



Asian Journal
of
PHARMACEUTICAL RESEARCH
Journal homepage: - www.ajprjournal.com

MEDICINAL PLANTS USED FOR THE WOMEN AND CHILDREN IN VILLUPURAM DISTRICT, TAMIL NADU

M. Thamacin Arulappan and S. John Britto

Rapinat Herbarium & Centre for Molecular Systematics, St. Joseph's College (Autonomous), Tiruchirappalli, Tamilnadu, India.

ABSTRACT

Traditional medicinal plants have been playing important roles in protecting the human beings and the animals from various diseases. The field, Ethnomedicine, is investigated thoroughly and systematically as because it yields results of greater value to the Ethnobiologists, Ethnobotanists, Botanists, Pharmacologists and ultimately to human beings to discover the valuable medicinal properties in herbal plants that can keep the human race free from the diseases. Ethnomedicinal practices of Villupuram district of Tamil Nadu envisaged that some of the herbal medicines are specifically prescribed for women and children by the herbal practitioners and the common people in this area. 27 species used for childcare such as *Abrus precatorius*, *Indigofera longeracemosa*, *Mukia maderaspatana*, *Ocimum sanctum*, *Vitex negundo* etc and 9 species used for women such as *Adhatoda vasica*, *Astragalus candoleanus*, *Carica papaya*, *Sesamum orientale* etc are discussed in this paper.

Key words: Traditional Medicine, Ethnomedicine, Herbal Practitioners, Villupuram.

INTRODUCTION

Women and children encompass a broad range of health issues. The former's health problems are related mainly to reproductive organs and their functions such as menstruation, discharge, bleeding, pain in the reproductive organs and menopause [1]. The latter's health problems are related mainly to improper and weakened immune systems. Complaints related with reproductive system of women create both physical and psychosocial stress and anxiety in women. Because of these complaints, some women could experience feelings of fear, guilt, discomfort, shame or anxiety etc. which could avoid women from utilizing health institutions sufficiently, cause them to hide their problems and employ traditional methods that reduce their complaints [2]. Children are especially prone to infectious diseases, as it takes some years before their immune system to be properly developed. The most common diseases of children include measles, mumps, scarlet fever, chicken pox and whooping cough. Major causes of mortality and morbidity affect women as well as children, and they also seek healthcare for normal life events.

Many of the common illnesses of childhood and womanhood can be quickly and effectively treated at home with herbal medicines. India has a long history in traditional health practices in local health tradition and

home remedies (Grandma's medicine) [3]. Home remedies are especially aimed in uplifting the health profile of women and children. Even though modern medical systems are available, most of the people are still depending on the rich local health traditions for mother and child care. The uses of herbal medicinal plants are growing in popularity as an alternative treatment. In this regard, the medicinal plants are gaining recognition in the conventional field of medicine and have been subjected to many clinical trials. The present paper is underlined with some common medicinal plants that are specifically used to cure diseases of women and children in Villupuram district, Tamil Nadu.

STUDY AREA

Villupuram is the largest district in Tamil Nadu (with 22 Blocks as compared to the average of 13-14 blocks in the other districts), but it is one of the least industrialized areas of the State. The majority of the population depends on agriculture. Villupuram District lies between 11° 38' 25" N and 12° 20' 44" S; 78° 15' 00" W and 79° 42' 55" E with an area of 7222.03 Hec. It was carved out from the South Arcot District in 1993 and was rechristened as Viluppuram District. It is surrounded on

East and South by Cuddalore District and on West by Salem and Dharmapuri District and on North by Thiruvannamalai and Kanchipuram District. At present Vilupuram district comprises of 1490 Revenue Villages, 4 Revenue Divisions, 8 Administrative Taluks, 22 Blocks, 15 Town Panchayat Unions, 1104 Village Panchayats and 3 Municipalities [4].

The district receives rainfall from southwest monsoon (June – September), northeast monsoon (October – December) and non-monsoon periods (January – May). The rainfall is generally heavy during low-pressure depressions and cyclones and during the northeast monsoon period. The normal annual rainfall is 1119.8 mm (1901-1980) and the higher is towards coast. The area falls under tropical climate with temperature in the summer months of March to May. The average temperature varies from 26 to 41°C. The humidity is also high in the order of 80%. The wind speed is high during the months of July and August. The wind speed ranges from 7.4 to 12.6 km/hr, which increases from 100 to 120 km/hr during cyclone period. According to census (2001), the district has total population of 29, 60,373 out of which male population is 14, 92,442 as compared to 14, 67,931 female [5].

MATERIAL AND METHODS

During the ethnobotanical expedition in various places of Villupuram district, I have used Jain's methodology [4] to gather information on the medicinal plants that are most commonly employed in the treatment of the women and children's diseases. A standard questionnaire (Form 1) was used in field visits indicating the name of the place visited, practitioners' names, the duration of the practices and the mode of applications. The plant parts that have been used as medicine are carefully recorded. Most of the important medicinal plants are collected for better identification and cataloguing the plants. To do this, some good photographs of the plants are taken as whole. About 20 people were interviewed which includes five herbal practitioners who hold the practices as their livelihood and have well established herbal centre and the rest are the local inhabitants. It is noteworthy to mention here that information gathered more from women than men.

Questionnaire

Form 1

Questionnaire for data collection of medicinal plants used in Villupuram District, Tamil Nadu

Traditional Ethnomedicine Survey project, Rapinat Herbarium & Centre for Molecular Systematics, St. Joseph's College (Autonomous) Tiruchirappalli, India
(One form should be completed for each plant)

1. Name: _____
2. Sex: _____
3. Age: _____

4. Address: _____
5. Occupation: _____
6. Date: _____
7. Collection No: _____
8. Taxon: _____
9. Vernacular name: _____
10. Botanical name: _____
11. Family: _____
12. Locality (specific): _____
13. Habit: Tree _____ Herb _____ Shrub: _____ Climber _____
14. Height: _____ Diameter: _____
15. Bark characteristics: _____
16. Smell: _____
17. Latex: Present _____ Absent: _____
Colour: _____
18. Tree parts used in medicine: Root: _____ Stem: _____ Flower: _____ Fruit: _____ Seed: _____
19. How a plant is used: Fresh: _____ Dried: _____ Boiled: _____
20. Other plant or tree ingredient added to it: _____
21. Method (s) of preparation for use: Powdered: _____
Extracted with cold water: _____
With hot water: _____ Boiled: _____
22. Mode of administration: _____
23. Dosage: _____
24. Source of collection of species: _____

RESULT AND DISCUSSION

A. Enumeration of Plants for Childcare

1. *Abrus precatorius* (Leguminosae) Eight to ten seeds and roots of *Wrightia tomentosa* are ground into powder. This powder is equally divided into six to eight doses, which is prescribed orally with honey in empty stomach to cure fever in children [8]
2. *Adhatoda zeylanica* (Rutaceae) Leaves along with the roots of *Solanum surattense* and fruits of *Piper longum* are taken in equal proportions and ground into powder. This is mixed with honey and taken twice in a day for about a week to cure cold and cough in children.
3. *Andrographis paniculata* (Acanthaceae) Half a glass of decoction made from the leaves *Andrographis*, *Evolvulus alsinoides* and *Mollugo pentaphylla* in equal proportions is administered orally to cure cold, cough and asthma in children. Moreover, the decoctions made from *Andrographis*, *Leucas aspera* and *Acalypha indica* in equal proportions is also given orally to the children for the same. Leaves of *Andrographis* are powdered and given three times daily to cure jaundice [5].

4. *Anisomeles indica* (Lamiaceae) The juices of the leaves are administered orally with honey to reduce cold and fever in children. It is also used for curing stomach complaints in children.
5. *Azadirachta indica* (Meliaceae) The dried leaves are first powdered. It is then added with milk and administered orally to those children who are affected with skin diseases. The dose is to be given early in the morning in empty stomach. It is to be continued for about a week.
6. *Cassia tora* (Caesalpinaceae) The dried leaves are ground and then added with milk and given children to drink in the empty stomach. It controls loose motion. The flowers are also ground and the juice is applied on the wounds and cuts to stop bleeding. This treatment is applicable also in adults.
7. *Cardiospermum halicacabum* (Sapindaceae) Leaf juice mixed with lime taken in empty stomach to control dysentery in children.
8. *Cleome viscosa* (Capparidaceae) Seeds are ground and the paste form is orally taken to increase hunger and appetite. This treatment is applicable both for children and adults.
9. *Croton bonplandianus* (Euphorbiaceae) Leaf paste is mixed with lime juice and externally applied on the injuries in children.
10. *Desmodium triflorum* (Leguminosae) Root is ground and made into paste. This paste is applied on the affected parts of the body to cure the skin diseases in children and adults.
11. *Enicostemma axillare* (Gentianaceae) Leaves ground with salt and garlic and the paste is kept under the aching tooth for about half an hour without spitting it out. It relieves the tooth ache immediately. It is administered only in the morning. It is generally used for all.
12. *Euphorbia hirta* (Euphorbiaceae) The juices of the leaves are drunk. It relieves body from hotness and promotes cooling of the body in summer. It is very effective in children.
13. *Hemidismus indicus* (Periplocaceae) Leaves made into paste and mix with neem oil to cure scabies in children.
14. *Indigofera longeracemosa* (Papilionoideae) The roots of this plant is ground with dry ginger and made into paste. This is then administered orally to cure cold and fever in children.
15. *Limonia acidissima* (Rutaceae) Leaves are made into paste and given with honey in the morning in empty stomach to relieve cold in children.
16. *Mukia maderaspatana* (Cucurbitaceae) The tender leaves are ground with little salt and made into paste. It is then administered orally to relieve cold, cough and joint pains in children. Root is made into paste and taken with honey internally to control dysentery.
17. *Ocimum sanctum* (Lamiaceae) The fresh leaves or leaf juice is administered orally to children to get relief from cold and cough. Some herbal practitioners also

recommend the oral administration of its juices early in the morning to get the relief immediately.

18. *Ormocarpum sennoides* (Papilionoideae) The powdered form of leaves is mixed with milk and drink before meal early in the morning. Powdered leaves mixed with water and applied on the bone fracture in the body. This treatment is applicable for all.

19. *Pavonia procumbens* (Malvaceae) Leaves are ground and made into paste. It is prescribed orally with honey in empty stomach to control loose motion in children.

20. *Phyllanthus madearasensis* (Euphorbiaceae) Leaf is to be ground in powered form and mixed with cow milk and given orally to children to stop vomiting.

21. *Phyllanthus reticulatus* (Euphorbiaceae) Leaf is made into paste and given 2 times a day to dysentery in children.

22. *Scopariadulcis* (Scrophulariaceae) The leaf paste when consumed with buttermilk relieves body heat in children.

23. *Solanum nigrum* (Solanaceae) Leaves are boiled and the juice is given to the children to drink. At times the fruits also are given to eat. It cures ulcer in the intestine and also cools the body. It is administered only in the morning in empty stomach. This treatment is applicable for all.

24. *Solanum trilobatum* (Solanaceae) Leaves are eaten orally to cure throat infection, cold and cough.

25. *Trianthema portulacastrum* (Aizoaceae) Leaves are cooked as food and given to children to cool the body of children in summer.

26. *Tribulus terrestris* (Zygophyllaceae) Leaves are made into paste and given orally to promote good urination and also it removes stones in the gall bladder. This treatment is administered to all.

27. *Vitex negundo* (Verbenaceae) Ten drops of leaf juice are instilled in the nostrils of a child during the epilepsy attack. The recovery occurs immediately. Leaf decoction is mixed with *Piper longum* and is given to children having headache and earache. The leaves are first powdered and then warmed for a while and it is then bound in a cloth and placed on the forehead of a child to cure headache.

B. Enumeration of Plants For Women

1. *Adhatoda vasica* (Acanthaceae) Fresh leaves of Adhatoda are crushed and made into paste. It is to be orally taken along with jiggery in empty stomach in the morning for 15 days. It normalizes the menstrual cycle in women. The same effect is also recorded by Ranjit *et al.*, (2012) [6].

2. *Astragalus candoleanus* (Fabaceae) Root is made into paste and is orally taken with milk for a month to regulate menstruation. The same utility of this plant is also recorded by Ranjit *et al.*, (2012) [6].

3. *Carica papaya* (Caricaceae) Some matured seeds from the fruit is dried and made into powered and drank with water early in the morning to promote abortion. It is

very effective first two month. Ranjit *et al* [6] reported that when the fresh unripe fruits cooked with coconut, green chili, onion with little salt and taken with rice for few days promoted good menstrual cycle in women. His study also revealed that the juice of few seeds when taken orally for three days reduces menstrual pain in women.

4. *Hibiscus rosa-sinensis* (Malvaceae) The soaked petal along with coconut oil is externally applied for alopecia. The leaves and flowers are observed to be promoters of hair growth. Ranjit *et al* reported that the fresh flowers boiled in cow's milk when taken orally for 2 -3 days normalize the menstrual cycle in women. He also reported that few petals when eaten orally reduce menstrual pain in women.

5. *Ocimum sanctum* (Lamiaceae) Fresh leaves boiled and decoction is taken to relief the cough, dizziness, of boiled steams inhaled to relieve the headache. This treatment is applicable to all.

6. *Piper betle* (Piperaceae) Leaves are used for chewing and are credited with many medicinal properties such as digestive, stimulative, carminative and aphrodisiac. This treatment is administered to all.

7. *Ruellia tuberosa* (Acanthaceae) Leaves is to be made paste and then taken orally with milk to stop white fluids flowing from vagina after intercourse.

8. *Sesamum orientale* (Pedaliaceae) The leaf paste is orally taken in the morning in empty stomach for three days to promote anti-fertility. Ranjit *et al* [6] revealed that the germinating seed of the plant when eaten was found to

be very effective to stop irregular menstruation and normalize the menstruation in women.

9. *Vitex negundo* (Verbenaceae) Fresh roots to be cooked along with rice and eaten twice a day for a few days to start menstrual cycle. Ranjit *et al* [6] also observed same effect in his study of this plant.

27 species belonging to 17 families are employed in different ailments by the herbal practitioners and the local inhabitants in and around Villupuram district for childcare. It is seen that species from Euporbiaceae (4) family was maximum utilized to cure various ailments in children followed by Leguminosae (2), Lamiaceae (2), Rutaceae (2) Papilionoideae (2), Solanaceae (2) and one species each from Acanthaceae, Meliaceae, Caesalpiniaceae, Sapindaceae, Capparidaceae, Gentiamaceae, Periplocaceae, Cucurbitaceae, Malvaceae, Scrophulariaceae, Aizoaceae, Zygophyllaceae and Verbenaceae are employed for the treatment of the children's diseases. The survey also reveals that 8 family species are employed for curing various diseases in women. They include Acanthaceae (2) and one species each from Fabaceae, Caricaceae, Malvaceae, Lamiaceae, Piperaceae, Pedaliaceae and Verbenaceae. The study reveals the wide range of medicinally important species belonging to different families are found in this district. In country like India where the death rate of children and women, particularly in rural areas is much higher than the other developed countries, hence the scope of this type of study is very promising and it gives new source of drug plants in the treatment of diseases in children and women.

Chart 1. Distribution of Medicinal Plants in Study Area

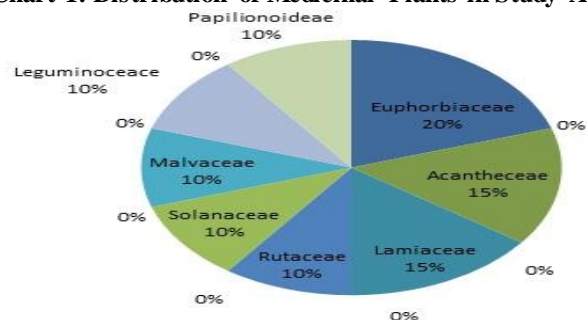


Chart 2. Parts of medicinal plants used

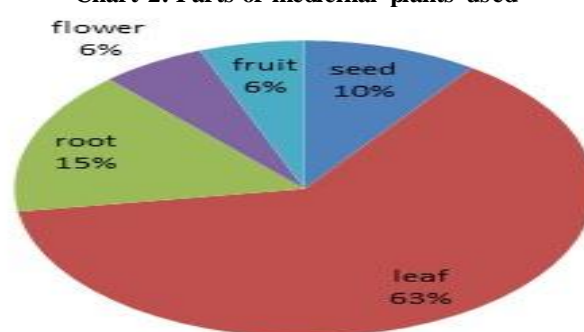


Chart 3. Mode of preparation of medicine

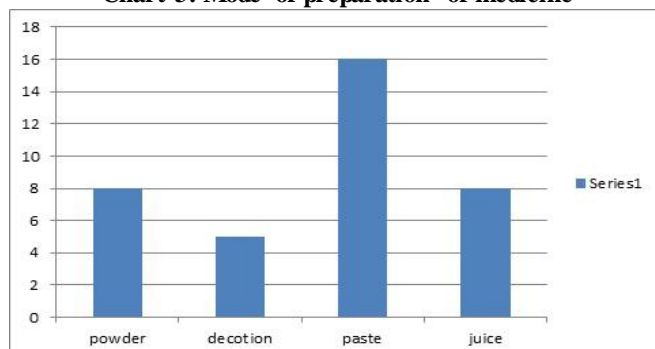
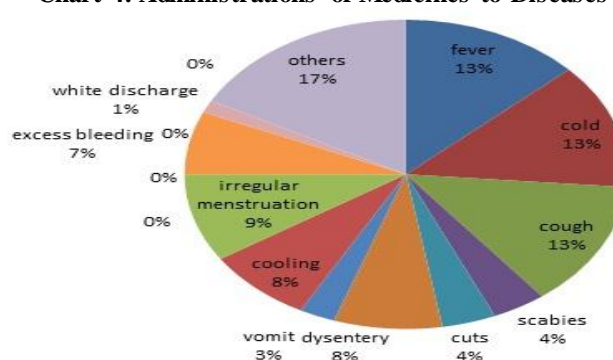
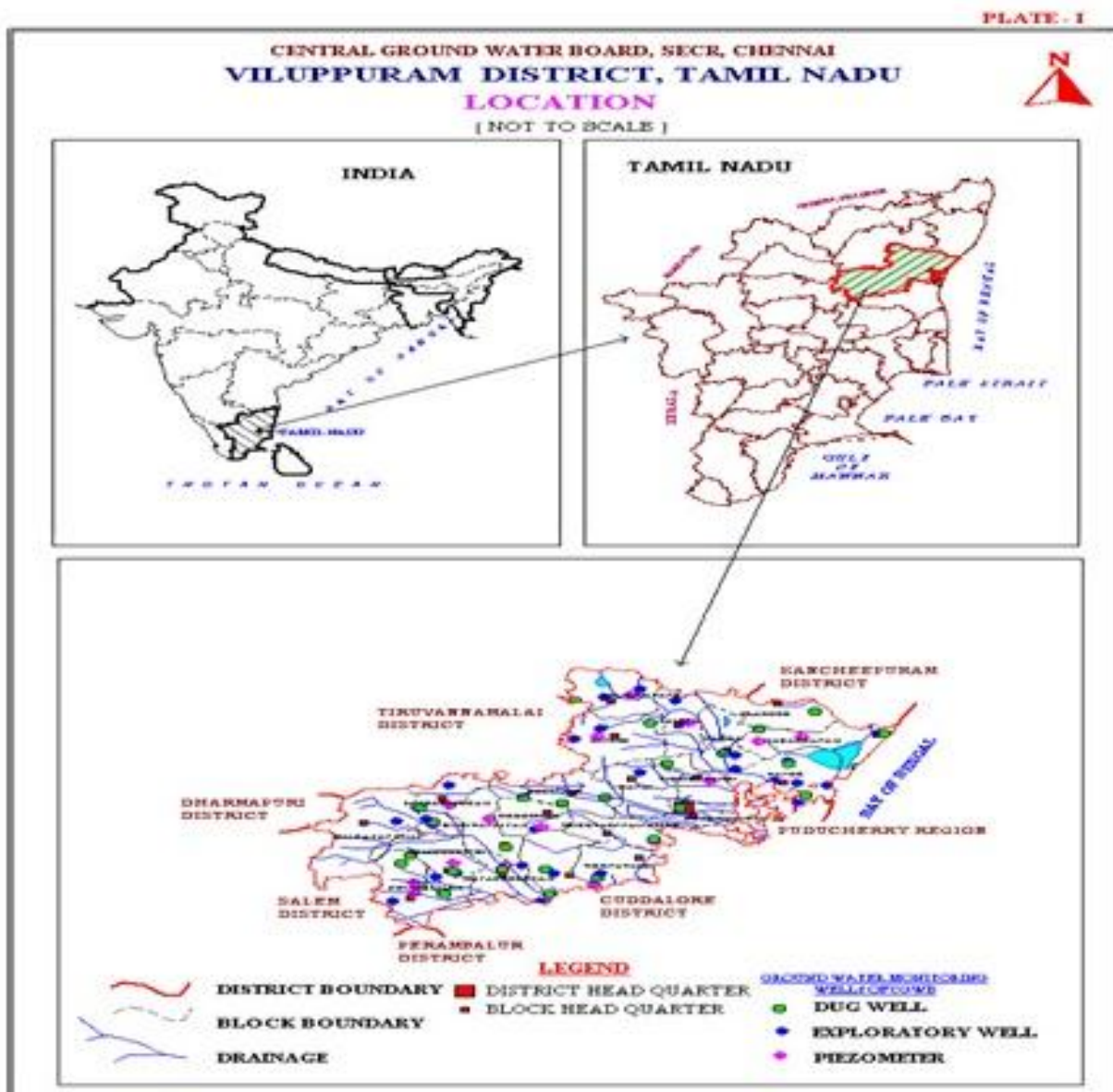


Chart 4. Administrations of Medicines to Diseases





(Published by: Regional Director, CGWB, SECR, E-1, Rajaji Bhavan, Besant Nagar, Chennai-90) [5].

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