 hours.

34. Scorpion Bite

Common name of plant: Manjita

Botanical name: Rubia cordifolia

Parts of plant: Leaves

Dosage & preparation: Either fresh leaves of *Rubia cordifolia* is directly consumed by the person or fresh leaves are crushed and extract is taken in one tea spoon with pinch of black salt in every half an hour interval. The poison of scorpion is excreted from the body.

Common name of plant: Peng

Botanical name: Celastrus paniculata

Parts of plant: Seeds

Dosage & preparation: The dried seeds of *Celastrus paniculata* are grinded and paste is formed with little water.Paste is applied in stung part of the body, for twice in one hour.

35. Sexual diseases

Common name of plant: Bhilari

Botanical name: *Peucedanum nagpurense*

Parts of plant: Leaves

Dosage & preparation: The dried leaves of Bhilari is powdered and filtered in cotton mesh. Powder and water is mixed in 1:3 and kept for two nights, then supernatant water is removed and preserved in a clean bottle. The three spoons of this decoction is taken with one tea spoon of honey, twice a day for 5 to 6 days for relieving any type of sexual diseases.

Common name of plant: Safed musli/ Kali musli

Botanical name: Chlorophytum tuberosum/ Curculigo orchioides

Parts of plant: Roots/ Roots

Dosage & preparation: An equal quantity of fresh roots of safed musli and kali musli is crushed in pastel and mortal to form paste. One tea spoon of paste with one tea spoon of honey is taken thrice in a day (morning, noon and evening) for 10 to 15 days to get relief.

Common name of plant: Jhagrin

Botanical name: Gloriosa superba

Parts of plant: Roots

Dosage & preparation: The small pieces of Jhagrin root dipped in to honey for two days, then roots are removed from honey and dried in the sunlight. The one piece of dried root is taken with one cup of water, twice in a day for 5-6 days. Consumption of cold water and food, excessive intake of sweet and sour food are avoided.

36. Tooth ache and Pyorrhea

Common name of plant: Ramdaton

Botanical name: Smilax macrophyla

Parts of plant: Whole plant

Dosage & preparation: The whole plant is crushed to take out extract, black salt and clove oil is added to make paste and is applied over the affected teeth and gum for once in a day, for 4 days to get complete relief. During the medication intake of cool and very hot, sour, spicy or oily food is avoided. The cost of treatment occurred Rs. 50/ episode. The soft stems of *Smilax macrophyla* is also used as tooth brush, this also gives relief from toothache and pyorrhoea.

Common name of plant: Koliyapad

Botanical name: Dioscorea daemona

Parts of plant: Whole plant

Dosage & preparation: The whole plant of the *Dioscorea daemona* is crushed and boiled in 1:3 water, then black salt and pinch of powder of *pipper nigrum* is added. The mixture is allowed to get cool. This mixture is used for gargling twice a day, for 15 days gives relief from toothache and pyorrhoea. The steam of plant *Dioscorea daemona* is inhaled to get relief from toothache.

Common name of plant: Sarponkha

Botanical name: Tephrosia purpurea

Parts of plant: Whole plant

Dosage & preparation: The whole plant of *Tephrosia purpurea* is crushed and used as a tooth paste. The twigs are also used as a tooth brush; both of them give relief from toothache.

37. Tuberculosis

Common name of plant: Bhelwa Botanical name: Semicarpus anacardium

Indian Journal of Research in Anthropology / Volume 2 Number 1 / January - June 2016

Parts of plant: Seeds

Dosage & preparation: The equal proportion of seeds and bark dried in sunlight for five days till the removal of oil then seeds are grinded to form powder. One tea spoon of powder is mixed in one tea spoon of honey and taken twice in a day for 15-20 days to get relief from tuberculosis. During this treatment cold and sour substance are restricted to eat.

38. Weakness

Common name of plant: Keokand/ Satawri

Botanical name: Costus speciosus/ Asparagus racemosus

Parts of plant: Roots/ Roots

Dosage & preparation: An equal quantity of the roots of keokand and satawri are crushed and boiled in 1:4 water.Boiling is done till the reduction of volume to half, then again it is boiled with sugar 1:3 till the formation of granules. The granules are stored in clean bottles. This preparation is known as Satawari kalpa. The one teaspoon of satawari kalp is taken with one cup of milk, twice in a day to overcome weakness.

39. Worms

Common name of plant: Madar Botanical name: *Calotropis procera* Parts of plant: Roots Dosage & preparation: The fresh roots of *Calotropis procera* is crushed with water and filtered in cotton mesh.Half tea spoon of this extract with one tea spoon of honey is taken twice a day for three day to get relief from worms Common name of plant: Kurai

Botanical name: Holarrhena antidysenterica

Parts of plant: Bark

Dosage & preparation: The bark of the *Holarrhena antidysenterica* is crushed with water and filtered by cotton mesh. One tea spoon of the extract is taken with one tea spoon twice a day, for 3-5 days to recover from worms problem.

Common name of plant: Kewanch Botanical name: Mucuna pruriens Parts of plant: Leaves

Dosage & preparation: 30-50 leaves of *Mucuna pruriens* (Kewach) with 5 grains of black pepper is grinded to form powder and is taken with water for twice a day for 3 days. It gives relief from the worm problem. The leaves and hairs of *Mucuna pruriens* (Kewach) is dried in sunlight and powdered in pastel and mortal. Powder is added with molasses to form small tablets. 2 tablets with one cup of water are taken for two to three days. Worms get completely destroyed.

Recommendations

To integrate the tribals alienated from traditional practices of forest conservation, it is essential to strengthen the tribal institutions which are many instances. A place for traditional herbal remedies in the health care system will be established only if recommendations for their use are based on studies that make them credible and acceptable.

- Maintaining Indigenous Medicine's Autonomy from the State Government Control throughout the discussions is *traditional healers / Baigas/ Gunias*.
- Developing Appropriate Policies and Protection for Indigenous Knowledge between health agencies, researchers and interested parties.
- Capacity Building training programmes, exposure visits and mass awareness campaign should be conducted.
- Mass Awareness Campaign for sensitizing the NTFPs/MAPs collectors to stop destructive harvesting of NTFPs/MAPs and overcome from the exploitative marketing. In this context workshop should be conducted at the presenting activities covering folk songs and plays related to the campaign. Posters and pamphlets should also be distributed amongst the villages.

- Marketing linkages are to be developed by contacting traders, *traditional healers/ Baigas/ Gunias*, pharmaceutical companies, Govt. departments (CGMFP Federation, Khadi Gram Udyog Kendra) etc.
- Mentorship between Youth and *traditional healers/ Baigas/Gunias* felt that they were losing valuable knowledge because there was no interest from youth in learning Indigenous knowledge or pursuing careers as medicine people. It was suggested that schools could credit young people for apprenticing with *traditional healers/Baigas/Gunias*.
- Indigenous Medicine and Knowledge are Colonized. The need to assist in nurturing a healthy respect for traditional medicine by health care providers/ leaders and community is essential.
- Ttraditional healers/Baigas/Gunias thought school is where they should be learning about good diets and traditional knowledge of medicines.
- Conservation Practices of medicinal plants of Tribals in Bastar as they know the value of plants in their life. They also know this fact that plants in forest have great importance in their livelihood and health security; hence they have learnt the sustainable use of their forest resource.

Acknowledgement

I should thanks to Prof. M.M. Hambarde, Director General of Chhattisgarh Council of Science and Technology, Raipur for provided financial assistance of this research study.

Conclusion

The use of plant species as remedies is probably as ancient as men itself or the most part, the knowledge of medicinal plants is still transmitted orally. This research study will provide adequate view to academics and researchers working on the promotion and restoration of Indigenous Knowledge Systems (IKS) of tribal communities of India as well as in world. Globally, about 85 percent of the traditional medicines were used for primary health care which are derived from plants. There is a need to document the indigenous knowledge related to Indian herbs and plants and their medicinal and other uses and convert it into easily navigable computerize data base for easy access and to secure patenting rights; to discourage other countries for patenting Indian heritage; to transfer knowledge to all sectors who are interested to know about our Indian Systems of Medicine; most of our knowledge is in Sanskrit, Arabic, Persian and other classical languages, which needs to be translated to other modern languages. It has been realized that medicinal herbs are going to play an important role in future material. These herbal drugs provide strength to the body organs and stimulate normal functioning. The herbal drugs act selectively and gently without disturbing other system. Whereas, modern medicine affects several metabolic activity in the human system and has side effects which makes body more susceptible to other diseases. It is anticipated that some significant conclusions have been emerge from the study. What can be generally surmised at this stage, are some of the broader implications and expected contributions of the research. First, over the last decade or so, increasing interest in traditional knowledge, particularly regarding medicinal plants, has been fraught with debates regarding intellectual property and traditional resource rights. Often, driven primarily by interests and forces external to indigenous communities, these remain extremely complex and indeed, urgent issues with which policy maker and stakeholders from both the North to South and East to West are actively grappling in various international floras. But this highly politicized focus at the global level seems to have diverted research attention away from the local context, i.e. from a real understanding of the actual and potential roles of traditional health knowledge and practices in addressing arguably the most urgent health care needs of growing populations in resources constrained developing countries like India. Hence, it is hoped that the present study and others like it can, in the first instance, help to redirect some research attention to the community level. Second, as this study has demonstrate, at least in the context of rural communities in Bastar District of Chhattisgarh of India, traditional knowledge regarding the use of medicinal plants is far from being a corpus of wisdom or expertise generally presumed to be restricted to the male dominated elite of professional traditional health practitioners. Indeed, most of the traditional treatments used in the communities studied are collected, prepared and administered by ordinary men and women at the household level. Hence, this implies that those 70 percent of the population, who are said to rely on traditional plant derived medicines, do not invariably consult professional practitioners. Indeed, the fact that traditional health knowledge is so pervasive and the use of local medicinal plants so widespread has paramount implications, which simply cannot be ignored by those concerned with health development and practitioner in the closely allied field of natural resources management. Finally, it has become evident that research and development efforts must also aim to identify and address the challenges and threats faced by traditional health knowledge systems, in Bastar. The ultimate goal is to strengthen and improve this vast knowledge base for the benefit of the great majority of the developing world who have survived on it for centuries and will continue too do so into the foreseeable future. It can be concluded that the local and tribal people of Bastar district have very good knowledge on the use of medicinal plants. But such knowledge of medicinal plants is restricted to a few persons. Therefore it is necessary that suitable requirements are needed in order to protect the traditional knowledge in particular area with reference to medicinal plant utilization and it was found that traditional ethno-medicine still persists among the tribal's in Bastar District of Chhattisgarh.

References

- Bhalla, N.P., Sahu, T.R., Mishra, G.P. & Dakwala, R.N., 1982. Traditional plant medicine of Sagar Madhya Pradesh, J Econ Taxon Bot, 3, P.P.23-32.
- 2. CMO 2013 District Hospital, Jagdalpur, District

28

Bastar, Chhattisgarh.

- 3. Hemadri, Koppula & Rao, S.S., Folk medicine of Bastar, J Ethnobot. 1989; 1: 61-66.
- Oommachans, M. & Shrivastava, J L, 1996. Flora of Jabalpur ; Scientific publishers, Jodhpur, India, p. p. 319.
- Smvastar, S., 1996. The Flora of Western Tribals of Madhya Pradesh, Scientific Publishers Jodhpur, p.p 26-28.
- Verma, D.M., Balkrishna, N.P. & Dixit, R.D., 1993. Flora of Madhya Pradesh; Botanical Survey of India, Vol.1.

Indian Journal of Trauma and Emergency Pediatrics

Handsome offer for subscribers!!

Subscribe **Indian Journal of Trauma and Emergency Pediatrics** and get any one book or both books absolutely free worth Rs.400/-.

Offer and Subsctription detail

Individual Subscriber One year: Rs.7650/- (select any one book to receive absolutely free) Life membership (valid for 10 years): Rs.76500/- (get both books absolutely free)

Books free for Subscribers of **Indian Journal of Trauma and Emergency Pediatrics.** Please select as per your interest. So, dont' wait and order it now.

Please note the offer is valid till stock last.

CHILD INTELLIGENCE By Dr. Rajesh Shukla ISBN: 81-901846-1-X, Pb, vi+141 Pages Rs.150/-, US\$50/-Published by World Information Syndicate

PEDIATRICS COMPANION By **Dr. Rajesh Shukla** ISBN: 81-901846-0-1, Hb, VIII+392 Pages Rs.250/-, US\$50 Published by **World Information Syndicate**

Order from **Red Flower Publication Pvt. Ltd.** 48/41-42, DSIDC, Pocket-II, Mayur Vihar, Phase-I Delhi - 110 091 (India) Tel: 91-11-22754205, 45796900, Fax: 91-11-22754205 E-mail: redflowerppl@gmail.com, redflowerppl@vsnl.net Website: www.rfppl.co.in