



Common plants used in the treatment of jaundice in southern India as a natural remefier- A review

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Abstract

Plants have traditionally served as man's most important weapon against pathogens. India is repository of herbal medicines & there are evidences that herbs are predominant in the treatment of various diseases for revitalizing body system from ancient civilization. Recently, considerable attention has been paid to utilizing eco friendly & bio friendly plant based products for the prevention & cure of different human diseases .The use of herbal medicine in the treatment of liver disorder has been in tradition from long back. In majority of cases, extract from the whole plant were used for curing jaundice, followed by root and fruit. It is said that interest in medicinal plants is increasing as an alternative to modern medicine. Therefore, there is an urgent need for conservation of this valuable treasure.

Key words: Jaundice, siddha system, parts used, Mode of administration

Introduction

Ethnobotany and Ethnomedical studies are recognized as the most viable method of identifying new medicinal plants or refocusing on those earlier reported for bioactive constituents. The tribal & rural people of various parts of India are highly depending on medicinal plant therapy for meeting their health care needs. This is attracting the attention of several botanist's, plant scientists who directing vigorous researchers towards the discovery or rediscovery of several medicinal remedies for various diseases Karuppsamy, 2007. Several workers (Bhattacharjee, 2001; Bhattacharya & Goel, 1981; Manikandan *et al.*, 2007; Manikandan *et al.*, 2009) were reported the utility of plants for the treatment of jaundice.

Jaundice can indicate liver or gall bladder disorders. When the excretion of bilirubin is hindered, it passes into the blood, resulting in jaundice. Jaundice can also result from excessive breakdown of red blood cells (a process called haemolysis) and too much bilirubin is released into the blood stream. This occurs typically in the haemolytic anemia's (as opposed to the aplastic anemia in which not enough red cells are produced).Jaundice is common in newborns because, there is some haemolysis during delivery and the new born's liver is immature and may not be fully matured to handle the task of bilirubin for a few days. Jaundice is a yellowish discoloration of the skin, sclera and mucous membranes caused by hyperbillirubinemia. Jaundice

becomes visible when the bilirubin level is about 2 to 3 mg/dl (Guyton, 2005)

Background

Jaundice is the one of the pitha type of disease is illustrated in ancient siddha system of medicine. This is one of the oldest traditional systems of medicine flourished in south India particularly in Tamilnadu. This siddha system of medicine is based on Panja Boothic theory and Thridosa theory. In thridosa i.e.,Vadha ,Pitha, Kapha three vital humors are in a equilibrium state in a healthy condition which is dearranged in a unbalanced state is called disease condition. Pitha humour is mainly affected or dearranged in jaundice disease condition.

In T.V.Samba Sivam Pillai's Dictionary (V) Kamalai is defined as follows, A Disease which is characterized by yellowness of the eyes, skin, and urine and by indigestion and loss of appetite. Mukkutram ie., Vatham, Pitham and Kapham are the three vital factors which are responsible for the normal physiological condition of the body. If any one of these three factors increases or decreases from its normal ratio ie.,1:1/2:1/4 respectively it leads to some pathological changes in the body and thus produces the Diseases.

In Siddha literatures, the aetiological factors are explained in two ways. One is "Extrinsic factor" and other is "Intrinsic factor. Mukkutram is affected by these factors.

Extrinsic factors

Extrinsic factors includes the environment especially climate,occupation,wandering in the hot sun, sleeplessness during night ,etc., are the important cause. Due to these activities Pitham is increased which is the main causative factor for this disease.

Classification of Jaundice in siddha system of medicine

According to Yugi vaidya chindhamani ,Vadha kamalai, Pitha kamalai, Kapha Kamalai,VadhaKapha kamalai,PithaKapha Kamalai,Mukkutra Kamalai,Perumanjal Kamalai,Azhagu Kamalai, Shengamala

Kamalai,Kumba Kamalai,Gunma Kamalai,Oothu Kamalai,Varal Kamalai.

In Agastiyar 2000, Jaundice is classified into 8 kinds - Seven are based on kutra types, another one is based on disease wise. They are vadha kamalai, pitha kamalai, silathuma kamalai, pitha silathuma kamalai, vadha silathuma kamalai,sannibatha kamalai,pitha vatha kamalai,sobai kamalai.

In vaidya Sara sankiragam Jaundice is classified into 5 types. This classification includes manjal Kamalai. They are varal kamalai,vatha kamalai,pitha kamalai,ayya kamalai.

In Dhanvanthiri vaidyam, Jaundice is classified into 5 kinds. They are Vatha Kamalai,Pitha Kamalai,Silathuma Kamalai,Thiridosha Kamalai,Kumba Kamalai.

In Bala vagadam, Jaundice are classified into three kinds. They are oothu Kamalai, Manjal kamalai, viral Kamalai. Out of nearly 17,000 higher plants recorded in India (Warrier, 1994), 7500 are reported to be in medicinal use by the rural & tribal communities (Karthikeyan, 2000;Dubey *et al.*, 2004) a perusal of literature revealed that some work has been done on ethnomedical plants of south India (Ignaciamuthu, 2006;Karuppusamy, 2001 & 2002; Rajendran, 2004) especially the review was made to know about the traditional phytotherapy used in southIndia, In general, could provide very interesting clues for further phytochemical & pharmacological research on lesser known plant sources of India, however, this communication has a special reference to jaundice and its remedial measures through traditional medicines used in different parts of south India. (Table 1) shows the enumeration of medicinal plants.

Conclusions

The study revealed that different modes of treatment either were followed to cure jaundice by different parts of people in and around SouthIndia, individual plants or in combination with other plants were used. Most

Table 1. Enumeration of medicinal plants

S.No	Botanical name/family	Local name(Tamil)	Part used	Modes of administration
1	Cynodon dactylon(L.)/Poaceae Phyllanthus amarus/ Euphorbiaceae Piper Nigrum/Piperaceae	Arugambull Keelanelli Milagu	Leaves Schum & thonn Fruits	These 3 are grounded & the extract is given
2	Hemidesmus indicus (L.)/Asclepiadaceae	Nannari	Root	Powdered & given
3	Leucas aspera(wild.)/Lamiaceae	Thumpai	Leaf	Pasted & applied on head
4	Azadirachta indica/Meilaceae Carum nothum/Apiaceae	Vempu Omam	Leaves & fruits	Fried & add salt & powdered & is given with milk
5	Eclipta alba/Asteraceae Phyllanthus amarus/ Euphorbiaceae Leucas aspera/Lamiaceae	Karisalanganni Keelanelli Thumpai	Leaves Schum & thonn Leaf	These 3 are grounded & the extract is given
6	Musa paradisiaca/Musaceae Lablab purpureus/Fabaceae	Vaazhai Avarai	Interior stem Portion Fruits	Both Prepared as a veg. curry given with diet
7	Aegle Marmelos/Rutaceae	Vilvam	Leaf powder	Given along with goat milk
8	Cynodon dactylon(L.)/Poaceae Phyllanthus amarus/ Euphorbiaceae	Arugambull Keelanelli	Leaf extract Schum & thonn	Both are Mixed and given
9	Musa paradisiaca/Musaceae	Vaazhai	Interior stem Portion	Dried & powdered .powder is given with honey
10	Monordica charantia/Cucurbitaceae	Paagarkkaai	Fruits	Dried fruit pieces are fried & given with normal diet
11	Andragraphis lineate wall/Acanthaceae	Periyanangai	Root	Paste mix with milk and given
12	Cyperus rotundus/Cyperaceae	Koraikilangu	Tubers	Crushed with water and given
13	Justicia adhatoda/Acanthaceae	Adathoda	Leaves	Paste administered with honey
14	Phyllanthus amarus/ Euphorbiaceae	Keelanelli	Whole plant	Paste given oral
15	Eclipta alba/Asteraceae	Karisalanganni	Leaves	Leaves extract is given

of these plants are commonly available in natural sources or obtained from local dealers.

Taking the medicine as infusion either with milk, honey & and water. The medicines also given in the form of oral or by application. Traditionally used medicinal plants produce a variety of compounds of known therapeutic

properties (Anonymous, 1952; Chopra *et al.*, 1992, Harborne, 1989; Iyengar, 1950; Khare, 2004; Leukotriene *et al.*, 1979; Paranjape, 2001). Some plants used for the treatment of catarrhal jaundice (Scott treadway, 1998). In recent years, focus on use of traditional approaches to treat diseases has been revived

worldwide. The evidence collected until now shows immense potential of medicinal plants used in traditional systems. Moreover, it may further be mentioned that over exploitation of these species in the name of medicine may lead some species ultimately to the disappearance in future. Therefore and attention should be made on proper exploitation and utilization of these medicinal plants.

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