



STUDY ON FOLKLORE MEDICINAL PRACTICES OF PANIYA TRIBES FOR GYNAECOLOGICAL AILMENTS.

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ABSTRACT

The present world is keen in providing good medical services in every field related. Among them gynaecology is getting deep focus in every sense from the pregnancy to the end of the child hood of the baby as well as mother. The world faces big problem by the use of chemical based medicines. Seeking alternative through traditional medicine would be the only viable solution. However the execution of this system can only be possible through documenting and standardising the folklore medical practices from the tribes who are the repository of traditional knowledge. *Paniya* tribe is the very prominent folklore group of Kerala especially in Wayanad. In the present study 32 plant species from 30 genera belongs to 25 families have been recorded as medicinal plants against gynaecological problems and members from Fabaceae are the predominant among them.

KEY WORDS: Gynaecology, Pregnancy, Repository, Paniya tribe, Wayanad.



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INTRODUCTION

The great blue planet "Earth" have very rich flora in both terrestrial and aquatic ecosystems. Basically each and every plant has medicinal value. Now days a huge volume of mankind rely on herbal medicines for their health care needs in day to day life. Due to severe side effects caused by the modern system of medicine practiced which is completely based on chemicals, the rest of population is also ready to accept the herbal system of medicine as an apt alternative. The study was conducted at the *Paniya* settlement at Nellivayal of Wayanad district of Kerala.

The state Kerala is seen at the South West tip of Indian union and is sandwiched between Arabian Sea and Western Ghats. It shares border with two states namely Tamil Nadu and Karnataka, and the rest are coastal areas. Wayanad is a northern district of Kerala, its prime feature is the Western Ghats mountain range, standing tall with lofty ridges and interspersed with dense forests, tangled jungles and deep valleys. Wayanad is bounded on the east by Nilgiri and Mysore district of Tamil Nadu and Karnataka respectively, on the south by Malappuram and on the west by Kozhikode and Kannur district of Kerala. It is situated between 11°27' to 15° 58' north latitudes and 75°47' to 70° 27' east longitudes with the altitude ranging from 700 to 2100 M above msl. The temperature ranges between 16° C (Dec-Jan) and 30° C (April-May). The annual rainfall ranges from 300 to 1000 mm. The major vegetation is semi evergreen, evergreen and moist deciduous forest¹. Total geographical area of Wayanad is 2126 km², which comprises 5.48% area of the state Kerala.

Study group The state of Kerala has recognized 36 scheduled tribes. *Paniyas* are socially marginalized group which constitute the largest single scheduled tribe in Kerala². They are mainly in Wayanad. A few of them are found in Malappuram, Kozhikode and Palakkad districts. The majority of the *Paniya* tribal populations (71.95%) are found in Wayanad alone.

Traditionally *Paniyas* enjoys their food from fish, crabs and animal flesh as well as wide range of grass to buffalo. They use edible roots, leaves, tubers, fruits, vegetables, small creatures, besides drinking coffee and tea; they are addicted to Indian hemp (*Cannabis sativa*) and toddy mainly from different palms. *Paniya* reports less episodes of illness during a year than others. Traditionally, this treasure of knowledge has been passed on orally from generation to generation without any written document³.

METHODOLOGY

The ethnobotanical study was carried on survey basis. The survey regarding the usage of medicinal plants available in the local area for treating various gynaecological problems were collected by the prescribed procedure⁴. Extensive field trips were conducted between November-2011 to February-2012 in the *paniya* colonies of Nellivayal of Wayanad. The information on gynaecological uses of plants were collected by inter views with old age members of *paniya* tribe, tribal healer and tribal mid wife. The plant species were identified with the help of floras⁵⁻⁶ and documented. Information collected on ethnogynaecology was assessed in terms of Botanical name, Vernacular name, Common name, Family, Useful Parts, Ailments and Mode of administration.

RESULTS AND DISCUSSION

The present study was carried out in *Paniya* village of Wayanad. It was much difficult to interact with them, but it was overcome with the help of translators. Most of them except new generation do not have a clear record on their birth and majority of them do not know their date of birth; hence they calculate their age approximately. It is much striking to note that the traditional knowledge on the plants is very much high with the old age people to youth and adults.

Most of the youngsters are unaware of their traditions and the value of biodiversity but a few of them are much informative. There is a great struggle for survival and the *Paniya* community is forced to find any source of employment to meet their needs. Now almost all from the study area are employed with Mahatma Gandhi National Rural Employment Surety Programme.

The entire population from the selected tribal settlement were 128 and they are from 34 families. Every family have their own huts known as 'Pira or Kudi'. During the survey only 19 respondents were interviewed. Among them 26% are men and 74% are women. The respondents are belonging to an age group of 40-80, (Fig 1)

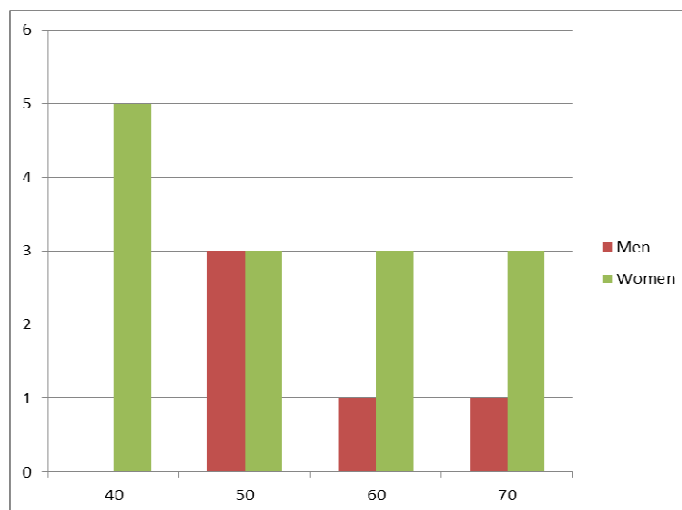


Figure-1
Number of respondents

Ethnogynaecological study

The result obtained from the ethnogynaecological study carried out in the *Paniya* tribe is given below. The ethnogynaecological plants are enlisted with their botanical name, vernacular name, common name and family. This study has been recorded 32 plant species

The documented 32 plants showed wide variety of habits, among them majority are trees with a huge percentage of 41% and similarly by herbs with 28%, shrubs 19%, climbers 9% and palm with 3% , Fig(3). Different parts of plants have been used by the studied tribe. Among the plant parts most extensively used seeds with a percentage of 33% and exudates with a least percentage of 2. The ether parts recorded as

from 31 genera belonging to 25 families. Among them Fabaceae is the predominant family. The recorded plants are enlisted below (Table-1). There are some additions in gynaecological perspective to medicinal plants used by the forest tribe Mananthavadi thaluk Wayanad district⁷.

being used are leaf, fruit, flower, root, tuber, rhizome and stem, Fig (4). The parts of the plants being used varies from one species to another, from practitioner to practitioner, from disease to disease and depends on the climatic conditions. A wide range of traditional medicines are used to regulate menstrual cycle, fertility enhancement, delivery easiness, abortion, prevention of abortion⁸.

Table-1
List ethnogynaecological plants used.

SI NO	Botanical name	Habit	Parts used
1.	<i>Aegle marmelos</i> L.	Tree	Leaf, flower
2.	<i>Calotropis gigantean</i> L.	Shrub	Leaf, latex
3.	<i>Cocos nucifera</i> L.	Palm	Seed
4.	<i>Commiphora mukul</i> L.	Tree	Fruit
5.	<i>Cuminum cyminum</i> L.	Herb	Seed
6.	<i>Curcuma longa</i> L.	Herb	Rhizome
7.	<i>Elattaria cardamomum</i> L.	Herb	Seed
8.	<i>Glycyrrhiza glabra</i> L.	Shrub	Root
9.	<i>Hemidesmus indicus</i> L.	Shrub	Tuber
10.	<i>Holostemma ada-kodien</i> Shult	Shrub	Tuber
11.	<i>Jasminum sambac</i> L.	Shrub	Flower
12.	<i>Moringa oleifera</i> L.	Tree	Leaf, flower, fruit
13.	<i>Mucuna pruriens</i> L.	Climber	Seed
14.	<i>Murraya koenigi</i> L.	Tree	Leaf
15.	<i>Myristica fragrance</i> Hoult.	Tree	Seed
16.	<i>Oryza sativa</i> L.	Herb	Seed
17.	<i>Oscimum basilicum</i> L.	Herb	Leaf
18.	<i>Phyllatthus emblica</i> L.	Tree	Fruit
19.	<i>Piper betle</i> L.	Climber	Leaf
20.	<i>Piper nigrum</i> L.	Climber	Seed
21.	<i>Ricinus communis</i> L.	Tree	Seed
22.	<i>Ruta chalepensis</i> L.	Herb	Leaf
23.	<i>Sanadalum album</i> L.	Tree	Stem
24.	<i>Saraca asoca</i> Roxb.	Tree	Bark
25.	<i>Sesamum radiatum</i> L.	Herb	Seed
26.	<i>Spondias pinnata</i> L.	Tree	Fruit
27.	<i>Syzegium aromaticum</i> L.	Tree	Flower
28.	<i>Terminalia bellirica</i> Gaertn.	Tree	Seed
29.	<i>Theobrama cacao</i> L.	Tree	Seed
30.	<i>Trigonella foenum-graecum</i> L.	Herb	Seed
31.	<i>Vetiveria zizanioides</i> L.	Herb	Root
32.	<i>Withania somnifera</i> L.	Shrub	Root, leaf

Table-2
List of ethnogynaecological plants (forms and parts)

SI NO	Botanical name	Vernacular name	Common name in English	Family
1.	<i>Aegle marmelos</i> L.	Kuvalam	Bael tree	Rutaceae
2.	<i>Brassica juncea</i> L.	Kaduku	Mustard	Brassicaceae
3.	<i>Calotropis gigantea</i> L.	Erikku	Mudar	Asclepiadaceae
4.	<i>Cocos nucifera</i> L.	Thengu	Coconut	Arecaceae
5.	<i>Commiphora mukul</i> L.	Gulgulu	Bdellium	Burseraceae
6.	<i>Cuminum cyminum</i> L.	Jeerakam	Cumin	Apiaceae
7.	<i>Curcuma longa</i> L.	Manjal	Turmeric	Zingiberaceae
8.	<i>Elattaria cardamomum</i> L.	Ealam	Cardamom	Zingiberaceae
9.	<i>Glycyrrhiza glabra</i> L.	Irattimadhuram	Liquorice	Fabaceae
10.	<i>Hemidesmus indicus</i> L.	Nannari	Sarsapilla	Fabaceae
11.	<i>Holostemma ada-kodien</i> Shult.	Adapathiyan	Holostemma creeper	Asclepiadaceae
12.	<i>Jasminum sambuc</i> L.	Mullappuv	Jasmine	Oleacea
13.	<i>Moringa oleifera</i> L.	Muringa	Moringa	Moringacea
14.	<i>Mucuna pruriens</i> L.	Naykurana	Cowhage	Fabaceae
15.	<i>Myristica fragrance</i> Hoult.	Jathi	Nutmeg	Myristicacea
16.	<i>Oryza sativa</i> L.	Nellu	Rice	Poaceae
17.	<i>Oscimum basilicum</i> L.	Thulasi	Basil	Lamiaceae
18.	<i>Phyllatthus emblica</i> L.	Nellikka	Gooseberry	Euphorbiaceae
19.	<i>Piper betle</i> L.	Vettila	Betle leaf	Piperaceae
20.	<i>Piper nigrum</i> L.	Kurumulaku	Pepper	Piperaceae
21.	<i>Ricinus communis</i> L.	Avanakku	Ricinus	Euphorbiaceae
22.	<i>Ruta chalepensis</i> L.	Nagathali	Garden rue	Rutaceae
23.	<i>Sanadalum album</i> L.	Chandanam	Sandal wood	Sandalaceae
24.	<i>Saraca asoka</i> Roxb.	Asokam	Asoka	Fabaceae
25.	<i>Sesamum radiatum</i> L.	Ellu	Ginjelly	Pedaliaceae
26.	<i>Spondias pinnata</i> L.	Ambazham	Hogplum	Anacardiaceae
27.	<i>Syzegium aromaticum</i> L.	Grambu	Clove	Myrtaceae
28.	<i>Terminalia bellirica</i> Gaertn.	Thanni	Bellari	Combritaceae
29.	<i>Theobroma cacao</i> L.	Coco	Kokko	Sterculeaceae
30.	<i>Trigonella foenum-graecum</i> L.	Uluva	Greek hays or Fenu greek	Fabaceae
31.	<i>Vetiveria zizanioides</i> L.	Ramacham	Vetivera	Poaceae
32.	<i>Withania somnifera</i> L.	Amukkuram	Winter cherry	Solanaceae

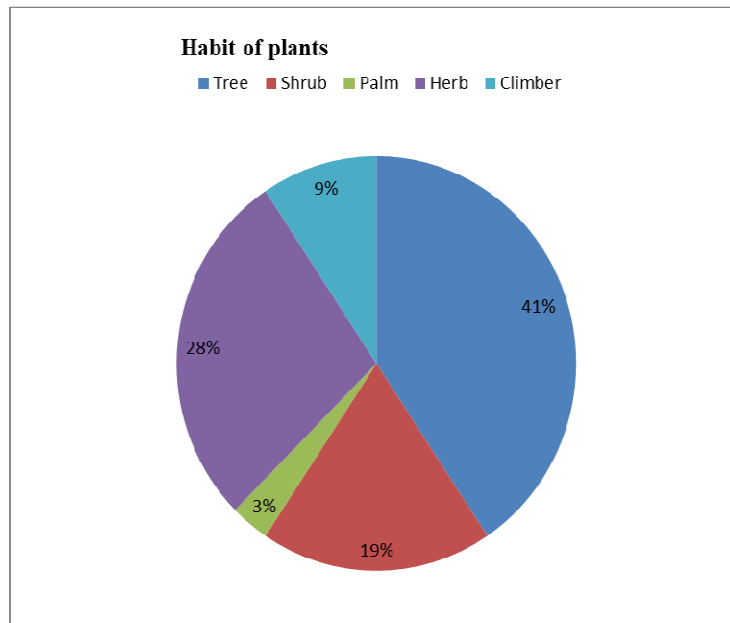


Figure-2
Habit of plants used in gynaecological treatment.

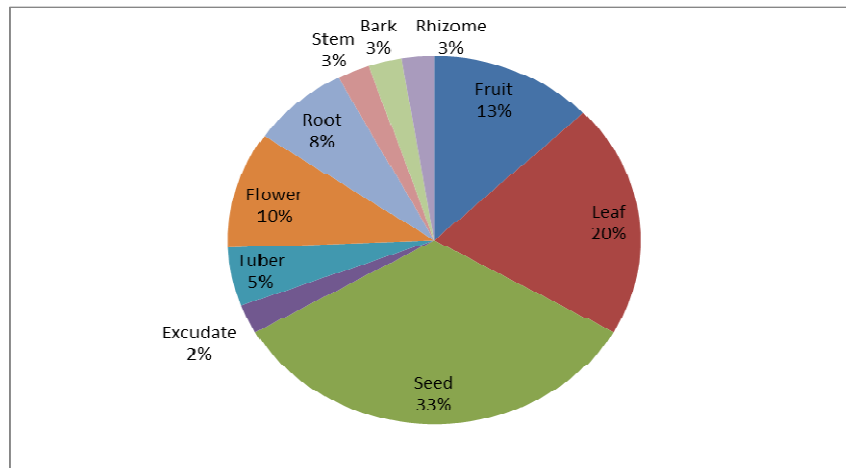


Figure-3
Parts of plants used for gynaecological needs

Mohanan *et al*⁹ conducted ethnobotanical study on Mullukuruma tribe of Wayanad. *Salacia reticulata*, bark of *Saraca asoka*, seed of *Trigonella foenumgrecurm* are used for dysmenorrhoea. The rhizome of *Curcuma longa*, bark of *Calophyllum inophyllum* is used to arrest vomiting. The same plant species may be sued

for several ailments – bark of *Moringa olifera* for abortion and leaf of the same plant is used to induce lactation, the rhizome of *Curcuma longa* is used to heal the umbilical cord and arrest vomiting. In this study he has reported administration of tuber paste of *Ipomoea mauritina* orally twice a day for 2 months for

treating impotency. Stem bark decoction of *Streblus asper* is taken twice a day will cure leucorrhoea.

Kuru suresh et al¹⁰ conducted a study on ethnobotanical knowledge on single drug remedies from Idukki. In this study he has reported that the oral intake of ground bark of *Azadirachta indica* in filtered butter milk will control excessive menstrual bleeding. The decoction made with root of male *Carica papaya* plant in one litter water and it is mixed with one

spoon of charred elephant dung and consume 3 times a day to induce abortion.

Rajith et al¹¹ conducted study on traditional mother care plants of rural communities of south Kerala, and identified that *Justicia adathoda* is used to cures body ache, and the seeds of *Cuminum cyminum* are used for relief from body pain. He also reported that *Moringa olifera* leaves are the nutritious food during pregnancy.

Ethnogynaecological treatment by plants

1. Leucorrhoea

- a. Nannari (*Hemidesmus indicus*) tuber is made into juice with in cow milk and taken orally.
- b. A juice is made up with tender coconut (*Cocos nucifera*) water, powder of sandal (*Sandalum album*) and cumin (*Cuminum cyminum*) and taken orally.
- c. Asoka (*saraca asoka*) bark is ground and taken orally twice a day for five days continuously.

2. Fatigue

- a. Decoction of Greek hay (*Trigonella foenum-graecum*) is taken orally in the morning.
- b. Moringa (*Moringa pterigosperma*) leaves were cooked and taken as side dish for main food.

3. Oligospermia

- a. Holostemma tuber (*Holostemma ada-kodien*) is boiled and taken as breakfast.

4. Low women volume

- a. Ripened hogplum (*Spondias pinnata*) is taken one per day.

5. Premature ejaculation

- a. Nutmeg (*Myristica fragrance*) is ground and taken orally with milk in the morning.
- b. Basil (*Ocimum basilicum*) leaves were dried, powdered and taken orally with milk in the evening.

6. Syphilis

- a. Decoction of mudra (*Calotropis gigantea*) leaves is used to clean the organ.

7. Easy delivery

- a. Greek hay (*Trigonella foenum-graecum*), rice (*Oryza sativa*), cumin (*Cuminum cyminum*) are dried powdered and made into jam with cane sugar and taken orally. It will release the delivery pain also.
- b. Liquorice (*Glycyrrhiza glabra*) is taken orally as mixed with cane sugar and least quantity of water.

8. Breast growth

- a. The leaves of garden rue (*Ruta chalepensis*) were ground and applied on the breast, will help in its development.

9. Lack of Libido

- a. Cocoa (*Theobroma cacao*) seed powder is taken orally with milk in bed.
- b. Powdered rice (*Oryza sativa*) and white cherry (*Whithania somnifera*) are taken orally with boiled milk twice a day.

10. Mastitis (Breast inflammation)

- a. Vetiver (*Vetiveria zizanioides*) and sandal (*Sandalum album*) ground in milk and applied on the breast.

- b. Bdellium (*Commiphora mukul*) is roasted in cow ghee and applies on the breast after the bath.
- 11. Dysmenorrhoea**
- a. Seed of Greek hay (*Trigonella foenum-graecum*) is taken orally along with coconut (*Cocos nucifera*) meat.
- b. Asoka (*saraca asoca*) bark is ground and taken orally twice a day for five days continuously.
- 12. Vomiting**
- a. Rhizome of turmeric (*Curcuma longa*) is ground and mixed with boiled milk and taken orally.
- 13. Umbilical treating**
- a. Application of turmeric (*Curcuma longa*) rhizome paste will heal umbilical cord.
- 14. Stimulation of lactation**
- a. Cooked gingelly (*Sesamum radiatum*) is taken with ghee, milk and honey.
- 15. Impotency**
- a. Liquorice (*Glycerhiza glabra*), cardomomum (*Elataria cardomomum*), clove (*Syzegium aromaticum*), cumin(*Cuminum cyminum*) leaves, and flowers of bael (*Aegle marmelous*) are dried, powdered and mixed with honey and taken in empty stomach for long time.
- b. The seeds of bellari (*Terminalia bellarica*) are taken orally with honey twice a day.
- 16. Vaginitis**
- a. Ricinus oil (*Ricinus communis*) and cow milk were mixed well and applied on the itching vagina.
- b. Juice of goose berry (*Phyllanthus emblica*) is taken orally with honey in the bed to check the vaginal oozing.
- 17. Breast cancer**
- a. Grind cumin (*Cuminum cyminum*), bark of moringa(*Moringa oliefera*)and long pepper (*Piper nigrum*) with cow urin and apply on the breast.
- 18. Stop lactation**
- a. Grind betel leaves (*Piper betle*) and applied externally on the nipples will arrest lactation.

CONCLUSION

The ethnobotanical knowledge of *paniyas* paves way for conservation and sustainable utilization of resources. *Paniyas* are the repository of accumulated knowledge and they have developed their own culture, myths, songs, foods and medicinal practices. Living close and mingled with the nature, the *paniyas* are familiar with their environment having diversified flora and fauna. By empirical reasoning and trial and error method they have screened and developed a wider range knowledge of their ecosystem. It is striking to note that the traditional knowledge of *paniyas* on plants is very high with older members when compared to the youth and adults.

The ethno gynaecological study has been recorded 32 plant species from 31 genera belonging to 25 families. Among them Fabaceae are the predominant family with five plants.

The use of herbal remedies has great potential and detailed investigation should be planned with the help and cooperation of different agencies. It will be useful for sustainable medical development in future and further investigation is required, then only we could provide good alternatives to the chemical base allopathic system hence we could satisfy the modern medical challenges.

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