

## Original Research Article

# Ethno-medicinal practices among the Toto tribe in Alipurduar, West Bengal

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### ABSTRACT

**Background:** Ethno-medicinal practices has been widely using by the people of every corner of the world. Tribes are not exceptional from this. Totos are residing at the Alipurduar district of the state West Bengal. They strongly believe the natural resources of the earth like wind, water, fire and forest. They living totally forest oriented life. Ethno-medicine also somehow depends upon the natural resources as well as various types of plants.

**Methods:** A descriptive cross-sectional study design has been employed for this present study. The study has been done among the 152 families. Apart from this the data regarding various types of diseases and their curing system has been gathered through interview and observation methods. Schedule and questionnaire method has been also employed to collect data of disease pattern and their treatment system.

**Results:** It has been observed that 15.13%, 53.29% and 31.58% families believe on ethno-medicine, both ethno-medicine as well as modern medicine and only modern medicine accordingly.

**Conclusions:** Basically, the people called Ojha who practices ethno-medicine among the Toto tribe. There 5 ethno-medicinal practitioners are present who tremendously struggle to cure the patients as soon as possible by their skill and medicinal plants.

**Keywords:** Ethno-medicine, Illness, Local self-government, Toto, White magic

### INTRODUCTION

India is known for its rich heritage of the knowledge of natural products, particularly of its herbal medicine. Indian people are using medicinal plants from prehistoric period.<sup>1</sup> Tribal, living mostly in the remote forest areas, still depend to a great extent on the indigenous system of medicine. Indigenous healing practices have been culturally accepted during all phases of human culture and environmental evolution. About 85% of traditional medicines are plant derived.<sup>2</sup>

Medicinal plants have a long-standing history in many indigenous communities, and are an integral part for treating various diseases, particularly to cure daily ailments, and this practice of traditional medicine is based on hundreds of years of belief and observations. With

enormously diversified ethnic groups and rich biological resources, India represents one of the great emporia of ethno-botanical wealth.<sup>3</sup>

Nothing is more fundamental to human life than health (Strange), good physical and mental health helps a man go to the top or his or her destination very easily. But if any problem arises, physically or mentally then survive within the environment become effected. 'Health is the level of functional and metabolic efficiency of a living organism'. The WHO defines health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity".<sup>4</sup>

Different types of tree or plant parts like bark, leaves, roots etc. as well as shrub also they have been used to made their herbal remedies for their treatment. Even now days some

tribal groups are using ethno-medicinal practices for their treatment. As we all know that tribes are mainly depending on their natural resources and they also worship nature. Now days they always try not to use modern medicine for their minor ailments. The present study 'Ethno-medicinal practices among the Toto tribe in Alipurduar, West Bengal has been done among the Totos. The livelihood of Totos is mainly depends upon forest collection and trading. They are very hard working and as a result mostly of the adult family members have been suffering from different types of body pain. The most interesting thing is that, to heal this problem they never go to hospital or any modern health care practitioners. When they cannot tolerate the pain then few of them take ethno-medicines to cure the problem and others go to near modern medicinal practitioners. However, when serious problems like breathiness, chest pain etc has been appeared then they must go to hospitals to getting the health facilities.

The primary objective of the present study is to find out the use of ethno-medicinal practices among the Toto tribe of Alipurduar, North 24 Parganas, West Bengal. Apart from this the present study also try to find out different types ethno-medicinal herbs and systems among the studied population.

## METHODS

The present study is a cross sectional study. And the study has been done among at the village Totopara in the district Alipurduar, West Bengal, India. The village Totopara is situated at the adjacent of the country Bhutan. The study has been done frequently in the year 2016 (March-June, August-October, and December-February). Simple random sampling method has been applied to choose the studied subject. It was door to door study and structured schedule method has been used to collect data about diseases.

All of the data required to answer and validate the research questions were collected from primary sources. To generate the required data from the primary sources, a designed-questionnaires and key informants interview of traditional healers and knowledgeable elders were used to collect pertaining data. The data collecting questionnaires and key informants interview were administered in the local language. Several topics was asked, useful plants growing in their natural locality including vernacular names, parts used and methods of preparation, conservation status including scarcity and cause of scarcity management way of multipurpose tree species and traditional farming practice, treats to these genetic resources and related data was collected. Photographic methods were also used to collect data about disease symptoms and also the data about use of medicines. Scheduled method has also been used to collect demographic data as well as medicinal practice system. Apart from these some secondary data collection method has been used to collect data as per the requirement of the present study.

## Inclusion criteria

All people of the Toto tribe who were residing at the Totopara of Alipurduar district in West Bengal.

## Exclusion criteria

Some people of other tribes were also present there and fulfil the present research objectives they are excluded from this research.

## RESULTS

### *Different type of morbidity and it's healing process*

#### *Viral disease*

Local name was shordi-kashi. Symptoms of the disease were watering from nose and cough. Causes of the disease were weather change and cold. Treatment was as follows- (a) traditional treatment- bark of the Totla tree. They used the bark of this tree by boiling with water, and eat biscuits; (b) modern treatment was using antibiotic, antacid, syrup, and antihistamine.

#### *Fever*

Local name was jor. Symptoms of the disease were high temperature, headache, and body ache. Causes of the disease were weather change, cold, and hard working. Treatment of the disease was as follows: (a) traditional treatment was they used the extract of neem leaves, and use the bark of deshim tree, and chewed the root of ultekhara tree, eat honey, use a piece of wet clothes on the forehead, and use joributi; (b) modern treatment was using antibiotic (tablets- Amoxyclav, Liff laxi, PPI, paracetamol, vitamins, ORS, azithromycene).

#### *Pain in abdomen*

Local name was pet batha. Symptoms of the disease was heavy pain in abdomen. Causes of the disease were polluted water, unhygienic conditions and bad food habit. Total individuals who were suffering from this disease were 14. Treatment followed was- (a) traditional treatment was chewing peyarapata (leaves of guava tree), using mantra anding boiled water; (b) modern treatment was using pain killer (Decolic, Cyclopam), ORS, antacid (Rantac, Pancid, Aciloc).

#### *Headache*

Local Name was matha jontrona. Symptoms of the disease was headache and feeling irritated. Causes of the disease was high blood pressure, hard work and cold. (a) Traditional treatment was consuming cooked sojina data and consume it, use to eat the bark of the lagakomache and arjun tree; (b) modern treatment was using painkiller such as Parasafe, disprins, crocin.

### *Acidity*

Local name was gas. Symptoms of the disease were pain in abdomen and vomiting. Cause of the disease was wrong food habit. Treatment followed was- (a) traditional treatment was utilising extracts of tree sugarcane, use branches of sandhi tree, extracts of guava leaves, bark of chatuhal tree, mantra, the root of gurjer tree; (b) modern treatment- antacid (PPI, Aciloc 300, Rantac).

### *Rashes*

Local name of the disease was chulkani. Symptom of the disease was rashes on skin. Causes of the disease were water pollution, weather change and uncleaning. Treatment of the disease was- (a) traditional treatment- use the extract of neem, ambashi, toltla, dunche, vutta tree; (b) modern treatment was using B-tex, lifeboy, amoxyclave, Amaxycol, Azythromycal, flouconazole, antihistamine, BB lotion and Detol.

### *Chest Pain*

Local name was bukebbatha. Symptom of the disease was pain in chest. Causes of the disease were hard work, acidity, cough, and heart disease. Treatment followed was (a) traditional treatment was chewing brikhma and punga flowers; (b) modern treatment was using pain killer, antacid and use few other medicines after pathological test.

### *Foot pain*

Local name was paa-e-batha. Symptoms of the diseases were pain in foot, and swelling in pain. Cause of the disease was hard work. Treatment followed was- (a) traditional treatment was oiling on foot, one type of joribhuti (Cinnabar, china rose, incense, clove, oil, half boiled rice binding with white string); (b) modern treatment was using Moov, pain killer,

### *Pulmonary obstructive disease*

Local name was hapani. Symptoms of the disease was shortness of breath. Causes of the disease were cold, dust and weather change. Treatment followed was- (a) traditional treatment was chewing the roots of ultekhara tree, the bark of gamari tree, using the root of beetle nut tree; (b) modern treatment was using Vetolin HFA, ProAir HFA.

### *Pain in back*

Local name was pit batha. Symptoms of the disease were pain in mid-section, problem in up down movements. Cause of the disease was hard work. Treatment followed was- (a) traditional treatment was giving massage with oil, and mantra, one type of joribhuti (Cinnabar, china rose, incense, clove, oil, half boiled rice binding with white string); (b) modern treatment was using Moov and pain killer.

### *Pain in waist*

Local name was komor batha. Symptoms of the disease was pain in mid-section and problem in up down movements. Cause of the disease was hard work. Treatment of the disease followed was- (a) traditional treatment was giving massage with oil, and mantra, one type of joribhuti (Cinnabar, china rose, incense, clove, oil, half boiled rice binding with white string); (b) modern treatment followed was using Moov and pain killer.

### *Eye Problem*

Local name was choke somossa. Symptoms of the disease was pain in eye and vision problem. Cause of the disease was aging. Treatment given was- (a) traditional treatment– they don't use any traditional healing process; (b) modern treatment was using various eye drop.

### *Decrease of blood cells*

Local name was rokto kome jaoa. Symptoms of the disease were fading skin color, weakness, white eye colour and migraine. Cause of the disease was improper food habits. Treatment was- (a) traditional treatment used was marusai and rai leaves as a vegetable, and use to eat fishes, and meat; (b) modern treatment followed was using iron tablet and folic acid tablet.

### *Liver problem*

Local name was liver somossa. Symptoms of the disease was loss of appetite, weakness, reddish eye and stool problem. Cause of the disease was bad food habit, hard work and using polluted water. Treatment followed was- (a) traditional treatment was using- extracts of lauribedh tree, root of beetle nut tree, extract of sugarcane, branch of sandhi tree, boiled papaya, use tika (give them one type of chemical, which can make a mark on their forehead) on their forehead; (b) modern treatment was using poyratynimide and injection of streptomycine.

### *Tumor*

Local name was tumor. Symptoms of the disease was lump on body parts pain. Cause of the disease was nil. Treatment was as followed: (a) traditional treatment was using jarivuti and mantras; (b) modern treatment was operation.

### *Tooth pain*

Local name was dath batha. Symptoms of the disease were pain in teeth, sometime blood appear from tooth. Cause of the disease was over pressure on teeth and something enter into teeth (meat). Treatment was (a) traditional treatment was utilising bark of satankadana and neem trees with honey; (b) modern treatment was using pain killer, antibiotics, and antacid.

### *Neck Pain*

Local name was ghare batha. Symptom of the disease was pain in neck. Cause of the disease was hard work and bad life style. Treatment used was- (a) traditional treatment was massaging oil on neck; (b) modern treatment was nil.

The Table 1 shows that the distribution of families in respect to medicinal practices among studied families of Toto community of Alipurduar in West Bengal. It has been observed that only 15.13% families still believe on ethno-medicine. It has also been observed that these families practice ethno-medicinal system due to trust on nature.

**Table 1: Distribution of families in respect to medicinal practices among the Totos.**

|                        | Families which are performing only ethno-medicine | Families which are performing only modern medicine | Families which are performing both ethno-medicine and modern medicine | Total |
|------------------------|---|--|---|-------|
| <b>No. of families</b> | 23  | 48   | 81  | 152   |
| <b>Percentage (%)</b>  | 15.13   | 31.58  | 53.29   | 100   |

## DISCUSSION

Toto tribe is the one and the only endemic endogamous tribe of the state. But at present with the pace of civilization this endemic tribe of the state is continuously face the westernization and as result a huge acculturation in their daily behavioural life takes place. At present most of the Toto people give up their traditional dress and start to wear western dress and blindly follow the western culture to fulfil every needs of their life, they also give up their age old traditional medicinal practices which are entirely based on the natural resources. Instead of that they are now mostly depends on the western medicine to treat their ailments. The Toto medicine and their medicinal practice is a vast to a complex-diseases like ophthalmic problem and cardiac diseases.<sup>5</sup>

The study points out the importance of savannahs even if degraded in terms of useful plants and provides a valuable addition to current knowledge of plant use in Northern Angola. This is not only essential for further studies, i.e. regarding pharmaceutical agents, but also for the design of a planned botanical garden of the University Kimpa Vita in Uíge, which aims at communicating the findings to the local people.<sup>6</sup>

From the present study it has been observed that only 15.13% families still believe on ethno-medicine. And these families practice ethno-medicinal system due to trust on nature. They think nature has all healing power of human's problem. Now the present situation has changed. More than fifty percent (53.29%) of families now practice both ethno-medicinal and modern medicinal system. The individuals of these families choose ethno medicine first. After that when ethno-medicine fails to heal the problem then they go for getting treatment from modern medicinal system. Beside this approximately 31.58% families totally depend upon on modern medicinal system. They do not

believe in any traditional health care system. Various types of tree barks, roots and leaves has been used to treat the alignment. The traditional medicine practitioners known as Ojha always extend their helping hand to sort out the health problem of the villagers. And the bonding between traditional medicine practioners and villagers is very strong. They keep their full faith on the Ojha.

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## CONCLUSION

Toto tribe of Alipurduar district in West Bengal has been considered for this present study. It has been done on ethno-medicinal practices among the Toto. They are very hardworking people. Their livelihood mainly depends upon forest collection, cultivation, and business. They are trading beetle nut with the neighbouring country Bhutan. Exporting beetle nut from Alipurduar to Bhutan is their main business. Beside this they are also importing wine from Bhutan. They have owned cultivated land. They generally cultivated maize. Beside this they also cultivated potato, banana and different types of vegetables. Maize is one of their stable foods. They have also exported maize to Bhutan. Handicraft is also seen among them. Mirror with woollen decoration and pen stand is their main handicraft object. They make it and sell it in tribal fair and other tribal occasions. Mostly female members of this community are engaged with collection of forest products. Mainly the female members are using string made by piece of cotton to carry the forest products from forest to home. It has been observed that mothers carry their children during forest collection. Sometimes female members are using a large size bucket made by thin bamboo strips to carry different types of fruits and flowers. The main food of the Toto people is rice, pulse, fish, and flesh of different types of animals. They are extensively habituated with the red meat. And this is the main reason behind their different types of illness. Due to excessive intake of red meat and wine as well as local liquor 'Eu' maximum members are

suffering from deadly diseases like cardiac problems, hypertension, pulmonary dysfunctions etc. The Totos are not using any type's ethno-medicines for the above-mentioned diseases, although ethno-medicinal practices have been observed among them. They are using ethno-medicines for different types of diseases which are not very complicated. They are using various types of leaves and tree root's extracts to cure problems. Apart from this white magic has also been performed to cure different type's illness. Generally, Shamans are performing the white magic. It has been observed that Shamans collect ethno-medicinal materials like tree roots, and leaves from their nearby forest. Sometimes they collect from their own house.

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