

## DRUGS DERIVED FROM ANIMAL ORIGIN AS USED BY THE MINA TRIBALS OF NORTH-WEST RAJASTHAN, PART-1

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### ABSTRACT

The present zootherapeutic study describes the traditional knowledge related to the use of different animals and animals-derived products as medicines by the Mina tribe reside in the districts of North-West Rajasthan, India. They use the animals/parts in curing the dreaded diseases prevalent among the tribal community. The survey covers the north-west districts of Rajasthan namely-Bikaner, Barmer, Jaisalmer, Jalore and Jodhpur. A total of 12 animal species were recorded and they are used for different ethnomedical purposes, including cough, asthma, tuberculosis, paralysis, weakness, muscular pain etc. The zootherapeutic knowledge was mostly based on domestic animals, but some protected species like the peacock, turtle, sambhar were also mentioned as medicinal resources. We would suggest that this kind of neglected traditional knowledge should be included into the strategies of conservation and management of faunistic resources in the investigated area.

**KEYWORDS:** Animal Drugs, Diseases, Tribals, Zotherapy

Ethnozoology deals with studies on relationship of animals with mankind including primitive rural and tribal people and recording their unique knowledge about animals for search of new resources of drugs, food etc. and socio-cultural aspects of animals in human life. Plants and animals have been need as medicinal sources since ancient times, Alves and Rosa (2005, 2007), Lev (2003).

In developing countries like India, it is extremely difficult for an ordinary citizen to afford medicine, especially in prolonged disease(s). All of us know that there are a number of indigenous medicines, which, if readily made available can be utilized with advantage. During their long history, the primitive people exploited varieties of opportunities from the nature for their survival since times immemorial. Their intimate relation with animals is noteworthy (Tikader et al., 1985).

Indeed, aboriginals developed the art of healing through the use of various remedies of zoological origin (Azmi, 1989). These remedies are beneficial or claimed to be so, in a variety of ailments. The contemporary society may benefit from the tribals experiences in its flight against diseases and sufferings (Azmi, 1990). Notably, the established systems of Indian medicines too felt the importance of such drugs, for that several drugs are obtained from animals (Puri, 1970).

### MATERIALS AND METHODS

The medico-ethnozoological data were collected by semi-structured interviews of the Mina tribe of north-east Rajasthan. Most of the animals were identified up to species level but a few could be identified up to generic level. The general idea about district-wise distribution of Mina tribe could be had from the Tribal Map of India (Gohain, 1971). Information regarding their location, population and social structure were collected from the 'District and Block Development Officers'.

The present work is based on information gathered through interview with the village headman and village elders through questionnaire. In each and every district, the Mina tribal community was repeatedly interviewed from as many localities as possible to get accurate and elaborate information regarding the remedies derived from various animals, mode of their administration/application and therapeutic uses. Whenever the language problem arose, the services of interpreters were utilized.

### RESULTS

Information regarding the medicinal application of 12 animal species were obtained through the interview of Mina tribe. The format is an alphabetical arrangement of the vernacular names of animals and zoological names are given in parenthesis.

**Table 1: Medicinal uses of animals and animal parts by Mina tribe of north-west Rajasthan.**

Name of Animals	Part(s) used	Mode of administration	Name of Disease(s)	Name of District(s)
Apple snail ( <i>Pila</i> sps.)	Shell	Ash of shell is mixed with honey and taken for about 15 days, twice daily	Paralysis	Bikaner, Jaisalmer
	Pila water	Dropped into eyes 2-3 times daily, for about one week	Redness of eye	Bikaner, Barmer
	Flesh	Prepared soup with spices and taken orally once daily for about 21 days	Rickets	Jaisalmer, Jalore
Bat ( <i>Pteropus</i> sps.)	Bone	Powdered, mixed with mustard oil, warmed and massaged twice daily, for about 15 days	Rheumatic pain	Barmer, Jaisalmer
Bed bug ( <i>Cimex</i> sps.)	Whole body	Crushed in basil ( <i>Ocimum sanctum</i> ) and applied to affected site once daily, till cured	Ring worm	Barmer, Jalore
Bivalves ( <i>Macra</i> sps.)	Shell	Ash of shell is taken for about 8-10 days, once daily	General weakness	Jaisalmer, Jodhpur
Camel ( <i>Camelus dromedaries</i> )	Milk	Used as massage cream once daily, till cured	Muscular pain	Jalore, Jodhpur
Dog ( <i>Canis familiaris</i> )	Stool	Eaten orally as general antidote	Snake-bite	Bikaner, Jalore
Dog ( <i>Canis familiaris</i> )	Saliva	Applied over the affected sites 3-4 times in a day, for about 8-10 days	Syphilis	Bikaner, Jaisalmer
Honey bee ( <i>Apis indica</i> )	Honey	Applied in the eyes regularly at bed time, for about 21 days	Weak-sight	Bikaner, Barmer
	Honey	Orally taken thrice daily, for about 4-5 days	Diarrhoea (infant)	Barmer, Jalore
Peacock ( <i>Pavo cristatus</i> )	Leg	Rubbed with water and this essenced water is used daily, for about 15 days	Ear-ache	Jaisalmer, Jalore
	Feather	Round spot of feather is mix with jaggery and taken once daily, for about 8-10 days	Infertility	Barmer, Jaisalmer
	Feather	Ash of feather mixed with honey and paste is given for about 4-5 days, twice daily	Diarrhoea, Dysentry	Bikaner, Jalore
Pigeon ( <i>Columba livia</i> )	Blood	Fresh blood is massaged on affected site once daily, for about one month	Paralysis	Jaisalmer, Jodhpur
	Flesh	Soup of meat and feather is taken daily, for about 30 days	Paralysis	Jalore, Jodhpur
Sambhar ( <i>Cervus</i> sps.)	Antler	Rubbed with water and paste is applied on chest and few drops are given orally to children once daily, for about 21 days	Pneumonia, Chest-pain	Bikaner, Jalore
	Milk	Applied in the eyes once daily, for about 30 days	Conjunctivitis, Night-blindness	Jaisalmer, Jodhpur
Scorpion ( <i>Buthus</i> sps.)	Whole body	Boiled in edible oil and the oil is the applied on infected areas daily, for about 21 days	Baldness	Barmer, Jaisalmer
	Whole body	Killed, burnt into ashes and applied on affected site daily, for about 7 days	Baldness	Jalore, Jodhpur
Turtle ( <i>Kachuga tontoria</i> )	Carapace	Ash of carapace mix with coconut oil and apply on affected site daily, for about 15 days	Skin diseases	Bikaner, Jalore
	Carapace flesh	Ash of carapace is taken orally for about 21 days, once daily	Asthma, Tuberculosis, Rheumatism	Jaisalmer, Jalore

## DISCUSSION

The details presented in this paper reveal curious and fascinating information regarding the medicinal applications of different animal species, while majority of these avocations are novel, some do find place in earlier texts (Vohra, 1978). An examination of literature shows that our knowledge of traditional drugs is meager except for the occasional writings (Verrier Elvin, 1951). Even the *Metria Medica* (Kent, 1970) mention is made only of a dozen animals. Joseph (1982) started the use of number of animals as traditional drugs prevalent in the various tribes of Madhya Pradesh. Maity (1982) has reported animal drugs from the ethno-zoological survey of Bihar.

Perusal of literature did not indicate the medicinal application and mode of administration of some of the animals which have been reported in this paper. The remaining species have been mentioned for their therapeutic value incidently for those ailments, which are mostly different from the ones treated by tribal people. Fat of the male animal is believed to produce more heat than that of female animals (Hussain, 1971). These information are tabulated in the following pages. These information suggest that if animal kingdom, is scientifically explored, may have much to contribute to our therapeutic armamentariums.

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