



TRADITIONAL KNOWLEDGE OF MEDICINAL PLANTS USED BY PALIYANS AND PULIYANS IN PACHALUR AND PERIYUR HAMLETS, DINDUGAL DISTRICT, TAMIL NADU.

R.PRADEEP KUMAR*¹, SRISAKTHI² AND JOSEPH JOHN³

*¹Reader, ²Senior lecturer, ³Professor and Head
Department of Public Health Dentistry, Saveetha Dental College, Saveetha University, Chennai.*

ABSTRACT

An ethnobotanical survey was carried out among the ethnic groups' of paliyans and puliyans in pachalur and periyur hamlets, Dindugal district, Tamil nadu. The tribal communities of paliyans and puliyans nurture rich knowledge about medicinal plants and its uses. Therefore, an exhaustive ethnomedicinal survey in this area. In this present investigation, it is observed that 19 species of plants included in 16 families have been recorded which are being potentially exploited by the tribal groups in curing different human ailments like wound healing, cold, tooth ache, jaundice, dysentery, asthma, bronchitis, etc.

KEYWORDS: Paliyans, Puliyans, Pachalur , Periyur, Medicinal plants; Traditional use.

*Corresponding author



R.PRADEEP KUMAR
Reader, Department of Public Health Dentistry, Saveetha Dental College,
Saveetha University, Chennai

INTRODUCTION

In recent years, due to the increased consumer desire in healthy living, there has been a dramatic increase in the consumption of natural foods and the use of dietary supplements. Plants have been used in the traditional healthcare system from time immemorial, particularly among the tribal communities. Numerous wild and cultivated plants play a vital role in their culture, customs, traditional healthcare system, rituals etc, and this interrelationship have evolved over generations of experience and practice. Demands of medicinal plants are increasing in both developing and developed countries. According to WHO 2000 report, over 80% of the world population relies on traditional medicine for their primary health care needs¹. India is one of the twelve mega-biodiversity countries of the world, having rich vegetation with a wide variety of plants with medicinal value. Over 550 tribal communities are covered under 227 ethnic groups residing in about 5000 villages of India in different forests and vegetation types². It is reported that traditional healers use 2500 plant species and 100 species of plants serve as regular sources of medicine³. The ethnic and rural people of India have preserved a large bulk of traditional knowledge of medicinal uses of plants growing around them. It is estimated that tribal people of Tamil Nadu occupy 1.05% of the total state population and 0.77% of the total tribal population of the country. Ministry of Tribal affairs states that Tamil Nadu contains 36 types of tribal communities and they are distributed in different districts in the forests and adjoining areas⁴. In many countries, scientific investigations of medicinal plants have been initiated because of their contribution to healthcare. It is also necessary to collect the information about the knowledge of traditional medicines, preserved in tribal and rural communities of various parts of India in general and Tamilnadu in particular before it is lost permanently. Recently various ethnobotanical studies have been reported to expose the knowledge from the various tribals of Tamilnadu⁴⁻¹¹. Documenting the indigenous knowledge through ethnobotanical studies is important for

the conservation of biological resources as well as their sustainable utilization. In such a way the aim of the present studies is to document the Ethnomedicinal practices and plant wealth extensively used by the paliyan and pulayans of pachalur and periyur hamlets.

METHODS

Paliyans and Palayans are found in the hilly regions of Madurai, Dindigul, Theni, Tirunelveli and Virudhunagar districts. The study was conducted in kadasikadu, Boothmalai, Kuranginiparai, Nadavankalvai, Karadipari, Suadalaimalai, Mandravayal, Nadupatti, Nallurkadu and pallathukalvai villages in pachalur and periyur hamlets in dindugal district. Pachalur and Pariyur hamlets are 34 kms away from oddanchatram and it is located at 10° 05' N latitude and 78° 16' E longitudes at an elevation of 1500 m above sea level and the temperature ranged from 28-35°C. Generally they are illiterate and they speak Tamil. When compared to various tribal communities in Tamil Nadu constitute relatively a small group. They are under privileged and are marginalized socially and geographically. Data was collected from the local People and traditional medicinal practitioners inhabiting the villages through direct filled interviews. The information was collected through questionnaire, interviews and discussion with the tribals in their local language (Tamil). The ethnobotanical data collection was based upon medicinally useful plant (local name), plant parts, and method of administration.

RESULTS

In the present study 19 species of plants included in 16 families have been recorded which are being potentially exploited by the tribal groups in curing different human ailments as shown in Table 1 . They use different parts of plants for curing various ailments like wound healing, cold, tooth ache, jaundice, dysentery, asthma, bronchitis, etc.

Table 1
List of Medicinal plants used by paliyan and puliyan communities in dindugal district

S.No.	Botanical name	Family name	Vernacular name	Parts used	Medical uses
1	<i>Allium cepa L.</i>	Alliaceae	Vengayum	Root	Throat pain
2	<i>Allium sativum L.</i>	Alliaceae	Vellai poondu	Root	High blood pressure, boiled bulbs taken at night.
3	<i>Capsicum annuum L.</i>	Solanaceae	Sampagamilagai	fresh	Tooth ache
4	<i>Chenopodium album L.</i>	Chenopodiaceae	Paruppukeerai	Leaves	Boiled leaves taken at night for asthma
5	<i>Cipadessa baccifera(Roth)</i>	Meliaceae	Semmatti	Leaves	Stomach disorders
6	<i>Costus speciosus</i>	Costaceae	Vasambu	root	Stomach ache in children Diarrhea, dysentery
7	<i>Gmelina arborea</i>	Verbenaceae	Kumalampattai	bark	
8	<i>Hippeastrum leopoldii</i>	Amaryllidaceae	Sivappu visha moongil	Leaves, Bulb	Eczema
9	<i>Jatropha Curcus.L.</i>	Euphorbiaceae	Kattuummanaku	Milky latex	Tooth ache, Tooth brush
10	<i>Ocimum basilicum L.</i>	Lamiaceae	Thiruneethupachai	leaves	Common cold
11	<i>Piper nigrum L</i>	Piperaceae	Milagu	seeds	Tooth ache
12	<i>Phyllanthus amarus</i>	Euphorbiaceae	Keelanelli	leaves	Jaundice, mouth ulcer, menstrual problems.
13	<i>Ruta chalepensis L.</i>	Rutaceae	Punianthalai	leaves	Stomach ache
14	<i>Solanum melongena L.</i>	Solanaceae	Mullukathrikai	fruit	Cough and common cold
15	<i>Solanum trilobatum L.</i>	Solanaceae	Thoothuvalai	Leaves	Common cold
16	<i>Terminalia chebula</i>	Combretaceae	Kadukai	nuts	Dysentery, asthma, bronchitis, tooth ache.
17	<i>Trigonella feonum-graceum L.</i>	Papilionaceae	Venthayam	Seeds	Stomach pain
18	<i>vernonia elaeagnifolia.DC</i>	Compositae	Kattupachai	leaves	Body ache
19	<i>Zingiber officinale Roscoe</i>	Zingiberaceae	Ingi	Root	Dysentery and stomach disorders.

DISCUSSION

The traditional systems of medicine that have evolved over the centuries within various communities, are still considered as a great traditional knowledge source in herbal medicines¹². Traditionally, this treasure of knowledge has been passed through verbal communication from generation to generation without any written document¹³. A recent study done by Abhang A.R et al 2015 proved that the tribal people and other villager residing in Mula river valley region use about 86 plant species for the treatment of various ailment and they depend mostly on herbal medicines. As the villagers of this area are mostly tribal and illiterate and have no knowledge how to conserve the plants and the methods of applications.¹⁴ The present study of ethnobotanical knowledge of paliyans and pulayans would help in greater dissemination of this knowledge for long term conservation of a sustainable livelihood for the tribes. This study shows that knowledge and usage of medicinal plants for the treatment of various ailments among palayan and pulayan tribes is still a major part of their life and culture. Generally, the people of the study area still have a strong belief in the efficacy and success of herbal

medicine. The tribal has convinced us that traditional medicine can help rural and tribal communities in India to achieve self reliance in their primary oral health care needs. Further detailed exploration and collection of ethnobotanical information, chemical studies and screening of medicinal properties will provide reliable source of medicine.

CONCLUSION

The results of the present study provide evidence that medicinal plants continue to play an important role in the healthcare system of this tribal community. It is concluded that biodiversity plays important role in the functioning of the village ecosystem; hence there is an urgent need to study on the conservation of biodiversity in and around the tribal settlements would help in sustainable development giving more emphasis to the indigenous within the people.

CONFLICT OF INTEREST

Conflict of interest declared none.

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