

Ethno-Medicinal Plants Used For Jaundice from Konkan Region, Maharashtra, India.

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ABSTRACT: Tribal people from Konkan region provide traditional medicines in curing Jaundice. Tribal communities like Mahadevkoli, Thakur and Katkari residing in and around Mahalmirya forest in Raigad district. Majority of the formulations are prepared in the form of decoction. For which freshly collected medicinal plant parts are used. Some local herbalist use single drug and administered orally to cure jaundice. The present paper deals with different ethno botanical practices and their use patterns performed by local Vaidus and Bhagats.

KEYWORDS : Jaundice, Hepatitis, Ethno medicinal plants, Tribal, Konkan region.

I. INTRODUCTION:

The value of medicinal plants to the mankind is well known. It is estimated that 70-80% of the people worldwide depends on traditional health care system and largely on herbal medicines. (Pei Sengji, 2002, Shanley and Luz, 2003). Jaundice is the most common of all liver disorders. Jaundice is known as Hariman disease in Rig-veda (8000 BC).The first record of Hepatitis was reported by Hippocratic School in 200B.C (Nene, 2007).Jaundice is recognised disease from Charaka (700 BC) and it is called as Kamala and herbal treatments are prescribed. (Vidyalankar, 1994). Kamble and Kulkarni (2010) reported plants used to cure jaundice from Bhor region of Maharashtra. In this survey, 18 plants are reported and different administrations are given to cure disease. The present study carried out in the region of Konkan.

Symptoms of Jaundice : Jaundice may be caused by an obstruction of bile ducts which normally discharge bile salts and pigments into the intestine. It is caused by bilirubin which comes from red blood cells. The colour of the skin and urine vary depending on the level of bilirubin. The yellow discoloration of the skin and mucous membranes occur due to an increase in the bile pigments means, bilirubin in blood. When the level of the bilirubin mildly elevated, they are yellowish. When it's high; they tend to be brown colour. It disturbs the function of liver and consequently secretion of bile. The symptoms of patients, eyes and urine become yellow, and feel to extreme weakness, headache, and fever, loss of appetite, severe constipation, nausea, and yellow coloration of the eyes, tongue, skin and urine, Haemoglobin, the iron containing chemical in red blood cells that carries oxygen, became low that is caused by high levels in blood of the chemical bilirubin and fatigue ultimately and succumbs to jaundice in case of severe attack. The obstruction of the bile ducts could be due to gallstones or inflammation of the liver, which is known as hepatitis and is caused by virus. Jaundice may result from various diseases or conditions that affect the liver, like Hepatitis A, Hepatitis B, Hepatitis C, Hepatitis D, Hepatitis E, Auto immune hepatitis, Liver cirrhosis, Liver cancer, Haemolytic anaemia and Malaria. There is no unique treatment for jaundice and hepatitis by prescribing modern allopathic and homeopathic medicine. Jaundice is a viral disease and spread through poor sanitation and contaminated water and foods in urban and rural areas of India. In this context, the present study is carried out with special emphasis on documentation of medicinal plants used by tribal people for jaundice and hepatitis. Chemical remains in the blood are removed after the herbal treatment.

Study area: Independent Kulaba District came into existence on 1869 .But now it is known as Raigad district since 1 May 1981. It occupies an area-7148 K.M. and compared it with Maharashtra state, it is 2.32%. It includes 15 tahsil. It lies between 17° 51' to 19° 80' North latitude and between 72° 51' to 73° 40' East longitudes. As per the census -2011, the population of district was -26, 35,394. Raigad district has fulfil forest area is about -1606.48 sq. K.m. The study area of Mahalmirya forest was rich in medicinal plants biodiversity came in Pen taluka with altitude ranging from 563 meters above the sea level. It is a type of top evergreen forest, Semi- evergreen forest, Moist deciduous forest and thorny, scrubs forests etc. which includes an area 566.559 hector and divided into two compartments, Pen and vadkhal.The average Rainfall is 2000-2300 m.m. Temperature ranges from -28°-38° c The main tribes of study area are Thakur, and Mahadevkoli (land holders) and Katkaris (Marginal or landless), others are Dhangers, Sonars, Mali and kunbi etc.The diseases found in this

area are malaria, typhoid and jaundice etc. Though the jaundice is an important disease contaminated of drinks, water and foods exclusive studies on it are not too much done in this area.

II. METHODOLOGY:

The different survey was conducted during 2013-2014. Ethno medicinal plants traditionally used in jaundice information was collected from age-old people, headmen, traditional doctors, age old women and the person having a through knowledge of ethno medicinal plants practices to cure jaundice. Some of the commonly occurring 25 Ethno medicinal plants to cure jaundice were listed and the existence of these plants were cross checked and confirmed with the help officials of local veterinary tribal peoples.. The information gathered from one place was confirmed by other different local or tribal people, Village people and ethnic groups in different places of investigation. The plant specimen were collected and identified by referring standard local flora. The entire specimen in the form of herbarium was deposited in herbarium centre, (AHMA, ARI) Pune. A list of plants and their administration is presented below:

In jaundice, ethno medicinal plants are important and doses are prescribed by local people with combination of plant parts with juice, extracts, infusion, decoction, etc.

Treatment – 1: *Cynodon dactylon* (L.) Pers. (Poaceae)

***Phyllanthus amarus* Schum and Thorn. (Euphorbiaceae)**

***Piper nigrum*. (Piperaceae)**

It is mixture of three plants leaves, fruits made into a juice and given to patient to cure the jaundice.

Treatment – 2: *Hemidesmus indicus* (L.) R.Br. (Asclepiadaceae)-Root powder given along with honey once a day.

Treatment – 3: *Leucus aspera* (Willd.) Link (Lamiaceae) -Leaf paste applied on head to cure Jaundice.

Treatment – 4: *Azadirachta indica* A. Juss. (Meliaceae)-Young leaves are fried with salt and powder given with milk.

Treatment – 5: *Eclipta alba* L. (Asteraceae)

***Phyllanthus amarus* chum & thorn. (Euphorbiaceae)**

***Leucas aspera* (Wild.) Link (Lamiaceae)**

Leaves of above three plants are ground and extract is given.

Treatment – 6: *Musa paradisiaca* L. (Musaceae)

***Lablab purpurea* L. (Fabaceae)**

Interior stem portion and fruits legume plants are prepared as a vegetable curry and given along with diet.

Treatment – 7: *Aegle marmelos* (L.) corr. Serr. (Rutaceae) Leaf powder is given along with goat milk.

Treatment – 8: *Cynodon dactylon* (L.) Pers. (Poaceae) and

***Phyllanthus amarus* Schum & Thorn. (Euphorbiaceae)**

Leaf extracts of above two plants are mixed and given with water.

Treatment – 9: *Musa paradisiaca* L. (Musaceae)-Interior stem portion is dried and powder is given with honey.

Treatment – 10: *Mimordica charantia* L. (Cucurbitaceae) Fruits are dried and fried given with normal diet.

Treatment – 11: *Boerhavia diffusa* L. (Nyctanthaceae)- Fresh whole plant material is boiled in water along with sugar, half cup of the decoction is given to the patient thrice a day for 2-3 week.

Treatment – 12: *Brassica juncea* L. (Brassicaceae) – Alum 40gm (White mineral salt) + Brassica seed 3 gm made in to the paste & eaten along with fruit of banana twice a day.

Treatment – 13: *Abrus precatorius* Linn (Fabaceae) – The decoction of roots has been used.

Treatment – 14: *Curcuma longa* L. (Zingiberaceae) – Paste of rhizome is mixed with cow milk and taken once day for 12-13 days.

Treatment – 15: *Asparagus racemosus* (Willd) (Liliaceae) – The decoction obtained from the root has been used to cure jaundice.

Treatment – 16: *Tabernaemontana divaricata* (L.) R.Br (Apocynaceae) – Root powder is boiled in water and the extract is given thrice a day for two-three weeks.

Treatment – 17: *Phyllanthus emblica* L. (Euphorbiaceae) – Dried fruit and seeds of ***Punica granatum* L.** are grounded together along with sugar and made into powder, two-three teaspoons of the powder are dissolved in one cup of water and taken orally twice a day for three weeks.

Treatment – 18: *Tinospora cordifolia* (Willd.) Hook. (Menispermaceae) - Infusions of whole plant along with sugar juice are given to patient.

Treatment – 19: *Phyllanthus amarus* L. (Euphorbiaceae) – Leaf juice 2 spoonful + cow milk is given early in the morning.

III. RESULT AND DISCUSSION:

The research work revealed that total 19 modes of treatment were used to cure Jaundice, by tribal people inhabiting in Konkan region of Raigad district of Mahalmirya forest. Various people inhabiting in different localities of study area followed different modes of treatment as their own knowledge. The plants were used either separately or in combination with other plants. They were used 19 treatments for Jaundice. Among them, 06 plants were used separately and 13 plants were used in combination with other plants to cure jaundice. Most of these plants are commonly available in natural sources in the study area and a few are obtained from local market. Considering the vehicles used for taking the medicines as infusion either with water, honey or milk. Scientific validation of these drugs needs to be carried out. In this respect, Mujumdar et al (1998) reported effect of *Azadirachta indica* A. Juss leaf extract on hepatic damage in albino rats. Mann et al (2006) mentioned plants like *Tephrosia purpurea* (L.) Pers, *Silybum marianum* (L.) Gaertn, *Picrorhizakurrova Royle ex Benth*, *Cajanus indicus* Spreng and *Phyllanthus niruri* L for hepatoprotective property and conducted research on *Terminalia arjuna* W.& A aqueous extract for hepatic and renal disorders. Parthasarthy et al (2007) carried out research on *Caesalpinia bonducell* Flam seeds for hepato-protective activity. Kamble et al. (2008) evaluated 11 herbal drugs for hepato-protective activity.

IV. CONCLUSION:

Traditional knowledge of tribal people on human diseases is very important to find out new drugs for human health. Doses and their administration need to be standardized with scientific way. Generally this traditional knowledge is erode at faster rate due to decreasing biodiversity in the region and need to be conserving with training to young generation and close association with surrounding nature.

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