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Research Article

ETHNO-MEDICO-BOTANY OF MOODABIDRI RANGE IN CHILD HEALTH CARE

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ABSTRACT

Traditional practices related to child care provides valuable knowledge and inputs in making best use of natural resources as it is proved very effective in indigenous experimentation. Medical ethno-botany forms a major part of medicinal aspects of aboriginal child care. Indigenous herbal practices related to child care provides valuable knowledge and aid in making best use of natural resources as it is dynamic in dissemination and scientific in indigenous experimentation. Twenty six villages in and around Moodabdiri were identified and planned for the present study. Principal investigator, Co Principal investigator, Technical assistant and local members visited each village in regular intervals to gather information regarding folklore practitioners and medicinal plants. A detailed proforma was prepared containing information about folklore practitioners and regarding the medicinal plants. In the present study the results are arranged in alphabetical order of the diseases. About 20 diseases are enumerated and in total 37 plants belonging to 28 families are used as herbal remedies in child–care, while 4 plant species are used along with other plant resources in herbal preparations. Local communities not only use these plants but also care for their conservation and protection; thus contributing towards sustainable development.

Key words: Ethno-medico-botany, Child health, Moodabidri

INTRODUCTION

Traditional practices related to child care provides valuable knowledge and inputs in making best use of natural resources as it is proved very effective in indigenous experimentation. The rural population of the region has repository of traditional wealth of medicinal bank. They have a strong belief on their nature and relay on their herbal cure. Herbal medicines for infants and child care are not exceptions.

Medical ethno-botany forms a major part of medicinal aspects of aboriginal child care. 70% of world population uses herbal traditional remedies in treatment of sick and injured children. Indigenous herbal practices related to child care provides valuable knowledge and aid in making best use of natural resources as it is dynamic in dissemination and scientific in indigenous experimentation.[1]

There are many drugs available in our surroundings but do not find mention in classical treatises of Ayurveda[2]. Some are mentioned in *Nighantus* like *Bhavaprakasha*, *Oshadi Nighantu* etc. In folklore practice too many drugs are being used which goes unnoticed many a times due to varied reasons[3]. Keeping this in mind a detailed survey of folklore healers of Moodabidri range of Dakshina Kanada district of Karnataka state was done in the present study.

The Moodabidri Range is very rich in herbal wealth and also the folklore practitioners. People of Moodabidri Range represent a combination of rich cultural and ethnic diversity. One can see a good admixture of both tribal and non-tribal folks as well as of all religions. Jains, Billava, Bunta, Kulaala, Konkani, Brahmana, Gowda, Christians and Muslims are some of the chief non-tribal communities of the range. Among tribals inhabitated in this range are Naika, Parava, Pambada and Nalike. The range covers 26 villages of Moodabidri Talluk and reaches to foothills of Western Ghats.

MATERIALS & METHODS

Twenty six villages in and around Moodabdiri were identified and planned for the present study. Principal investigator, Co Principal investigator, Technical assistant and local members visited each village in regular intervals to gather the information regarding folklore practitioners and medicinal plants. A detailed proforma was prepared containing information about folklore practitioners and medicinal plants such as source of plant, local name, taxonomic identification of the plant, parts used, means of collection of plant material and part(s) used, ingredients to be added in case of multi-herbal formulations, process of preparation of the medicine and mode of application, name, sign(s) and symptom(s) of the disease(s) treated, dosage and duration of treatment, therapeutic uses, dietary restriction(s) during the treatment and food values of the plants, any other relevant information such as divine beliefs etc. Information thus gathered were verified and crosschecked for its earlier documentation and authentication of plant identity by making use of available literature such as Bhavaprakasha Nighantu[4], Raja Nighantu[5], Flora of Udupi[6], Flora of South Canara[7], Flora of Shimoga[8] Flora of Madras presidency[9], Flora of British India[10] and also by consulting expert herbalists. Herbarium specimens and Photography of the rare medicinal plants with proper information were also documented.

OBSERVATIONS AND RESULTS

In the present study the results are arranged in alphabetical order of the diseases. About 20 diseases are enumerated and in total 37 plants belonging to 28 families are used as herbal remedies for

child–care, while 4 plant species are used along with other plant resources in herbal preparations. Local communities not only use these plants but also care for their conservation and protection; thus contributing towards sustainable development. Some of the ailments commonly treated which was observed during the survey are listed out here.

Ajeerna (indigestion)
Roots of *Thottea siliquosa* are ground with water and given internally.

Atisara (Diarrhoea)
The decoction of the roots of *Ziziphus oenoplia* is given internally in the dose of 10-15 ml thrice daily.

Chardi (Vomiting)
The decoction of the leaves of *Tamarindus indica is given internally.*

Grahani (Sprue)
Stem of *Zanonia indica* is steamed, juice extracted. It is mixed with juice of *Allium cepa, Ocimum sanctum, Centella asiatica, Leucas aspera, Vitex negundo, Acorus calamus* and *Zingiber officinale.* 2-4 tea spoon of this juice is given internally in case of symptom complex like stomach ache, indigestion, dysentery, excessive thirst, dryness of the skin and lips and anemia are predominant. This formulation is adminstered in the form of tablet ans is popularly known as *Chihnematre.*

Jwara (Fever)
- Decoction of the roots of *Gymnostachyum febrifugum* is given internally in the dose of 10ml thrice daily.
- Decoction of the whole plant of *Leucas aspera* is given internally in the dose of10-15 ml thrice daily.

Kamala (Jaundice)
- Dried powder of the whole plant of *Biophytum sensitivum* boiled with milk and given internally in the dose of 30 ml twice daily before food for 10 days.
- Juice expressed from whole plant of *Phyllanthus amarus* is given internally in the dose of 20ml twice daily.

Karna Vedana (Ear Ache)
Oil prepared out of the leaves of *Coccinia grandis, Ocimum sanctum* and *Allium cepa* along with coconut oil is poured as ear drop in case of ear ache.

Kasa (Cough)
- The syrup or leha prepared out of the fruit of *Averrhoea carambola* is given in the dose of 2 tsp thrice daily
- Decoction of the whole plant of *Naregamia alata* is given in the dose of 10 ml thrice daily
- The fresh juice or decoction of the leaves of *Melastoma malabathricum* is used as expectorant.
- Tender leaves of *Osbeckia muralis* is used in the form of juice or decoction is used as expectorant.

Krimi (Worm infestation)
The rice boiled with the decoction of the leaves of *Combretum extensum* and is given as food for 3 days in the morning in case of worm infestation in the children.

Medhya (Memory Booster)
The leaf juice of *Evolvulus alsinoides* in the dose of 10ml twie daily acts as medhya.

Mootra Krichra (Difficult micturation)
Decoction of the roots of *Hemidesmus indicus* with milk is used as a beverage in children.

Netra vikara (Eye diseases)
- Leaf juice of *Cyclea peltata* instilled to the eye as eye drop in case of burning sensation of the eye..
- Flower juice of *Moringa oleifera* used as eye drop and leaves of the same are given as vegetable to improve the eye sight.
- The decoction of the leaves of *Alternanthera sessilis* is given internally in the dose of 10 ml twice daily for 40 days to improve eyesight.

Pandu (Anaemia)
Fruits of *Aglaia elaeagnoidea* are considered as cooling and used in gastric irritation and biliousness.

Shayya mootra (Enuresis)
Juice of the steamed roots of *Coccinia grandis* is administered orally for a week or two, in a dose of about 30ml, once in the morning to relieve bed wetting in children.

Shirashoola (Head ache)
- A paste prepared by rubbing the seeds of *Barringtonia racemosa* with water is applied over the forehead.
- External application of paste of the whole plant of *Naravelia Zeylanica* pacifies headache.

Shosha (Emaciation)
- Medicated oil prepared from the roots of *Cyclea peltata* with those of *Ixora coccinia, Ventilago madraspatana* along with coconut oil is used as massage oil in growing children in emaciation.
- Decoction of the stem bark of *Bridelia scandens* is given as a substitute for milk in infants in case of non-availability of breast milk or cow's milk. This decoction is considered to be equivalent to milk in all aspects. Infants are sometimes fed with milk mixed with decoction of this plant to avoid any sort of stomach upset, stomach pain or diarrhoea, which may affect children, also given as a nutritive feeding in case of milk indigestion.

Shwasa (Asthma)
The decoction of the leaves of *Glycosmis pentaphylla* is given internally.

Twak Roga (Skin disease)
- Tender leaves of *Memecylon malabaricum* ground with cow's milk and few cumin seeds, given internally twice a day and applied externally in herpes.
- Roots of *Ixora coccinia* ground with *Ollekodi (Memecylon malabaricum*), *Kudka Bacchire* (*Desmodium triquetrum*) and milk applied topically for herpes, impetigo etc.

Udara Shoola (Stomach ache)
- Tender leaf paste of *Psidium guajava* along with *Zingiber officinale* and *Ferula asafoetida* given internally.
- Stem of *Zanonia indica* is steamed, juice extracted. 2-4 tea spoon of this juice is taken internally in case of stomach discomfort and digestive disorders.

Vibandha (Constipation)
The roots of *Uvaria narum* are rubbed with water and given internally.

Table 1: Ethno-medico-botany of Moodabidri range in Child health

Sl. No.	Botanical Name	Family	Local Name (Kannada)	Part used	Uses
1	*Acorus calamus* L.	Araceae	Baje	Rhizome	Sprue
2	*Aglaia elaeagnoidea* (A.Juss.)Benth	Meliaceae	Pucchehannu	Fruits	Anaemia.
3	*Allium cepa* Linn.	Liliaceae	Neerulli	Bulb	Sprue
4	*Alternanthera sessilis* (L.)	Amaranthaceae	Honaganne	Leaves	Eye Disease
5	*Averrhoea carambola* L.	Oxalidaceae	Darehuli	Fruit	Cough
6	*Barringtonia racemosa* (L.) Spreng	Barringtoniaceae	Samudraphala	Seeds	Head ache
7	*Biophytum sensitivum* (L.) DC	Oxalidaceae	Dodda Horamuni	Whole Plant	Jaundice
8	*Bridelia scandens* (Roxb.)Willd.	Euphorbiaceae	Bandanaru	Stem bark	Emaciation
9	*Centella asiatica* (L.)	Apiaceae	Ondelaga	Whole plant	Sprue
10	*Coccinia grandis* (L.) Voigt.	Cucurbitaceae	Tondekayi	Root	Enuresis
11	*Combretum extensum* Roxb.	Combretaceae	Kojambe	Leaves	Worms
12	*Cyclea peltata* (Lam.) Hook.f.& Thoms.	Menispermaceae.	Hadeballi	Root	Eye Disease
13	*Desmodium triquetrum* (L.) DC.	Papillionaceae	Moorele Honne	Leaves	Twak roga
14	*Evolvulus alsinoides* Linn.	Convolvulaceae	Vishnukranthi	Whole plant	Memory enhancer
15	*Ferula asafoetida* Linn.	Apiaceae	Hingu	Resin	Stomach ache
16	*Glycosmis pentaphylla* (Retz.) A.DC.	Rutaceae	Manikyasoppu	Leaves	Asthma
17	*Gymnostachyum febrifugum* l.	Acanthaceae	Nelamucchala	Whole plant	Fever
18	*Hemidesmus indicus* (L.)	Periplocaceae	Ananthamoola	Root	Difficult micturation
19	*Ixora coccinia* L.	Rubiaceae	Kepula	Root	Twak Roga
20	*Leucas aspera* Linn.	Lamiaceae	Thumbe	Leaves	Sprue
21	*Melastoma malabathricum* Linn.	Melastomaceae	Nekkarika	Leaves	Cough
22	*Memecylon malabaricum* (Clarke)Cogn.	Melastomaceae	Ollekodi	Leaves	Skin disease
23	*Moringa oleifera* Lam.	Moringaceae	Nuggesoppu	Leaves	Eye Disease
24	*Naregamia alata* Wight & Arn.	Meliaceae	Nelanaringa	Whole plant	Cough
25	*Naravelia Zeylanica* (L.)DC	Ranunculaceae	Shitaballi	Whole plant	Head ache
26	*Ocimum sanctum*	Lamiaceae	Tulasi	Leaves	Sprue
27	*Osbeckia muralis* Naudin.	Melastomaceae	Nelanekkarika	Leaves	Cough
28	*Psidium guajava* Linn.	Myrtaceae	Perale	Tender Leaves	Stomach ache
29	*Phyllanthus amarus* Schum. &Thonn.	Euphorbiaceae	Nela nelli	Whole plant	Jaundice
30	*Tamarindus indica* Linn.	Caesalpinaceae	Otehuli	Leaves	Vomiting
31	*Thottea siliquosa* (lam.)Ding Hou.	Aristolochiaceae	Chakrani	Roots	Indigestion
32	*Uvaria narum* (Dunal) Wall.	Annonaceae	Karimaderi	Root	Constipation
33	*Ventilago madraspatana* Gaertn.	Rhamnaceae	Ittaballi	Root	Emaciation
34	*Vitex negundo* L.f.	Verbanaceae	Nekki	Leaves	Sprue
35	*Zanonia indica* Linn.	Cucurbitaceae	Kandadiballi	Stem	Sprue, Stomach ache
36	*Zingiber officinale*	Zingiberaceae	Shunthi	Rhizome	Sprue
37	*Ziziphus oenoplia* Mill.	Rhamnaceae	Choorimullu	Tender leaves	Diarrhoea

PROFORMA FOR ETHNO-MEDICO-BOTANICAL DOCUMENTATION

Name of the informant:	Occupation:
Age	Education
Sex	Economical status
Address	Experience
Name, Signs and Symptoms of the diseases treated	
Local names of the plants	
Parts used	
Method of preparation	
Mode of administration	
Maatra	
Anupana	
Duration of the treatment	
Dietary information during treatment	
Any other relevant information	
Signature of the informant	Signature of the Principal Investigator

DISCUSSION

The present study reveals that, there are many such traditional medicines in practice in different conditions. Due to the secrecy maintained by the folk informants, such a potent practices are fast eroding and with great difficulty they reveal its identity when convinced. It was observed that in different contexts these medicines are used, in present study it was observed that folk remedies are frequently used in rural areas more than urban population successfully. Local communities not only use these plants for medicinal purpose but also take good care for their conservation and protection; thus contributing towards sustainable development.

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