

## RESEARCH ARTICLE

### Perceptions and attitudes of tharu ethnic group towards medicinal ethnobiology in the dekhatbhuli village of kanchanpur, nepal

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#### ABSTRACT

In the present exploration we identify dependency pattern of Tharu ethnic group on medicinal plant and animals for traditional use and understanding their attitude as well as role in conservation. The perception of Tharu people was conducted in Dekhatbhuli village of Kanchanpur district Nepal to understanding knowledge on medicinal animal and plant species the Tharu community uses for treating different ailments. Data were collected through questionnaire survey, interviews with key informants (Bharras) and through group discussions. Random sampling method was used for selection of respondent. The result showed that the indigenous Tharu traditional healers and elders are rich in ethno medicinal knowledge. The elder people also belief in the traditional medicine and they showed the positive view towards the conservation of them were found under category not dependent. Almost all of the healer respondents were found to have played role in conservation of medicinal plant and animal and positive attitude towards conservation. The majority of elder people (97.21%) has great faith towards the traditional healer and was found to have played some role in medicinal plant and animal conservation. But, majority of young (83.53%) people have lacking of knowledge on medical ethno-biology. This vast knowledge on ethno-biology is poorly handed over to the young generation. Easy access to health services, few local healers, negligence of youngsters toward the continuation of traditional knowledge and disappearing of ethnic characters are the main challenge verge to extinction. This research will be milestone for policy making bodies and local people to aware about conservation of medical ethno biology in timely.

#### INTRODUCTION

Perception and Attitudes are two different words having different meanings. Perception means concept of peoples towards particular tradition while attitude means the reaction they shows for that tradition. Tharu ethnic group also have their own culture and tradition like others. Likewise, they have their own healing process for particular ailments (Traditional healing mechanism) they learnt from their ancients or from 'trial and error' mechanism. Ethno-biology is defined as the interrelationship as well as interdependency between a particular ethnic group and the existence of bio-resources in the given region (Singh 1997). Documenting indigenous knowledge through the ethnobiological approach is important for species conservation and sustainable resource use (Upadhyay et al. 2010). On the other hand, ethnomedicine or medicinal ethnobiology is concerned with the cultural interpretations of health, disease and illness and also addresses the health care seeking process and healing practices (Pieroni et al., 2005). The ethnic people develop their valuable knowledge depending on the climate of where they lived; their ecology, culture, and tradition helped sustain their society (Maskey, 2007). The indigenous knowledge for treating diseases is the hidden treasure of the whole

world, which can provide essential information for human beings in this modern world if we are successful in documenting it properly (Paudel and Singh 2016). Indigenous people such as, rural communities, tribes, and ethnic societies have invaluable bank of knowledge, which is passed on verbally from one generation to another (Singh, 1995). Indigenous and other local people are vital and active parts of many ecosystems and may help to enhance the resilience of these ecosystems. In addition, they interpret and react to climate change impacts in creative ways, drawing on traditional knowledge as well as new technologies to find solutions, which may help society at large to cope with the impending changes (Salick and Byg, 2007). This vast knowledge on ethno-biology was found to be poorly handed over to the young generations. Easy access to health services, few local healers, negligence of youngsters toward the continuation of traditional knowledge and disappearing of ethnic characters are the main challenges noticed. Therefore there is need of its urgent action from concerned agencies to conserving biodiversity and the tradition as well. This project is aimed to explore the perception and attitude of Tharu ethnic group, transmission rate to future generations, their dependency pattern on Ethnomedicine from Dekhatbhuli, ethnobiologically rich age category and to suggest some necessary suggestions.

#### KEYWORDS:

Tharu,  
Medicoethnobiology,  
Dependency, Attitude,  
Perception,  
Conservation,

**HISTORY**  
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## MATERIALS AND METHODS

### Study Area

The selected area i.e. Dekhatbhuli predominately possesses Tharu community. It lies in Kanchanpur district of Province no. 7. It is between latitudes  $28^{\circ} 50' N$  and longitude of  $80^{\circ} 24'E$ . The Dekhatbhuli VDC was divided in to three municipalities viz. Krishnapur Municipality, Suklaphanta Municipality and Laljhadi Rural Municipality. This former Dekhatbhuli area possesses 18,578 people. The elevation ranges from 160 m to 184 m (The Siwali Hills). The average annual rainfall of the district is 1775 mm. The average maximum temperature is  $43^{\circ}C$  while the average minimum temperature is  $3^{\circ}C$ .



**Map 1:** Map of Kanchanpur district  
Nature and Sources of Data.

### Nature and Sources of Data

The present research work was based on both the primary and secondary data. Primary data has been collected from the field study, and the secondary data from the relevant offices, textbooks, research paper and publications, journals etc.

### Primary Data Collection

The primary data were collected through direct observation, group discussion, discussion with key informants (local healers) and direct personal interview with local inhabitants. Generally speaking, questionnaire method of data collection was applied while collecting data.

### Direct Observation

The use of fauna and flora by the tharu group were observed and recorded through direct observation and household survey. Similarly, the actual condition of medicinal organisms in the forests, the different sources and the local management practices of medicinal plants has been observed and recorded. This method was helpful to verify the data collected from the respondents during the questionnaire survey and from the informal

discussions. The researcher also observed the events like preparation of herbal medicine, treatment of local patients etc. directly.

### Questionnaire survey

A set of questionnaires were developed as a tool to collect data from the local community of the selected study area. The questionnaire were included knowledge of local respondents on the use of plants and animals for medicine and perception of impacts of climate change on medicinal flora and fauna. The questionnaire survey was used to collect the availability status of natural resources to the local community and community awareness towards the medical ethnobiology. The historic information on indigenous medical knowledge system was also documented. There were also being questions that would obtain out the perception of the people of the ethnic group on different aspects of flora and fauna. A random sampling method was adopted. A total of 100 Households were interviewed for the required primary data.

### Key Informant Interview

The key informants were interviewed so as to extract out the information about the flora and fauna used by local tharu people and their perception on climate change impact on medical ethnobiology. The key persons/informants were included include especially the traditional healers, political leader knowledgeable peoples and old aged persons. They were interviewed, and their information was collected.

- Local healers (eg. Bharras)
- Knowledgeable elder people (teachers, Bharras, farmers, educated persons, elderly peoples etc.)

### Group discussion

During the field survey, group discussions was organized that comprises from youth, local people to elderly persons that helped to obtain the general information on various subjects like traditional medicine and indigenous knowledge, sources of medicinal plants and their local condition, the problems faced by the traditional healers that has supported to fulfill the intended objectives of present study. Also the information collected about the ethno-medicine and perception on climate change from the questionnaire survey was discussed and verified.

### Informal Discussion

The informal discussions with local people like farmer, youths, political leaders of different political parties', elder persons as well as with knowledgeable people of

the community has been helpful for obtaining the relevant and necessary information.

### Photography and specimen Collection

During the field survey, various known and unknown species of different medicinal plants and animals used for traditional healing practices were collected and photographed.

### Secondary Data Collection

secondary data was collected from different reports, various books, journal published by native and foreign institutions, newspapers and documents from related literature have also been adequately consulted for relevant information.

### Data Analysis and Interpretation

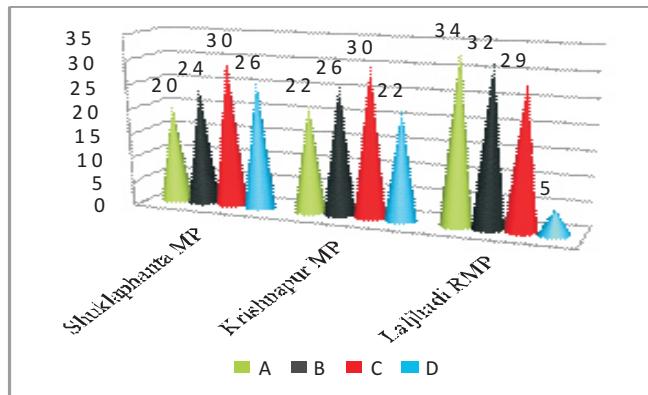
Different statistical operations were used in the analysis and interpretation of the collected information. The data were presented both in the descriptive form and in the form of tables, pie charts, bar graphs.

### Ethical, Legal and Social Implications

During the course of study the Tharu ethnic group and the other concerned parties were made aware about the novelty of the study and its expected outcomes. It's assured to all the local inhabitant of study area that this project won't go in against of the society and nature. During this course, no animals and plants were harmed. All efforts were made to design the study ethically sound by adhering to the protocols/methodologies that were in accordance with the codes of ethics designed by International Society for Ethno-biology (ISE, 2006).

## RESULTS

### Dependency rate on Ethno-medicine observed in study site



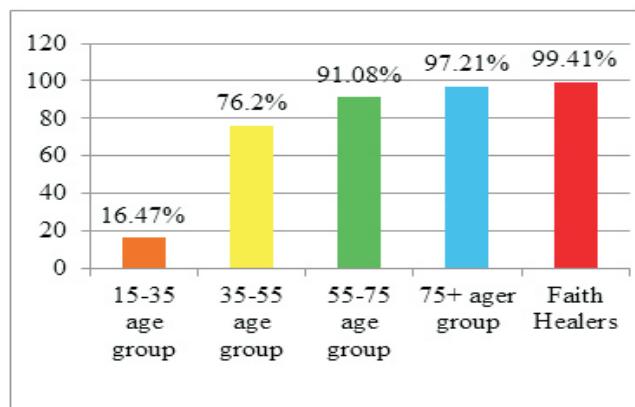
**Fig 1:** Dependency pattern of Tharu ethnic group in Ethnomedicine in different municipalities present in Dekhatbhuli (Now Dekhatbhuli is divided into three municipalities'. They are: Shuklaphanta Municipality, Krishnapur Municipality and Laljhadi Rural Municipality.

Where A= very much depend, B= depend, C= little bit depend, D= don't believe on healer

The dependency on ethnomedicine for primary health cure is more in Laljhadi RMP than in Shuklaphanta MP and Krishnapur MP. Much people in Shuklaphanta MP and Krishnapur MP do not believe on healers while very few peoples were found not believe on healers in Laljhadi RMP.

### Identification of Ethno-medically rich age group

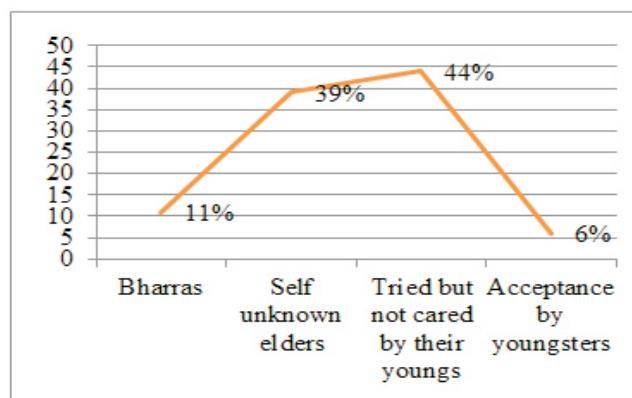
The faith healers' and elders were found to rich in Ethnomedicinal knowledge while others were found to have little knowledge on this field.



**Fig 2:** Categorization of different age groups on the basis of ethno-medical knowledge.

### Transmission rate of indigenous knowledge (IK) on future generations

The indigenous knowledge should be transmitted to new generations in order to preserve this knowledge. The transmission way is one and only oral way. Therefore it becomes hard to preserve this indigenous medicinal knowledge. This data shows that the elders and Bharras have tried a lot to transmit this knowledge to future generations but the acceptance rate by youngsters is found very low. This means that the IK is transmitted to new generations in low rate and is in the verge of extinction.



**Fig 3:** Transmission rate of indigenous knowledge (IK).

## DISCUSSION

The elder traditional healers have greater knowledge about the traditional medicinal system than the younger one. Availability of modern health facilities young generation is attracted towards the modern medical system. Due to the climate change, pollution, urbanization, biodiversity loss, deforestation, change in life style, unawareness of the knowledge system amongst the new generations such traditional and indigenous use of medicinal plants and animal was found to decline day by day supported by (Maskey, 2007; Thapa et al., 2013, Poudel and Singh, 2016, Awasthi, 2017). To increase awareness among the tharu ethnic group for preserving their culture, tradition and language, but also their pristine and valuable indigenous knowledge system is the need of present day. Along with the raising awareness their own cultural belief and tradition has also supported in the conservation and sustainable use of medicinal plant species. The indigenous knowledge which the native people have should be transmitted from generations to generations. The local faith healers of tharu have greater knowledge about the traditional medicinal system. Those peoples which having traditional knowledge lacks the writing style and is the main reason of its extinction in past days and now-a-days too. The acceptance rate of youngster is found to be very low. Thus we can say that this vast knowledge on ethno-biology is poorly handed over to the young generations. Therefore, this ritual should be preserved, promoted and disseminated. The elder traditional healer has greater knowledge about the traditional medicinal system than the younger one. Availability of modern health facilities young generation is attracted towards the modern medical system. Lack desire among youngsters in acquiring such knowledge and practice is major cause for decline in such practice and therapeutic use of medicinal plants and animals. The local healers and people have also contributed in the conservation as well as sustainable use of such species by collecting the required parts of medicinal plants and protecting the remaining body of it.

As far we discussed with the peoples, they lamented on being ashamed of receiving this traditional knowledge by the generations after them due to unknown reason. Local healers and some elder people were found to have more knowledge on the traditional use of medicinal plants and animals in medical therapy where as young people and students were not much aware about use of such species of medicinal plants and animal. Either they are feeling uneasy to follow this or greatly impressed by the foreign tradition. Whatever is the reason, this indigenous knowledge is in the verge of extinction, this should be conserved and it should be disseminated and process of transferring indigenous knowledge should be encouraged and promoted. Locals are found keen in habitat conservation. They were found conserving the habitats for different endangered species and medicinal plants also, either for their own sake or by knowing the advantages of habitat conservation. The youngsters should involve in this mission but it was not so. They should be promoted and encouraged.

## CONCLUSION

Finally, it has been concluded that the Tharu ethnic group is rich in medicinal ethnobiological knowledge, this they were preserving since ancient days through the one and only oral way. The elders and Bharras were found rich on ethnomedicinal knowledge than the youngsters. The dependency on Ethnomedicine was found more in Laljhadi Rural Municipality than in Shuklaphanta Municipality and Krishnapur Municipality. Though the Bharras were found to have tried a lot to transmit, this vast knowledge of ethnomedicine was found poorly handed over to the young generations. The reason for this would be modernization of the society, easy access to the health sectors, negligence of youngsters, and disappearance of youngsters due to ageing.

## RECOMMENDATIONS

Tharu are indigenous people of Dekhatbhuli village of Kanchanpur district. They have good knowledge on plant and animal species having medicinal values and their uses in different diseases. However, this traditional knowledge may be lost due to several factors such as the change in life style, urbanization, biodiversity loss, deforestation, and unawareness of the knowledge system amongst the new generations.

The study recommends following points;

- Tharu people should be encouraged to conserve the local habitat. This might help to conserve the plants and animal's habitat and therefore different medicinal plants and animals can be conserved. This may help to increase the socioeconomic condition of Tharu.
- Timber requirements should be reduced by encouraging brick houses in the villages because this help in the conservation of natural habitat.
- The comparative ethno-biology between Tharu sub group (Dangaura and Rana Tharu should be checked urgently.
- Bharras and other faith healers should be provided with additional training in herbal medicine and natural therapy.
- Encourage people for commercial cultivation of medicinal plants.
- There is a tradition of Jungle fire in the nearby jungle in each summer. Jungle fire should be prohibited to protect medicinal herbs.
- Medicinal Herbs processing unit should be established.
- Habitat conservation and regular monitoring of medicinal plants and animals
- Documentation and promotion of traditional knowledge on medical ethno-biology

- Youth awareness on ethno-biology should be implemented as soon as possible.
- Political commitment and local involvement
- Motivate traditional healers to inherit their knowledge to growing generation.
- The governmental bodies should implement programs such as training, awareness and education as well as monitoring and control pesticide trade, use and practice
- This issue should be raised in national policy level as well.

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