Indigenous knowledge of Zootherapeutic use of Invertebrate by the Mawasi tribes of Chhindwara District of Madhya Pradesh India

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ABSTRACT

The Mawasi tribes of Chhindwara district of Madhya Pradesh India mostly use invertebrate derived medicine for a whole range of affections like defecation, ulcer, conjunctivitis, leucorrhea, pneumonia, fit, asthma, fever, rheumatism, ear pain, tuberculosis, vomiting, weakness, impotency and stop bleeding. Detailed information has been obtained on the traditional therapeutic use of 15 different invertebrate species. A field survey was conducted from July 2009 to October 2009 by performing interview through structured questionnaire with 10 selected respondents, who provided information regarding use of invertebrate animals and their products in folk medicine. The zootherapeutic knowledge inherited since time immemorial was mostly based on the use of invertebrate animals as important medicinal resources. It is suggested that this kind of knowledge may be useful to save the life in emergency. The study also gives emphasis on the strategies of conservation and management of faunistic resources. The ethno-zoological practice indicates that traditional knowledge of zootherapy is a must and to be strengthened in order to discover the new line of resources in pharmaceutics.

Keywords: Indigenous, zoo-therapy, Invertebrate, Ethno-zoology, Pharmaceutics, Ailment.

INTRODUCTION

Since ancient times animals, their parts, and their products have constituted part of the inventory of medicinal substances used in various cultures. The healing of human ailments by using therapeutics based on medicines obtained from animals or ultimately derived from them is known as zootherapy, (Mahawar and Jaroli, 2006). The tribal people are totally dependent on the forest and its resources for their livelihood. They developed their own skills to harvest the natural resources through traditional knowledge system since long back, (Anonymous, 1999). Ingredients of wild plants and animals are not only used in traditional medicine but have been increasingly used as raw material in the preparations, (Kulkarni et al., 1995). Zootherapeutic is such a body of indigenous knowledge system built up
by a group of people through generations, by living in close contact with nature and using traditional drugs of animal origin in the local environment so that it is specifically adapted to the local people and conditions, (Kakati et al., 2006).

A lot of work has been done in the Chhindwara District on the medicinal plants and plant products and documented too, but there is a definite scarcity of such knowledge when it comes to animal products. Therefore in the study it is endeavored to record the important of animal products and their utility as medicine by the Mawasi community in therapeutics. Because it is observed that the Mawasi community residing at the Jnnardeo Tahsil of Chhindwara district has been wildly using the animal products as traditional medicine. The study not only brings forth the salient features of the life style of the Mawasi people at Chhindwara and attempts to inventories the traditional nature cure system also suggests a strategy to conserve these animals for future too.

MATERIALS AND METHODS

The Mawasi tribes inhabits Jnnardeo tahsil of district Chhindwara. Out of nine tahsil, I was selected Mawasi dominant tahsil i.e. Jnnardeo. A study was carried out from July 2009 to October 2009. The proposed work did under selected 10 benefices of tribal’s. The pre-structural interview schedule is used for tribals. Respondents are 30 to 70 age group in that group, information was collected by 2 old aged females and 8 males. Local respondents from each group were interviewed from as possible about remedies made from invertebrates, about ailments for which the animal-derived remedies were prescribed. The name of animal and other ethnozoological information were documented. Photographs and discussion were also recorded with the help of camera and voice recorder.

Study Area: Chhindwara district is located on the South-West region of Satpura Range of Mountain. It is situated in the 21.28 to 22.49° North latitude and 78.40 to 79.24° East longitude and spread over an area of 11,815 sq.km. There are nine tehsil and 1984 villages in the district. Amarwada, Jamai, Bichhua, Harrai, Pandhurna, Tamia, Chaurai, Sausar and Parasia are main tehsils. This district is bound by the plains of Nagpur District (in Maharashtra State) on the South, Hosangabad and Narsinghpur District on the West and Seoni District on the East.

From the Geographical point of view Chhindwara district can be divided into three main regions - The plains of Sausar and Pandhurna, The Satpura mountain region is central region and the third region is mostly the Northern region comprising of hilly terrain.

The Mawasi Tribe: They are traditionally a nomadic community and speak mawasi boli. Mawasi are generally shy, honest and laborious. They are very co-operative in nature and peace loving people. The economic condition of the tribes is not good. Agriculture, animal husbandry, poultry forming and laboring are source of income. They also collect gum, traditional medicine and honey and sale to generate income. The life of the people is full of traditions and social customs from birth to death owning to outdated customs not attuned to remain competitive in the current economic scenario of privatization. Due to living in remote areas traditional culture large number of family member and poverty their children are not able to take even primary education, only 5-10% children get primary education, higher education.
The tribal people residing in the remote and deep forest areas still dependent on plants and animals for their primary health care and for treatment for various ailments. (Fig-1, Mawasi Tribe).

RESULTS AND DISCUSSION

This is being used by the Mawasi tribes to treat different ailments (Table-1). The animal species recorded for their medicinal importance belong to 4 phylum and these are being too used to cure around 15 different diseases or health disorders. However the red velvet bug was believed to promote strength and virility and especially accelerates the sexual vigor in men. The other animal being used for the treatment of delactation, ulcer (wound), conjunctitis, leucorrhrea, pneumonia, fit, asthma, fever, stop bleeding, rheumatism, ear pain, tuberculosis, vomiting, weakness and impotency. The knowledge pertaining to the use of animal species is an important factor even for the conservation of the wildlife, as their population is falling down day by day. Since only a very little is known about their use in medicine and other purposes, it is important that such, information be documented and measures to be taken to build up a database for the conservation of these important fauna.

Table 1: List of Invertebrate Animal Species Use for Therapeutic Purpose by Mawasi Tribes of Chhindwara District of Madhya Pradesh, India

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Common Name/ Phylum</th>
<th>Scientific Name</th>
<th>Local Name</th>
<th>Parts use</th>
<th>Disease treated</th>
<th>Prescription</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annelida</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Earthworm</td>
<td>Pheretima posthuma</td>
<td>Gindorna</td>
<td>Whole</td>
<td>Delactation</td>
<td>Crushed and mixed with Daliya and administered orally by woman just after delivery.</td>
</tr>
<tr>
<td>2.</td>
<td>Leech</td>
<td>Hirudinaria granulosa</td>
<td>Gonch</td>
<td>Whole</td>
<td>Ulcer (wound)</td>
<td>Living animal attached with Wound.</td>
</tr>
<tr>
<td>4.</td>
<td>Lac insect</td>
<td>Lacifer lacca</td>
<td>Lakhidka</td>
<td>Lac</td>
<td>Leucorrhrea</td>
<td>Powder administered orally.</td>
</tr>
<tr>
<td>5.</td>
<td>Silk worm</td>
<td>Bombyx mori</td>
<td>Kosa kida</td>
<td>Cocoon</td>
<td>Pneumonia</td>
<td>Rub with water and administered orally.</td>
</tr>
<tr>
<td>7.</td>
<td>Cockroach</td>
<td>Periplanata americana</td>
<td>Kosari</td>
<td>Ash</td>
<td>Asthma</td>
<td>Ash mixed with honey and administered orally.</td>
</tr>
<tr>
<td>8.</td>
<td>Red velvet bug</td>
<td>Trombidium grandissimum</td>
<td>Badal kida</td>
<td>Whole</td>
<td>Fever</td>
<td>Dry animal use orally.</td>
</tr>
<tr>
<td>10.</td>
<td>Crab</td>
<td>Cancer pagurus</td>
<td>Kelda</td>
<td>Ash</td>
<td>Rheumatism</td>
<td>Ash used with honey.</td>
</tr>
<tr>
<td>12.</td>
<td>Prawn</td>
<td>Macrobranchium malcomssonii</td>
<td>Jhinga macchi</td>
<td>Whole</td>
<td>Weakness</td>
<td>Soup is considered for woman just after delivery.</td>
</tr>
<tr>
<td>Mollusca</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>Snail</td>
<td>Pila globosa</td>
<td>Sankholi</td>
<td>Flesh</td>
<td>Tuberculosis</td>
<td>Cooked and used by patient.</td>
</tr>
</tbody>
</table>
Indigenous knowledge of Zootherapeutic use of Invertebrate by the Mawasi tribes

Pheretima posthuma is used for lactation by delivered lady, in this area but the ground animal used for high fever due to measles and chicken pox by Tamang people of Central Nepal also used for wounds, cough, jaundice and pain by tribes of Attappadi hills of Western Ghat. (Lohani 2010; Padmnabhan and Sujana 2008). The Hirudinaria medicinalis is used for ulcer, in this area but animal ash is used as sexual stimulant, Pharyngitis and piles by people of Western Ghat and South India (Dixit et al., 2010). Lac powder of Lacifer lacca, is used for leucorrhrea but powder of animal is used for bone fracture by people of South India, (Dixit et al. 2010). Cimex lactuarius is used for fit in this area also used by people of South India (Dixit et al., 2010), but it is used in epilepsy, piles, alopecia and urinary disorders by people of Chhatisgarh (Oudhia 2003). Lyciosa tarantula web is used for stop bleeding in this area but it is used for aphrodisiac, muscular dystrophy by people of South India (Dixit et al., 2010). Cancer pagurus is used joint pain (rheumatism) is also reported tribes in Attappadi hills of western Ghat and Saharia tribes of Rajasthan, roasted animal used for sharpen memory by Tamang people of Central Nepal, whole body for jaundice and other liver disorders by tribes of Nagaland (Padmnabhan and Sujana 2008; Mahawar and Jaroli 2007; Lohani 2010; Kakati et al., 2002). Fume of hive of Apis spp., is used for eye disease (conjunctivitis), but same use of honey by Mogya, Bawaria, Meena tribes of Rajasthan (Gupta et al., 2003). Honey is used for asthma, cough and cold in Similipal Biosphere Reserve Orissa (Mishra et al., 2011). Ash of Periplanata americana, is used for asthma in this area but ash is used for dysphonic, urinary obstruction and uterine chic, in Western Ghat and Naga tribes of Nagaland (Padmnabhan and Sujana 2008; Jamir and Lal 2005). Palamnaeus spp., whole body boiled in mustard oil and oil use as eardrop in this area but the ash of animal is used to heal wound in Warangal district of Andhra Pradesh (Benarjee et al., 2010). Bombyx mori, cocoon of insect is used for asthma and pneumonia in this area but ash is used digestive and eye problem by tribes of Western Ghat (Padmnabhan and Sujana, 2008). Bivalve’s Unio spp., shell is used for vomiting in this area but ash of shell is taken for weakness by Saharia in Rajasthan and used for acne by Mogya, Bawaria, Meena tribe of Rajasthan (Mahawar and Jaroli 2007; Gupta et al., 2003). Pila globosa, flesh is used for tuberculosis is also used by tribes of Attappadi hills of Western Ghat (Padmnabhan and Sujana 2008). Macrobranchium malcomsonnii soup is used for weakness by woman just after delivery in this area but the dried powder used for tuberculosis.
by Saharia tribes in Rajasthan (Mahawar and Jaroli 2007). *Trombidium grandissimum*, is used for fever in this area but dry animal is used as ‘Viagra’ for sex power in Chhattisgarh (Oudhia 2003). Larva of *Papilio cresphontes*, is used for impotency in this area but has not possibly been reported earlier in India. Snail (*Pila spp.*) and Mussel (*Unio spp.*) are used in treating ailments like tuberculosis, cough and cold, vomiting and osteoporosis not only by this area also used by Naga tribes of North Eastern India, (Jamir and Lal, 2005).

**CONCLUSION**

Our result demonstrated the persistence of folk medicine practices in this area, that the Mawasi tribal community is still dependent on indigenous knowledge for health care that are being influenced by culture and socio-economic aspects, providing a cheaper and accessible alternative to the high cost pharmaceutical remedies. Other studies are also necessary to preserve the popular medicinal knowledge which is important to enhance our understanding of the relationship among men, society and nature resources especially to the Chhindwara biome, where the studies concerning this subject are scarce. The possible benefit of animal – derived medications constitutes a rewarding area of research.

**REFERENCES**


