



TRADITIONAL USAGES OF INDIGENOUS MEDICINAL PLANTS OF AO TRIBAL NAGAS OF NAGALAND

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ABSTRACT

The traditional way of using indigenous medicinal plants is a resource for healing among the Ao Tribal community of Nagaland. The Qualitative study reveals the different usages, practices and effectiveness of various medicinal plants by the Ao Tribal Nagas occupying the territory of Mokokchung district of Nagaland. The research study includes interview with the village traditional medicine practitioners of Ao area under Mokokchung district. According to the study, findings shows that all the parts of the plants are useful in treating ailments and are used in various forms of herbal medicine. Some of the common medicinal plants are longsokerok *Centella Asiatica* (which is used for healing wound, jaundice, stomach pain, diarrhea, indigestion), longkok *Solanum Torvum* (used for healing fever, tooth decay), metiong *Rhus Semialata* (used to control diarrhoea and dysentery). Ao ancestors used to depend on medicinal plants from brushing of teeth to any disease or ailment which they were suffering from, as they believed that medicinal herbs could cure anything.

KEYWORDS: Traditional Usages, Indigenous Medicinal Plants, Ao Tribal Naga, Mokokchung

INTRODUCTION

Medicinal plants in Nagaland are widely found especially among the rural areas. Medicinal plants are now crucial for the production of pharmaceuticals. Traditional medicine practitioners provide very efficient recipes for treating common problems including toothaches, allergies, insect stings, bladder, kidney stones, stomach, diabetes, cough, cold, cholera, and piles. Worldwide, there is a widespread use of plant medicines.

Major Indigenous Medicinal plants in Nagaland

The traditional knowledge of major indigenous usages of medicinal plants by the Ao Nagas is confined to local medicine men and is in regular practices. The knowledge of such folk medicine has developed and practiced through age long trial and error methods and passed on verbally from one generation to another as indigenous traditional knowledge. These are some of the major indigenous medicinal plants used by the Ao Tribals in treating various ailments such as cinnamon for allergies, Tulsi for cough and cold, castor oil plant for swelling and boils, aloe vera and shoe flower for gastric and intestine, mango leaves for diabetes, star fruit for bladder and kidney and so on.

Thus it reveals that the Ao Nagas still maintain considerable understanding of the applications of local medicinal herbs. Many more promising shrub and tree species still need to be thoroughly investigated and put to good use for the benefit of people, not just locally but also globally. Seeking the assistance of those who appreciate these plants, make use of them, and can contribute to their preservation is necessary to guarantee this prudent use of the

traditional medical system. People should be made aware of these abundant plant resources so they can preserve the ecosystem and use these therapeutic plants sustainably, thus continuing to reap their health advantages.

OBJECTIVES OF THE STUDY

1. To identify the indigenous medicinal plants used by Ao Nagas
2. To study the effectiveness of indigenous medicinal plants in treating illness.

METHODOLOGY

The Study looks at the indigenous usages of medicinal plants and their effectiveness that involves qualitative analysis. Tools like Questionnaires and interview were used to collect data from the general respondents and local medicine practitioners. The research is based on both primary and secondary source. The secondary data is collected from articles and websites related to medicinal plants and its effectiveness. Simple random sampling was used for the general respondents whereas purposive sampling was used to collect the information on Indigenous medicines.

REVIEW OF LITERATURE

N.S Jamir (1997) studied the "Traditional knowledge of medicinal plants used by Ao Naga tribes of Mokokchung district, Nagaland (India)." Where local medicine men (Kopiraz), Gaon Bora, village elders etc from various sections of Mokokchung district were consulted for sources with regard to the uses of medicinal plants. Department of Botany, Lumami, Nagaland,



flora's, literature were used to identify the Medicinal Plants that had been collected. The result showed that 38 plants were not exhaustive. The author stressed upon the urgent need for conservation and protection of this plants before they completely get extinct due to deforestation, shifting cultivation and many other Socio – economic activities.

Adani (2012) investigated on the folk medicine of Mao Naga in Manipur where the elders in the village as well as healers from Maos of Manipur were chosen as a 3 sample for study. Findings showed that variety of 39 families of plants, 57 general and also various 61 species of plants. The author emphasized the essential need for managing and conserving these priceless medicinal plants and its usages in long term as well as in research so that its components might be harvested to meet future demands for healthy medical products.

Petevino & Singh (2013) examined the “Ethno medicinal herbs used by the Angami people of Nagaland, India” where household survey and field investigations were taken from Khonoma people. Findings showed that 64 herbaceous plants were employed to treat diseases. The author emphasized the importance of educating the villagers so that they can continue to reap the health benefits of these therapeutic herbs and sustainably use them.

Bhuyan et.al (2014) examined the “ Indigenous use of medicinal plants by four Major Tribes of Nagaland, North East, India .” where 50 informants from 20 villages were interviewed for the study from four tribes of Ao, Lotha, Angami and Sema. The results demonstrated that 257 species of ethnomedicinal plants belonging to 85 groups were being utilised for a variety of medical conditions. The author emphasized the rapid erosion of traditional plants and the need for planting and protecting plants with the help of as many locals as possible.

Meyanungsang et.al (2015) studied on the Traditional healers and elders from the village of Chungtia where they were employed as a sample for the study through open group discussion and semistructured interview. Findings revealed that 135 plant species from 69 families and 123 generic were used for medicinal and domestic reasons, whereas Chungtia community usages were found to be compatible with other communities.

Alino & Kimiyekato (2018) studied the “Ethnomedicinal plants of Sumi Nagas in zunheboto District Northeast, India.” where 40 informants from Zunheboto District- Askhomi, Khrimtomi, Rotomi and Philimi were used as a sample of study. Findings revealed that 50 ethno medicinal uses were discovered and documented. The importance of traditional knowledge of 2 medicinal procedures was fully understood by Sumi's. The author emphasized the urgent necessity to conserve and record these important resources in order to sustainably maximize their usage in the Nagas native health care system.

Asangla et. al (2022) investigated about the traditiona knowledge of different of medicinal plants used by Zeliang Nagas where

local medicine men or folk healers, village elders, spiritual leaders and other locals from the villages near Itanki National Park in the Peren district were chosen as a sample for the study. Findings showed that there are 48 species of plants belonging to 34 families. The author emphasised that this comprehensive information could vanish in just a few generations, emphasising the significance of discovering and maintaining all such societies' traditional wisdom.

Nohochem & Tsipila (2022) investigated on the medicinal plants of Sangtam Nagas where indigenous herbalists, vegetable dealers and elders from Longkhim chare region of Tuensang district were used as a sample of study. Findings showed that different 49 species of 33 plant families were used for pain alleviation and treatment of different ailments. The author emphasized the critical necessity to conserve and record such important materials to maximize their usage in indigenous health care system.

FINDINGS, RECOMMENDATIONS AND CONCLUSION

The following are the Major Findings from the research conducted under the Objective.

1. To fulfil the objective on identifying the indigenous medicinal plants used by Ao Nagas and its effectiveness interview method was used where findings show that the indigenous medicine practitioners do not use the medicines they prepare to generate income because they think of it as a gift from God and the work of them is to make medicine to cure various diseases. It is a mission for them to use the gifts to cure the people.
2. Medicinal plants consisting of both wild and cultivated are used in the preparation of indigenous medicines because it has 100% medicinal effect as its organic so effective results can be seen. Findings also show that there is frequent availability of wild medicinal plants. Additionally, medicinal plants are important as they are 100% organic , effective and have no side effects
3. The results show that the majority of the respondents go for collection of plants two to three times in a month and least stated that they go for collection of medicinal plants often in a month. Majority of the respondents resort to self medication with traditional medicine and the least of the respondents took self medication with allopathic medicine and visited a medical doctor when they fell ill/sick.
4. Findings on Medicinal Plants used by indigenous medicine practitioners collected and analyzed through Interviews from the four indigenous medicine practitioners.

Names of the medicinal plants is written in Ao mongsen dialect and Nagamese terms (italic) and translated in English terms. The Images, terms, plant parts and purpose of use were collected through Interview. Scientific name and family was referred from secondary source.

- Medicinal plant: *Sungshe/ Cinnamon*
Scientific name: *Cinnamomum verum*
Family: Lauraceae



Plant Parts: Root, bark
Main purpose of use: Treat Allergies

- Medicinal plant: *Korishidong/* peach
Scientific name: *Prunus Persica*
Family: Rosaceae
Plant Parts: Leaves, root, bark
Main purpose of use: Treat Allergies
- Medicinal plant: *Aong Nangpera/* Tulsi
Scientific name: *Ocimum Sanctum*
Family: Lamiaceae
Plant Parts: Leaves, seeds, stem
Main purpose of use: Treat Allergies, insect bites, cough, cold, stomach acidity, cuts, wounds.
- Medicinal plant: *Alu - Lahsung/* Chinese Scallion
Scientific name: *Allium Chinense*
Family: Amaryllidaceae
Plant Parts: Whole plant
Main purpose of use: Insect bites
- Medicinal plant: *Sanglem/* Great Plantain
Scientific name: *Plantago Major*
Family: Plantaginaceae
Plant Parts: Leaves, seeds
Main purpose of use: wounds, bladder problem, indigestion
- Medicinal plant: *Asatong /*Naga Neem
Scientific name: *Azadirachta Indica*
Family: Meliaceae
Plant Parts: Leaves, root
Main purpose of use: Stomach pain and acidity
- Medicinal plant: *Khori/* Golden Eye grass.
Scientific name: *Curculigo orchioides*
Family: Hypoxidaceae
Plant Parts: Root,bark
Main purpose of use: Gastritis, jaundice, Redness and pain in eyes
- Medicinal plant: *Tongden Matsü/* Round leaf creeper
Scientific name: *Pratia nummularia*
Family: Campanulaceae
Plant Parts: Leaves
Main purpose of use: Bladder and kidney stone
- Medicinal plant: *Iritong/* castor oil plant
Scientific name: *Ricinus communis*
Family: Euphorbiaceae
Plant Parts : Leaves, seed
Main purpose of use: Swelling, boils, rheumatic joints, leprosy and skin inflammation
- Medicinal plant: *Orüma/* East Indian glory bower

Scientific name: *Clerodendrum Glandulosum*
Family: Lamiaceae
Plant Parts: Root, leaves
Main purpose of use: To purify blood

- Medicinal plant: *Ao term unknown/* Aloe vera
Scientific name: *Aloe Barbadensis* Miller
Family: Asphodelaceae (Liliaceae)
Plant Parts: Leaves
Main purpose of use: Gastritis, Intestinal problems
- Medicinal plant: *Mamali /* Papaya
Scientific name: *Carica Papaya*
Family: Caricaceae
Plant Parts: Fruit, leaves
Main purpose of use: Diabetes, gastritis
- Medicinal plant: *Lozü/* Gooseberry
Scientific name: *Phyllanthus emblica*
Family: Phyllanthaceae
Plant Parts: Leaves, bark
Main purpose of use: Bladder and kidney problems
- Medicinal Plant: *Yimpangnaro/*Shoe flower
Scientific name: *Hibiscus Rosa sinensis*
Family: Malvaceae
Plant Parts : Flower
Main purpose of use: Gastritis
- Medicinal plant: *Motsü/* Sugarcane
Scientific name: *Saccharum Officinarum*
Family: Poaceae
Plant Parts: Root
Main purpose of use: Intestinal problems, jaundice, gallbladder, sore throat
- Medicinal plant :*Tayakla naro/* touch me not plant
Scientific name: *Mimosa Pudica*
Family: Fabaceae
Plant parts: Root
Main purpose of use: Intestinal problems, cough, loose motion, piles, kidney and gallbladder, skin disease
- Medicinal plant: *Titi/* Mango
Scientific name: *Mangnifera Indica*
Family: Anacardiaceae
Plant Parts: Leaves, bark
Main purpose of use: Diabetes, toothache
- Medicinal plant: *Entsülashi/*passion fruit
Scientific name: *Passiflora edulis*
Family: Passifloraceae
Parts Parts : Leaves
Main purpose of use: Diabetes, High Blood Pressure and insomnia



- Medicinal plant: *Dunia/* Local coriander
Scientific name: Eryngium foetidum
Family: Apiaceae
Plant Parts: Leaves
Main purpose of use: Tapeworm and purifies blood
 - Medicinal plant: *Ao term unknown/* Peppermint
Scientific name: Mentha Piperita L
Family: Lamiaceae
Plant Parts: Leaves
Main purpose of use: cough, cold, sinus problems
 - Medicinal plant: *Masurentong /* Begonia
Scientific name: Begonia L
Family: Bignoniaceae
Plant Parts : Leaves, branch
Main purpose of use: Antioxidants, weight-loss
 - Medicinal plant: *Mangu tong /* Banana Tree
Scientific name: Musa
Family: Musaceae
Plant Parts : whole plant
Main purpose of use: dysentery
 - Medicinal plant: *Longkok/* Red nightshade
Scientific name: Solanum dulcamara
Family: Solanaceae
Plant parts : seed, roots
Main purpose of use: Toothache
 - Medicinal plant: *Charkona/* Star fruit
Scientific name: Averrhoa carambola L
Family: Oxalidaceae
Plant parts: Fruit, roots
Main purpose of use: High blood pressure, bladder and kidney
 - Medicinal plant: *Süngya/* Agar tree
Scientific name: Aquilaria malaccensis
Family: Thymelaeaceae
Plant Parts: whole plant
Main purpose of use: stroke patient
 - Medicinal plant: *Endivoksak/* Spiral ginger
Scientific name: Cheilocostus Speciosus
Family: Costaceae
Plant Parts: Roots
Main purpose of use: Bladder problem, tapeworm
 - Medicinal plant: *Charem /* Pomegranate
Scientific name: Punica granatum
Family: Lythraceae
Plant parts: Leaves, seeds, fruit, bark, root
Main purpose of use: Cholera, tapeworm, good for heart and eyes, blood purifier, gastritis, mosquito repellent
 - Medicinal plant: *Knokna/* fishmint plant
Scientific name: Houttuynia Cordata Thunb
Family: Saururaceae
Plant Parts: leaves, roots
Main purpose of use: Cholera, rashes, bladder problems
 - Medicinal plant: *Mong Mong/* Japanese prickly ash
Scientific name: Zanthoxylum ailanthoides
Family: Rutacea
Plant Parts: Seed
Main purpose of use: Toothache, Heart and chest problem
 - Medicinal plant: *Shing/* African dream herb
Scientific name: Entada rheedii
Family: Fabaceae
Plant Parts: Seed
Main purpose of use: dry scalp (Dandruff), rashes
 - Medicinal plants: *Enzi/ onnü/* velvet plant
Scientific name: Gynura bicolor
Family: Asteraceae
Plant Parts: Leaves
Main purpose of use: Blood purifier, indigestion
5. For medicinal purposes it is found that the plant parts which are mostly used by medicine practitioners are the leaves. Along with the leaves, the entire plant—root, stem, bark, fruit, seeds, flower, and branch—is also utilised. The primary uses of the plant are in the treatment of illnesses and as first aid.
10. Many diseases are treated with the medicinal plants they use such as Allergies, stomach pain, purify blood, Gastric, Intestinal problems, diabetes, Redness, pain and irritation in eyes, Tapeworm, cold, sinus, reduces fats, loose motion, high pressure, toothache, stroke, digestion, dandruff, Insect bites, cough, piles, Jaundice, gallbladder, sore throat, kidney stone, boils, rheumatic joints, leprosy, skin inflammation, Cholera and typhoid.

Recommendations

1. Usages of indigenous medicinal plants must be encouraged among people as it act not only as first aid measures but treat various diseases.
2. Many people do not have sufficient knowledge about indigenous medicinal plants which are even found near their surroundings or locality so it is important to let them know about the importance and preserve the treasure (medicinal plants) not only for now but for future generations.
3. Expansion of markets for medicinal plants will be helpful for local Medicine Practitioners as it would be helpful for them to generate income.

Conclusion

An effort has been undertaken to gather data regarding the Ao Nagas' beliefs, and knowledge of medicinal plant identification and efficacy. Availability of medicinal plants is in abundance and



the local medicine maker prepared medicine not to generate income but considered it as a gift to help the people in need. Moreover, preferences of medicinal plants were both wild and cultivated because it had 100% medicinal effects and it is also organic with minimal or no side effects. Availability of wild medicinal plants was abundant and both frequent and rare as it differed from plant to plant. Not only that, collections of medicinal plants by local medicine practitioners were 15 times in a month, some 10 times and some 2- 3 times in a month.

The belief and practices of indigenous medicines in treating illness in which most of the people take self medication with traditional medicine and the role played by indigenous substances is seen where it acts as a first aid measure to many of the people. Not only that the respondents use their knowledge of treating various ailments and diseases. The usages of medicinal plants for treating various sickness is used by the people for treating various sickness such as allergies, digestion, blood purifier, intestine, gastric, kidney and gall bladder stone, cough, cold, piles, tapeworm, diabetes, high pressure, toothache, loose motion etc., The change in the role of traditional practitioners and healers can be seen with changing times.

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