

PLANTS USED FOR THE TREATMENT OF JAUNDICE AND HEPATITIS IN KOTHI DISTRICT SATNA M.P.

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Article Received on
19 August 2017,

Revised on 09 Sept. 2017,
Accepted on 29 Sept. 2017

DOI: 10.20959/wjpr201712-9792

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ABSTRACT

Jaundice and hepatitis is a disease of liver disorder. It is mainly caused by contaminated water. It may be fatal if proper treatment is ignored. Rural people from Kothi region have traditional herbal knowledge in curing Jaundice and hepatitis. 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 and hepatitis. The present study was based on questioner survey and revealed that 41 species of plants belonging to 29 families are used by the rural people in treatment of jaundice and hepatitis.

KEYWORDS: Ethno medicinal plants, jaundice, hepatitis, herbal.

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 Harriman disease in Rig-Veda (8000 BC). The first record of Hepatitis was reported by Hippocratic School in 200B.C (Nene, 2007). Jaundice is recognized 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, 41 plants are reported and different administrations are given to cure disease.

Jaundice is mostly appears in the form of liver diseases such as hepatitis or liver cancer. It may also indicate leptospirosis or obstruction of the biliary tract. Jaundice is the yellowish staining of the skin and sclera (the whites of the eyes) which is caused by increase in the level of bilirubin chemical in the blood. The change in the color of the skin and sclera depends up on the bilirubin level. When the bilirubin level is mildly elevated, they are yellowish. When the bilirubin level is high, they tend to be brown (Wahab *et al.*, 2004). Jaundice may result from various diseases or conditions that affect the liver, like Hepatitis A, Hepatitis B, Hepatitis C, Hepatitis D, Hepatitis E, Autoimmune hepatitis, Liver cirrhosis, Liver cancer, Hemolytic anemia and Malaria. There is no unique treatment for jaundice and hepatitis by prescribing modern allopathic and homeopathic medicine. Although different workers have documented medicinal plants from various regions of world, but to our knowledge no systematic investigation on antiviral application of medicinal plants against jaundice and hepatitis has been made which was based on socio-economic conditions of respondent communities. In this context, the present study is the milestone with particular emphasis on medicinal plants used for jaundice and hepatitis.

The pattern of the use of the local plants for the treatment of various health disorders by local people has been an old practice. But the peoples of remote area this region still depends up on plant based house hold remedies for the primary health care. The old villager of this area has a huge amount of traditional knowledge associated with the use of these plants. Jaundice is mostly appears in the form of liver diseases such as hepatitis.

Study area

Kothi region lies in northern part of the Satna district block Sohawal of Madhya Pradesh. It is between 24°45'5.86"N latitude and 80°46'41.69"E longitudes. Total area is 438km². The total population of study area is 38,164. The majority of the population living here is rural. The main rural communities of area are Kol, Gond, Khairwar and Mawasi etc. They generally reside in and around the forest areas. The forests of area are tropical mixed dry deciduas type. The climate is extreme dry with well-marked summer, rainy and winter seasons. The maximum temperature goes up to 33.6° C in the month of May and minimum goes down up to 15.9° C in the month of January. An annual average rainfall is about. 1072 mm. Present work was undertaken to know medicinal plants found in the area to cure Jaundice and hepatitis and their use by rural people.



Fig -1. Map showing location of kothi.

METHODOLOGY

The present study is an attempt to enlist the medicinal plants growing and available in Kothi district satna. In this study an attempt has been made to enlist a maximum number of plant species available in kothi to cure jaundice or hepatitis. This study was carried out by interviewing respondents in different remote sites. The respondents were old age women, men and healers themselves and had knowledge on the medicinal use of the plants for the said purpose. Information was gathered by taking interviews of the informants and as witnesses of the uses during the period of studies in the field. Some information also collected from the books.

RESULT AND DISCUSSION

In the present study, 41 plant species from 29 families traditionally used in treatment of jaundice by the local people of kothi have been documented. The plants have been enumerated alphabetically according to their scientific name, habit, local name, family, parts used, mode of preparation and medicinal uses. Literature on the ethno medicinal plants used to cure jaundice by various communities in India was extensively searched and reviewed. Among the reported plants there are various species of trees, shrubs and herbs. The local healers and local people mostly used fresh plant parts. Dried plant parts are used in powdered form. The local people mainly used leaf, root, bark, rhizome, stem, fruit, seed and latex of these plants as medicine for jaundice. The reported plants were mostly administered as decoction, extracts, paste, juice and poultice. In the present study, 41 medicinal plants commonly used in treatment of jaundice in kothi have been documented. The use of medicinal plants was a chosen practice in this area through history, the knowledge of which was gathered through the experience of many generations. There was a consensus among

users indicates that plants have curative effect in treatment of jaundice and hepatitis. all the interviewed traditional healers identified jaundice according to the symptoms regardless of the cause of the disease. The symptoms used to identify jaundice were extreme weakness, headache, fever, loss of appetite, severe constipation, nausea, yellow discoloration of the eyes, tongue, skin, and urine, dull pain in the liver region and intense itching. The various plants used in treatment of jaundice and hepatitis are given in table 1 & 2.

Table-1 Medicinal plants used to treat Jaundice and Hepatitis in Kothi.

S. No.	Scientific name	Local name	Family	Part use	How to use
1.	<i>Adiantum Capillus veneris</i>	Hansraj, Hanspadi, Samalpatti.	Adiantaceae	Leaves	Fresh leaves are boiled in water along with sugar. One cup of the Decoction is taken orally twice a day for a week.
2.	<i>Argyrolobium roseum</i>	Sumbal, Kashmal, Kwaray, Chotra/Barberry	Papilionaceae	Whole plant	Fresh plant material is crushed and mixed along with water and sugar. One cup of juice is taken orally early at morning for two weeks.
3.	<i>Berberis lyceum</i>	Chitra, chotra, dar-chob, dar-hald	Berberdiaceae	Leaves	Fresh leaves are boiled in water and the decoction is given to the patient thrice a day for two to three weeks.
4.	<i>Boerhaavia procumbens</i>	Itsit / red hogweed	Nyctaginaceae	Whole plant	Fresh plant material is boiled in water along with sugar. Half cup of the Decoction is given to the patient thrice a day for three Weeks.
5.	<i>Carissa opaca</i>	Jungli Karonda, Wild Karanda	Apocynaceae	Leaves	Fresh leaves of <i>C. opaca</i> and roots of <i>S. brandrethiana</i> are boiled in Water. One cup of the decoction is taken orally twice a day for two to three weeks.
6.	<i>Cichorium intybus</i>	Kasni	Astraceae	Whole plant	Fresh plant material is boiled along with sugar. Half cup of the decoction is given to the patient thrice a day for two weeks.
7.	<i>Cucumis sativus</i>	Kheera	Cucurbitaceae	Fruit	Fresh fruit is cut into small pieces and is given to the patient thrice a day for a month.
8.	<i>Cuscuta reflexa</i>	Nelathri, amarbel	Cuscutaceae	Whole plant	Fresh plant material is cocked and three to four teaspoons of the paste are taken orally once a night for two weeks.
9.	<i>Equisetum debile</i>	Ashwa, pucchha, tail, horsetail	Equisetaceae	Whole plant	One cup of juice from fresh plant material is mixed with sugar and is Taken orally twice a day for two

					weeks.
10.	<i>Hordeum vulgare</i>	Jou, jav	Poaceae	Seeds	Dried seeds are grounded. Powder is mixed with water and sugar is taken orally thrice a day for a month.
11.	<i>Justicia adhatoda</i>	Bahker, Adulsa, Arsha, Vasala, Basak, adusa, aruha, vansa, vasa, vasaka	Acanthaceae	Roots	Fresh roots are boiled in water. Half cup of the decoction is taken orally before breakfast for two to three weeks.
12.	<i>Morus Alba</i>	Chitta toot, Shahtoot	Moraceae	Fruit	Fresh fruits are crushed. One cup of the juice is given to the patient twice a day for two weeks.
13.	<i>Morus nigra</i>	Kalla toot, kala shahtut	Moraceae	Fruit	Fresh fruits are crushed. One cup of the juice is given to the patient twice a day for two weeks.
14.	<i>Myrsine Africana</i>	Khukan, bandraru oleander, banwa, banwan, basuti, chapra, chhota mehndru	Primulacea	Leaves	Fresh leaves are boiled in water. One cup of the decoction is taken orally twice a day for a week.
15.	<i>Oxalis corniculata</i>	Gandora, Amrul	Oxalidaceae	Leaves	Fresh leaves are crushed and mixed in water. One cup of the juice is given to the patient twice a day for two weeks.
16.	<i>Phyllanthus emblica</i>	Aamla	Euphorbiaceae	Fruit	Dried fruit of <i>P. emblica</i> and seeds of <i>P. granatum</i> are grounded together along with sugar. Three teaspoons of the powder are dissolved in one cup of water and taken orally thrice a day for three weeks.
17.	<i>Phyllanthus niruri</i>	Bahupatra	Euphorbiaceae	Roots	Fresh roots are crushed and mixed with water. Half cup of the extract is taken twice a day for 10-15 days.
18.	<i>Pistacia integerrima</i>	Brandis Kangar, Kakadasrangi, Kakarasingi	Anacardiaceae	Fruit	Fresh fruits are crushed and mixed in water. One cup of the extract is given to the patient thrice a day for a week.
19.	<i>Plantago ovate</i>	Bhatti, Isabgol	Plantaginaceae	Fruit, Seeds	Two teaspoons of fruit or seeds husk are soaked in water for a night. Two cups of this extract are mixed with sugar and taken orally early at morning before breakfast for 20-25 days.
20.	<i>Prunus domestica</i>	Alubokhara, Plum, Alu Bukhara	Rosaceae	Fruit	Dried fruit of <i>P. domestica</i> and <i>T. indica</i> are soaked in water for a night. One cup of this extract is given to the patient for two to three weeks.

21.	<i>Punica granatum</i>	Durni, anaar	Punicaceae	Fruit, Seeds	Dried fruit of <i>P. emblica</i> and seeds of <i>P. granatum</i> are grounded together along with sugar. Three teaspoons of the powder are dissolved in one cup of water and taken orally thrice a day for three weeks. Dried rind is grounded and two teaspoons the powder are mixed with sugar and taken orally along with water at morning for a week.
22.	<i>Raphanus sativus</i>	Mooli	Brassicaceae	Root	Fresh roots are cut longitudinally and hanged over a night at open place. These pieces are given to the patient early in the morning for a month.
23.	<i>Rhus chinensis</i>	Taiter, Chinese Gall, dasni, Dansara, Darsan	Anacardiaceae	Fruit, Root	Dried fruits are grounded along with sugar and three teaspoons of the powder are taken orally with water at morning for three weeks. Fresh roots are boiled in water along with sugar. One cup of the decoction is given to the patient at morning for two to three weeks. Dried fruit and seeds of <i>R. chinensis</i> , <i>P. granatum</i> and <i>F. vulgare</i> are grounded. Two teaspoons of the powder are taken orally along with water at morning for a month.
23.	<i>Rumex hastatus</i>	Khatimal, Churki, churka	Polygonaceae	Leaves	Fresh leaves are crushed along with water and sugar. One cup of this extract is given to the patient twice a day for two weeks.
24.	<i>Saccharum officinarum</i>	Ganna, eekh	Poaceae	Stem	Fresh stems are crushed. Two cups of the juice are given to the patient four to five times per day for a month.
25.	<i>Silybum marianum</i>	Gaertn. Ount Katara, Milk Thistle, Blessed milk thistle	Asteraceae	Leaves	Fresh leaves are crushed along with water and sugar. Half cup of the Juice is taken orally twice a day for two weeks.
26.	<i>Tamarindus indica</i>	Imli	Caesalpinaceae	Fruit, Roots	Roots and fruit of <i>T. indica</i> and fruit of <i>P. domestica</i> and are soaked in water for a night. One cup of this extract is given to the patient for two to three weeks.
27.	<i>Taraxacum officinale</i>	Dudhi, Baran, dudal, Dudh-batthal, Dudhal	Asteraceae	Rhizome	Dried rhizomes are boiled along with sugar. One cup of the decoction is taken orally at

					morning for two weeks
28.	<i>Woodfordia fruticosa</i>	Dahvi, Dhaaya / Dhaay ke Phool, Ban-mahendi	Lythraceae	Flower	Fresh flowers are crushed and mixed with water. One cup of the extract is given to the patient twice a day for two weeks.
29.	<i>Viola serpens</i>	Phul naqsha, Banafsha	Violaceae	Whole plant	Fresh or dried plant material is first boil in water along with sugar. Two cups of this decoction are taken orally at night for one week.
Plants used in Jaundice					
30.	<i>Achryanthes aspera</i>	Chirchita, Latjira, apamarga	Amaranthaceae	Whole plant	The root is crushed to powder and boiled in water. 2 glasses of root decoction is given in the morning daily.
31.	<i>Aloe barbaden</i>	Gritakumari, aloe vera	Xanthorrhoeaceae	Leaves	The leaf sap is mixed with <i>Curcuma longa</i> Linn rhizome paste and cow milk is taken daily for 10-12 days, twice a day.
32.	<i>Andrographis paniculata</i>	Kalmegh, Kalpanath	Acanthaceae	leaves and stem	: Leaves and young twigs are crushed to paste, 20-30 gms paste taken three Times daily after meal for 2-3 weeks.
33.	<i>Azadiracta indica</i>	Nim, Margosa, azadirachta, nimbi	Meliaceae	Leaves, bark, fruits	The bark is crushed to powder and boiled in water; 5 ml extract is prescribed twice a day for two Weeks.
34.	<i>Brassica nigra</i>	Rai, black mustard	Brassicaceae	Seeds and leaves	The seed oil on hands and feet thrice daily for 2-3 weeks.
35.	<i>Centella asiatica</i>	Thankuni, gotu kola, mandukparni	Apiaceae	Whole plant	The leaf extract is mixed with <i>Daucus carota</i> Linn root juice (5-10 ml) and is taken orally.
36.	<i>Cynodon dactylon</i>	Durba, Doob, Ramghas, Dobri	Poaceae	Leaves	The juices of leaves are orally given.
37.	<i>Eupatorium tripliverve</i>	Apayan	Asteraceae	Whole plant	Leaf extract is taken with gur.
38.	<i>Ocimum tenuiflorum</i>	Tulasi	Laminaceae	Whole plant	The extract of the whole plant is taken for 3-4 weeks with cow milk.
39.	<i>Phyllanthus fraternus</i>	Bhui amla	Euphorbiaceae	Fruit	Ripened fruits are eaten daily for 10-15 Days.
40.	<i>Mentha spicata</i>	Pudina	Laminaceae	Leaves	Powdered dry leaves are eaten with chili powder for 10-15 days.
41.	<i>Tinospora cordifolia</i>	Guduchi, Gulanchi, Giloy, Gurach, Gulvel	Menispermaceae	Stem	Pieces of stems are soaked in water; this water is taken in the morning with Honey.

Appendix-1. Showing plants used in Jaundice and Hepatitis.



Adiantum capillus veneris



Argyrobolium roseum



Berberis lyceum



Boerhaavia procumbens



Equisetum debile



Carissa opaca



Cichorium intybus



Cucumis sativus



Cuscuta reflexa



Hordeum vulgare



Justicia adhatoda



Morus Alba



Morus nigra



Myrsine africana



Oxalis corniculata



Phyllanthus emblica



Phyllanthus niruri



Pistacia integerrima



Plantago ovata



Prunus domestica



Punica granatum



Raphanus sativus



Rhus chinensis



Rumex hastatus



Saccharum officinarum.



Silybum marianum



Tamarindus indica



Taraxacum officinale



Viola serpens



Woodfordia fruticosa

Jaundice



Achryanthes aspera



Aloe barbaden



Andrographis paniculata



Azadiracta indica



Brassica nigra



Centella asiatica

*Cynodon dactylon**Eupatorium tripliverve**Ocimum tenuiflorum**Phyllanthus fraternus**Mentha spicata**Tinospora cordifolia*

CONCLUSION

In the present investigation, 41 medicinal plant species used to treat jaundice and hepatitis were reported and documented. The use of these plants to treat jaundice and hepatitis. The majority of the reported species are wild and rare. These demand an urgent attention to conserve such vital resources so as to optimize their use in the primary health care system. Now a day, conservation of traditional knowledge is greatly menaced by a lot of factors related to modernization of the region and lack of interest in traditional healers, in transferring it to next generation. It is, therefore, urgent to save the cultural heritage of the natives, by confirming the therapeutically used plants with scientific criteria. In this context, screening for active substances and testing their activities against jaundice and hepatitis causing organisms form an interesting subject for the future studies.

Source: Internet.

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