# Comparative Study of Ethnomedicine among the Tribes of North East India 

Monimugdha Bhuyan<br>Department of Anthropology, North Lakhimpur College (Autonomous), District Lakhimpur, Assam, INDIA

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#### Abstract

The term Ethno-medicine is used to mean the traditional health care methods which are based on indigenous cultural beliefs and practices and are not derived from the conceptual framework of modern medicine. World Health Organisation (WHO) estimated that about $80 \%$ of the world's population depends on traditional medicine for their primary health care needs. Many rural communities of the world are far away from the reach of modern medicines and doctors and such communities still rely on traditional medicinal systems. For primary healthcare still many people of modern world go for ethno-medicine at the basic level. North East India is the homeland of a large number of ethnic groups belonging to different racial stocks, speaking different languages and having varied socio cultural traditions. The present paper tries to highlight the indigenous knowledge related to different medicinal plants used by different population of North East India. An attempt has been made to see the common medicinal plant species used by different communities of North East India.


Keywords: Ethno-medicine, medical anthropology, traditional health care, common medicinal plants, North East India.

## Introduction

Illness is culturally defined. Western world is accustomed to think of illness in terms of germs, viruses and assumes it to be a biological constant, a pathological condition to be verified by laboratory tests or clinical examinations. From the cultural point of view illness is quite different; it is a social recognition that a person is unable to fulfil his normal role properly and he should be brought back to normalcy ${ }^{1}$. There are numbers of medical systems each specific to its own culture and region. The medical doctor and anthropologist Arthur Kleinman writes that the health care system includes people's beliefs (largely tacit and unaware of the system as a whole) and patterns of behaviour. Those beliefs and behaviours are governed by cultural rules ${ }^{2}$. World Health Organisation (WHO) estimated that about $80 \%$ of the world's population depends on traditional medicine for their primary health care needs ${ }^{3}$. Ethno-medicine is a contemporary term that encompasses the whole gamut of ethnic beliefs and practices and behaviour towards health and disease as conceived in the tribal, peasant and pre-industrial societies ${ }^{1}$. Ethnomedicine has been recognized as an important field of Anthropological research today. Many rural communities of the world are far away from the reach of modern medicines and doctors and such communities still rely on traditional medicinal systems. For primary healthcare still many people of modern world go for ethno-medicine at the basic level. In his book Medicine, Magic and Religion, WHR Rivers argued that indigenous medical practices, which might seem irrational to Westerners, were rational when placed in the wider context of local beliefs and culture ${ }^{4}$. Medical anthropology an important branch of anthropology. It is chiefly concern with the relationship between health disorder on one hand and with cultural factors, belief and perceptions on the other. Applied
medical anthropology is now interdisciplinary in nature which works with sociology, medicine, demography and sociology. The most important fact about traditional medicine is the way it is integrated into a whole culture. Anthropology explains how the emic perspective of a community regarding health shapes their health behaviours.

In India around 16000 species of higher plants are found and out of these 7500 species are used for medicinal and health care purpose by different ethnic communities ${ }^{6}$. North East India is the homeland of a large number of ethnic groups belonging to different racial stocks, speaking different languages and having varied socio cultural traditions. North East India politically consists of seven states: Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura. The region has diverse ecotypes ranging from humid evergreen forest to temperate and alpine vegetation. North East India is the homeland of a large number of ethnic groups who came from different directions at different historical times. These groups belong to different racial stocks, speak different languages and have varied socio cultural traditions. North East India witnesses 130 major indigenous communities and is house to a number of archaic societies like Abor, Khasi, Mishing, Rabha, Naga, Apatani etc. ${ }^{10}$. The traditional communities of North East living here for thousands of years have built a precious knowledge base about the use of the rich bio resources of the region. This region has a strong heritage of herbal remedies and is very much an integral part of indigenous culture of North East India. Each tribal group has a particular medical culture or 'ethno-medicine' which forms the culture medical common sense or logic. In India the importance of 2416 plants of ethno-medicinal purpose has been recorded. Among which about 1963 plants are used by different tribal societies of North East India alone ${ }^{11}$.

## Methodology

The research is based on secondary data. To capture as many as relevant sources as possible, scientific literature on ethnomedicine field studies conducted in North East India were searched to identify primary studies. Relevant secondary literary sources in the form of books, journals and articles have been intensively read and studied in the preparation of this paper.

## Result and Discussion

North East India is the homeland of many precious medicinal plants. Most of the communities of North East India rely on ethno-medicine for their health care practices. The local tribal people utilize different parts of plants to cure disease and illness. Cross cultural study on traditional health care practices of the North Eastern tribes reveals that the same plant is used by different communities to heal different diseases. Table-1. reflects the common medicinal plants used by different communities of North East India. In the present study 20 medicinal plants which were listed are Amomum aromaticum Roxb. common in 2 groups (Bodo Kachari and Apatani) , Andrographics paniculata (Burm.f) by 2 groups (Bodo Kachari and Apatani), Argemone mexicana L. in 2 groups (Bodo Kachari and Apatani), Asparagus racemosus willd in 3 groups (Bodo Kachari, Lushai and Jaintia), Centela asiatica L. used by 9 groups (Bodo Kachari, Jaintia, Apatani, Chutia, Mishing, Bodo, Rajbongshi and Rangias, Lushai) Colotropis gigantean L. by 2 (Bodo Kachari and Apatani), Clerodendrum Viscosum vent by 2
(Bodo Kachari and Jaintia), Curcuma longa L. by 4 groups (Bodo Kachari, Jaintia, Lushai, Adi-Miniyong), Hibicus rosa sinensis L. (Bodo Kachari, Apatani, Mishing, tribes of Manipur), Houttuynia cordata Thunb by 6 groups (Bodo Kachari, Apatani, Mishing, Santal and Goreswar and tribes of Meghalaya), Murraya Koenigii (L) Syn- Bergera koengii by 3 groups (Bodo Kachari, Apatani, Mishing), Musa paradisica L. (Bodo Kachari, Apatani, tribes of Meghalaya and Manipur), Oroxylum indicum ( $L$ ) vent common in 8 groups (Bodo Kachari, Chutia, Apatani, Mishing, Naga, Nepali, Lepcha and Bhutia), Oxalis corniculata L.(Chutia, Apatani, tribes of Meghalaya), Paedaria foetida L. by 3 groups (Bodo Kachari, Apatani, AdiMiniyong), Plantago major L. by 2 (Jaintia and Apatani), Spilanthes paniculata D.C by 2 groups (Jaintia and Apatani), Terminalia chebula Retz. by 6 groups (Bodo Kachari, Chutia, Apatani, Nepali, Lepcha and Bhutia), Zanthoxylum oxyphyllum Edgew by 2 groups (Bodo Kachari and Apatani), Zingiber officinale Rosc. by 2 groups (Bodo Kachari and Apatani).

The present attempts to highlight the most commonly used medicinal plant i.e. Centella asiatica ( $L$ ). Jeeva et al., states that Centella asiatica $(L)$ is used by different tribal communities of North East India against stomach disorder and as brain tonic. This plant is followed by Oroxylum indicum ( $L$ ) commonly used by 8 groups of NE India. The most dominant medicinal plant family of North East India is Asteraceae ${ }^{13}$. The study reveals that 2 communities of North East India uses plant species of Asteraceae family for different disease problem.

Table-1
Common medicinal plants used by different communities of North East India

| $\begin{gathered} \text { Sl } \\ \text { no. } \end{gathered}$ | Medicinal Plant | Family | Tribe/ Community | Local Name of the Plant | Parts Used | Ethno medicinal Preparation and Use | Sources |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. | Amomum aromaticum Roxb. | Zingiberaceae | Bodo Kachari | Elaichi gidir | Fruits | To cure cough and pox paste made of fruit is used | 14 |
|  |  |  | Apatani | ........ | Leaf, seed | Fever, Abortion | 10 |
| 2. | Andrographics paniculata (Burm.f) | Acanthaceae | Bodo Kachari | Sirata | Leaf | Its dried leaves and stem are soaked overnight in cold water and taken in empty stomach in the morning to cure malaria | 14 |
|  |  |  | Apatani | ....... | Leaf | Dysentery | 10 |
| 3. | Argemone mexicana $L$. | Papaveraceae | $\begin{gathered} \text { Bodo } \\ \text { Kachari } \end{gathered}$ | Siyalpadur <br> $i$ | Leaf | In the cases of jaundice, malaria, leprosy the leaves are consumed | 14 |
|  |  |  | Apatani | ....... | Shoot | Skin diseases | 10 |
| 4. | Asparagus racemosus willd | Liliaceae | Bodo Kachari | Satamul | Roots | Powdered roots are used for treating jaundice | 14 |
|  |  |  | Jaintia | Lamardoh | Leaf | Urinary disorders and stomach ache are cured by consuming powder of dried leaves | 11 |
|  |  |  | Lushai | Uthinthang | Leaf | Powder of dried leaves are orally taken to get rid of | 23 |


|  |  |  |  |  | stomach disorders |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5.Centela <br> asiatica L. | Apiaceae | Bodo <br> Kachari | Manimuni <br> fisha | Whole <br> plant | Gastric patient are cured by <br> consumption of the plant | 14 |
|  |  | Jaintia | Wangrake | Whole <br> plant | Eye injury is cured by <br> decoction of leaves. In case of <br> indigestion leaves of the plant <br> are crushed and mixed with <br> water with a tablespoon of salt <br> and taken orally | 11 |


|  |  |  | Apatani | ....... | Flower | Reproductive disorders | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Mishing | Gokhai aphun | Flower | Flower are mixed with talmisri and orally taken with water | 16 |
|  |  |  | Tribes of Manipur | Juba, kusoom | Flower | Its extracted sweat from the flower is used to cure soreness of tongue and ulcer in mouth | 19 |
| 10. | Houttuynia cordata Thunb | Saururaceae | Bodo Kachari | Maisundur $i$ | Leaf | Fresh juice of the leaves is used to cure diarrhoea | 14 |
|  |  |  | Apatani | ....... | Shoot | Freshness, good sleep, heart disorders | 10 |
|  |  |  | Mishing | Masundari | Root | To cure skin disease the root of the plant is pasted on the affected areas | 16 |
|  |  |  | Santal and Goreswar | $\begin{gathered} \text { Mochondo } \\ \text { ri } \\ \hline \end{gathered}$ | Leaf | Leaf curry is used to reduce bodyache | 18 |
|  |  |  | Tribes of Meghalaya | ....... | Root, leaf | Roots and leaves are eaten raw to treat amoebic dysentery | 20 |
| 11. | MurrayaKoenigii $(L)$SS | Rutaceae | Bodo Kachari | Nwrshing | Leaf | To get rid of high fever juice of leaves is consumed | 14 |
|  |  |  | Apatani | ...... | Leaf | Stomach trouble | 10 |
|  |  |  | Mishing | Norsingh Gachh | Leaf | Juice made from leaves taken orally with water | 16 |
| 12. | Musa paradisica $L$. | Musaceae | Bodo Kachari | Athia thalit | Stem | To get relieve from fever paste of underground Stem is applied on the forehead | 14 |
|  |  |  | Tribes of Meghalaya | ......... | Whole plant | Plant juice or crushed raw fruit mixed with curd is taken orally 2-3 times daily to treat diarrhoea and dysentery | 20 |
|  |  |  | Apatani | ....... | Fruit | Indigestion | 10 |
|  |  |  | Tribes of Manipur | Laphu | Fruit, Stem, Roots | Unripe fruits are eaten to cure dysentery and diarrhoea. Roots and stems are cooked and eaten as tonic. Raw stems are mixed with common salt, chilli and dry fish or they are cooked as an item of curry for clearance of stomach | 19 |
| 13. | Oroxylum indicum ( $L$ ) vent | Bignoniaceae | Bodo Kachari | Kharang khandai | Bark, seed | To recover from snake bite the bark and seeds are used | 14 |
|  |  |  | Chutia | Bhat-ghila | Stem, Bark | To cure diarrhoea and dysentery infusion of stem bark is taken orally | 17 |
|  |  |  | Apatani | ....... | Seed | Purgative, headache | 10 |
|  |  |  | Mishing | Bhatgila | Stem | To recover malaria bark of the plant is consumed as powder | 16 |
|  |  |  | Naga | Tsungrem Noklangno k | Bark, Leaf, Pods | Decoction is drank for high bold pressure, diabetes and malaria | 21 |
|  |  |  | Nepali, Lepcha and Bhutia | Totola | Flower, Seed, | To cure burns the flowers are burned and applied on the affected area. | 22 |
| 14. | Oxalis | Oxalidaceae | Chutia | Tengesi |  | Plant paste is used | 17 |


|  | corniculata L. |  | Apatani | ...... | Shoot | Appetizer, headache | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Tribes of Meghalaya | ...... | Whole plant | Paste of the whole plant is made together with Drymaria cordata, Centella asiatica and <br> Metha spicata; The juice extracted from the paste is used as a medicine in diarrhoea and dysentery | 20 |
| 15. | Paedaria foetida (L) | Rubiaceae | Bodo Kachari | Khiphiban dang | Young stems and leaves | To get relieve from dysentery and stomach ache the paste of the leaves and young stems are used | 14 |
|  |  |  | Apatani | Phadobas lodi | Stem | Gastritis, diarrhoea, stomach disorder | 10 |
|  |  |  | AdiMiniyong | Yepe-tree | Leaf | Besides used as vegetable to cure diarrhoea and dysentery, the paste of the leaves applied to skin diseases | 15 |
| 16. | Plantago major $L$. | Plantaginacea <br> e | Jaintia | Chhakurblang | Leaf | To cure jaundice crushed leaves and raw milk is mixed and taken in an empty stomach. In case of tooth ache and gum bleeding leaf extract is used | 11 |
|  |  |  | Apatani | ..... | Leaf | Constipation | 10 |
| 17. | Spilanthes paniculata D.C | Asteraceae | Jaintia | Santustem | Flower | Cavity formation and tooth ache are cured by applying crushed flowers | 11 |
|  |  |  | Apatani | ....... | Leaf | Constipation | 10 |
| 18. | Terminalia chebula Retz. | Combretaceae | $\begin{gathered} \text { Bodo } \\ \text { Kachari } \end{gathered}$ | Selekha | Fruit | In case of gastric and stomach pain powder of the dried fruit is orally taken | 14 |
|  |  |  | Chutia | Silikha | Seed | Asthma patients are given decoction of seed | 17 |
|  |  |  | Apatani | Ontyal | Fruit | Cough | 10 |
|  |  |  | Nepali, Lepcha and Bhutia | Harra | Fruit, Bark | In case of fever, indigestion and diarrhoea powder of crushed bark and fruits are consumed | 22 |
| 19. | Zanthoxylum oxyphyllum Edgew | Rutaceae | $\begin{gathered} \text { Bodo } \\ \text { Kachari } \end{gathered}$ | $\begin{gathered} \text { Mejeng } \\ a \\ \hline \end{gathered}$ | Leaf | Used as remedy for toothcare | 14 |
|  |  |  | Apatani | ....... | Fruit | Stomach disorder | 10 |
| 20. | Zingiber officinale Rosc. | Zingiberaceae | $\begin{gathered} \text { Bodo } \\ \text { Kachari } \end{gathered}$ | Haizeng | Rhizome | To get relieve from stomach disorder paste of rhizome is consumed. Also the rhizomes are used to cure cough, cold, fever | 14 |
|  |  |  | Apatani | ...... | Rhizome | Cough | 10 |

## Conclusion

Medical systems are an integral part of culture. The efficacy of a medical system is not easily evaluated. Among the traditional societies the dividing line between medicine on one hand and
religion, law and society on the other are much less distinct ${ }^{1}$. The traditional medicine practiced by the indigenous communities is of great importance. Cross cultural study of ethno-medicine among the indigenous communities helps to
unearth much precious knowledge regarding heath care. This type of cross- cultural study has been an ongoing process in medical anthropology. 20 plants with medicinal values were listed out and their medicinal uses were examined. It was found that some common medicinal plants are used to cure different diseases.

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