

Ethno-zoological Practices by Khasis, An Indigenous Tribe of Meghalaya, India

KAREN R.R. MIHSILL¹ & BELA KESHAN²

ABSTRACT

Use of plants and animals in traditional medicines has been common since time immemorial by people all over the world and the people of India too are no exceptions. This paper focuses on the use of animals and their products in traditional healing practices by the Khasis, an indigenous tribe of Meghalaya, India. Use of hill mole (known as 'kyndat lyndang' in Khasi) or the bile juice of cows and bears for the treatment of malaria; tigress's milk mixed with mud for curing burns; a spoonful of sun-dried deer foetus mixed in a glassful of water to cure 'suh synria' are some of the traditional healing methods practised by the Khasis in Khasi Hills of Meghalaya.

Keywords: Traditional Medicine, Khasi Tribe, Animal Products

Introduction

Animal-based medicines have always played a significant role in the healing practices of indigenous people (Adeola, 1992; Gaski *et al.*, 1994; Kakati and Doulo, 2002; Sharma, 2002; Lev, 2003; Costa-Neto, 2004; Jamir and Lal, 2005; Mahawar and Jaroli, 2006, 2008; Alves and Rosa, 2007; Chakravorty *et al.*, 2011; Kumari *et al.*, 2013; Sarkar *et al.*, 2014). In India, nearly 15–20 percent of the ayurvedic medicine is based on animal-derived substances (Unnikrisnhan, 1998). The five major animal-derived products (milk, urine, dung, curd and ghee) of cow have been used since ancient times (Simoons, 1974). Among other animals, sixteen different species of mammals, birds, reptiles, arthropods and annelids have been

¹Ms. Karen R.R. Mihsill teaches at the Department of Zoology, St. Anthony's College, Shillong 793 022, India

²Dr. Bela Keshan teaches at the Department of Zoology, North-Eastern Hill University, Shillong 793 022, India

²Corresponding author: Dr. Bela Keshan (bkeshan@nehu.ac.in)

identified for the treatment of over 17 ailments among nine tribes spread over four districts of Tamil Nadu, India (Solavan *et al.*, 2004). Among mammals, 20 species have been proved as vital sources of tribal medicine (Ghosh and Maiti, 1996). The tribals of Nandurbar district (Maharashtra) use parts of wild animals as medicines along with plants (Patil, 2003). Gupta *et al.* (2003) described the traditional knowledge of local communities in district of Kachchh and listed about 34 animals and bird species, which are used in primary health care of human beings and livestock. Honey, a product from bees, is being therapeutically used since time immemorial. It's antibacterial, anti-inflammatory and wound healing properties are promising (Banerjee *et al.*, 2003). Use of 11 species of insects used to prepare traditional medicine in Tirunelveli district, Tamil Nadu has been shown by Singh *et al.* (2004).

North-East India, including Meghalaya being rich in biodiversity serves as an ideal place for the sustenance of traditional medicines. Jamir and Lal (2005) described the traditional method of using animal species and their products for treating various kinds of ailments by different Naga tribes. Kalita *et al.* (2005) made a study on the plant and animal based folk medicines used by the people in Dibrugarh district of Assam for the treatment of eleven different diseases. The Chakhesang tribe of Nagaland make use of twelve mammals, one bird, one reptile, two amphibians, one fish, one mollusc, one annelid and four arthropods for treatment of various ailments (Kakati and Duolo, 2002). The Ao tribe of Nagaland use twenty five different vertebrate species for traditional therapeutic use, of which, some have become rare (Kakati *et al.*, 2006). Dutta *et al.* (1996) reported the use of certain animals and their product by tribal people in Assam for medical treatment. Singh (2014) conducted an ethno-entomological survey on the edible insects in Manipur and indentified 11 species of insects having medicinal value. In Mizoram and Arunachal Pradesh, Chinlapianga *et al.* (2013) reported the use of 39 aquatic and terrestrial species by Adi tribe of East Siang district and 48 faunal species by the communities of Mizoram as food, medicine and/or for spiritual and cultural purposes. These methods have not died off but have been able to withstand the tests of time even with the advent of western medicine. The knowledge is usually passed down from generation to generation by the word of mouth and discipleship. Keeping in mind the importance of traditional healing practised by the tribes of Meghalaya, the present study was undertaken to record ethno-zoological information on the use of faunal species by the Khasi tribe in East-Khasi Hills.

Methodology

Meghalaya, one of the northeastern States of India, lies between 24° 58' N and 26° 07' N latitudes and 89° 48' E and 92° 51' E longitude and covers an area of 22,429 km². It is bounded by the State of Assam in the north and east and by Bangladesh in the South and West. About 70% of the total area of this State is the forested and rich in floral and faunal biodiversity. The climate of this State ranges from temperate to tropical. The State currently comprises eleven districts and East Khasi Hills district is one of these districts covering an area of 2748 km. There are many groups of indigenous people in this State out of which the Khasis, Jaintias and Garos are the main ones. The East Khasi Hills district is predominantly inhabited by the Khasis.

The information reported here is based on the data collected from interviews with traditional healers and villagers selected randomly in the East-Khasi Hills between March and April, 2015. Various healing methods using from animals/animal products by the indigenous Khasis were recorded after securing verbal consent from them.

Results and Discussion

The present study showed that the indigenous people of Meghalaya have many traditional healing practises ranging from the use of plants and animal products to invoking spirits and chanting. It was seen that many traditional healers preferred the use of plants and their products to that of animal ones. This may be due to easy availability of plants and ease of cultivation. Issues pertaining to animal rights might also have curbed the use of animals and their products by the healers.

Although the Khasis mostly use plants in their traditional medicines, the use of animals and their products is still common in many villages. The traditional healers usually collect the animal resources from the wild. Our study showed that Khasis use the whole body of an organism or its by-products or the extracts as pastes, oils and powder to heal various ailments. They take some of these formulations orally and apply some externally on the skin.

The therapeutic use of animals/animal parts to cure malaria is being practised by some traditional healers in East Khasi Hill district. The Khasis claim that malaria can be cured by eating the hill mole (*kyndat lyndang*) after it was simply burned to cook. According to some other Khasis, malaria can be cured by using the bile juice of cows and bears, along with some

medicinal plants. The use of this particular rodent has not yet been documented till now for the treatment of malaria.

It is said that when a lactating tigress' milk drops to the soil, it mixes with the mud and becomes a ball like structure which the Khasis claim can be used to cure burns, using little chunks cut off from this 'ball'. Though this may not be the only method used by them, but this study found this as one of the unique medicinal methods, as the Khasis are seen as the only ones who use tigress' milk for medicinal purposes.

It has been shown that the Biata people of Dima Hasao, Assam use the fermented fat of *Python molurus*, *Gallus gallus*, *Rhyticeros undulates*, or the dried or fresh flesh of *Lutrogale perspicillata* to cure burns (Betlu, 2013). People of the *Mech* tribe (Duars) of West Bengal use the bones of a snake, *Banguras fasciatus* for healing purpose. They clean the bones after the decomposition of the flesh and then pounded these bones into a paste and apply this paste externally on the epidermal wounds (Sarkar *et al.*, 2014).

There is a particular disease which the indigenous Khasi people call 'suh synria', where apparently when a breast feeding mother feels pain or is ill, the suckling child also shows the similar pain. Khasis have a unique way of addressing this illness. According to Khasi traditional healers, this disease can be cured if the people are able to catch a pregnant deer, kill it to get the foetus and get the powder from sun-dried foetus. When the mother is given this powder mixed in a glassful of water, she gets relief and so does the child.

Another disease, which Khasis call as 'Niang shaba', wherein new born babies or young infants seem to have white blemishes on their tongue and which may spread to their lips. This disease is similar to leucoderma. Khasi traditional healer treat this disease using the catfish 'dohthli' (*Channa striatus*), wherein a live fish is kept with its head near the baby's mouth and allowed it to rub the lips. It is said that something present in the fluid removes these blemishes and the skin returns to its normal colour after a few repetition of the process. According to the traditional practitioners, swellings of hands and feet can be cured by orally taking fresh blood off the tip of a completely black goat or dog.

A number of invertebrates are also used by the Khasi people in traditional healing. A common practice among the Khasis is the use of leeches to suck out blood or pus from boils. However, the leech should be from the

wild. Some claimed that the leech would have to be trapped onto thinking that the humans are just walking by when it attaches to their bodies. Otherwise, if humans deliberately take a leech and make it suck the “bad blood”, it would not work.

According to Khasi traditional practitioners, whooping cough can be cured using a particular species of cockroach. Trapping the cockroach in mustard oil inside the chimney and then eating the oil-fried cockroach can cure the disease.

In order to remove wooden or iron splinters from flesh, Khasi traditional healers use a paste made of fresh stick insect (*Caurausius sp.*) and apply it to the wound and cover it overnight. The splinter would automatically come out the next day.

A particular kind of rash which men get from the barber is sometimes very difficult to get rid of. As it gets worse, it gets thicker and cracks appear on the rash causing bleeding and pain. For this, Khasi traditional healers use the intestines of an insect called ‘*niang-saw-khlieh*’, found in young potato leaves. The insect would be squashed and its intestines would be used as a paste over the rash. After a few days the rash would heal. However, it is being argued by the traditional healers that these days it is very difficult to get insects due to the use of insecticides by the farmers on the potato plant as these insects are seen as pests.

The use of an insect called ‘*niang khap*’ in the local dialect, similar to ‘*niang khap skhor*’ to cure the dark blemishes/pigmentation on the cheeks of women (*niang mong*) is also seen. The insect is squeezed and the intestines are rubbed on the affected areas of the skin.

Certain spiders have also been found to be of great medicinal value among Khasi traditional practitioners particularly for the treatment of boils and wounds. The spiders are crushed and applied topically on wounds and boils and then left covered for at least two days. After this the wound or boil would be uncovered and left to dry. The use of spiders has been seen in other tribes as well although they make use of the web and not the spider *per se*. People living in and around Bokaro, Jharkhand have been applying spiders’ web on cuts and wounds to stop bleeding. The cobweb is said to enhance collagen synthesis which helps speed up wound healing in mice (Kumari *et al.*, 2013).

Though these traditional healing procedures involving animals or its

product were widely used in the past, they are losing significance now for many reasons particularly with the advent of allopathic medicines which are easily available and whose cure is faster. Issues pertaining to animal rights have curbed the use of animals and their products in traditional healing method. Further, some of the traditional healers are reluctant to say that they use animals/animal products in the medicine decoction due to clientele that only want herbal medicines. However, the laymen are not as reluctant in revealing the use of animals in traditional home remedies which they consider as medicines. One of the villagers in his interview said that due to rampant use of insecticides on plants, there is a loss of insect population and the ease of using allopathic medicines has led to traditional medicines losing popularity. Nonetheless, indigenous traditional knowledge is still as important today as it was in the past despite shortcomings.

Conclusions

India is rich in traditional knowledge and Meghalaya is not lacking behind. A rich treasure of traditional healing methods using animals or their products as practised by Khasi traditional healer is promising despite the fact that there is a lack of enough scientific evidences to support these healing methods. Thus, more scientific research needs to be carried out to validate traditional healing methods and to find out their role as antibacterial, antiviral, antimicrobial and immunomodulatory agents.

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