



Curing Animals with Animals: an another Prospective of Ethno veterinary Medicines used by the Tribals of Central Rajasthan, India

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Abstract

Traditional Medicare system reveals the use of various plants and animal based remedies to cure various ailments of humans and animals. The present study documents the use of animal based remedies by the inhabitants of villages of Central Rajasthan for ethno veterinary purposes. A field survey was conducted in the villages of Ajmer district of Central Rajasthan. The respondents provided valuable information regarding therapeutic uses of animals.

Keywords: Ethnoveterinary Medicines, Animals, Derived Products, Remedies.

Introduction

More commonly ethno veterinary is considered as the use of herbal medicines for the welfare of livestock but the use of animals, their parts and their products for the wellbeing of animals is also an integral part of ethno veterinary medicines. Treatment of various disorders of humans and animals with the medicines prepared from animals or their derived products is a very old tradition in many cultures.

The phenomenon of using ethno veterinary medicines is not marked by narrow boundaries of territories or communities or states but it has a broad geographical distribution, similarly its origin is deeply rooted in history¹. Plants and animal which have medicated properties are being used nearly all over the world. Ayurveda and Unani systems of medicines also describe the use of many animal based remedies²⁻⁶. Unani system of medicines documents the use of about 200 drugs prepared from animals or their products and are used for curing various ailments⁷. Similarly Ayurveda also describes the use of several drugs of animal origin obtained from domestic animals like cow, buffalo, goat, sheep, ass camel and elephant⁸. In these systems of medicines the entire organism or a part of or flesh, hair, feathers, fat, excretions, teeth, bones, horns and shells are used for medicinal purpose. These are either used singly or in compound form with some other substances. There are a variety of ways in which these formulations are prepared. It may include powder, soups, syrups, ash, liniments; ointments etc. About 380 types of animal based preparations used for various disorders have been mentioned in Charaka Samhita⁹.

A lot of research work has been conducted regarding the use of plants for ethno veterinary purposes but unfortunately a very little study has been done so far regarding the use of animal based remedies^{10,11}. The present research work is an initial

benchmark in this field.

Methodology

A number of elderly persons and livestock owners possessing knowledge of ethno veterinary medicines in the surveyed area of Central Rajasthan were interviewed. Informations were obtained through the use of well structured questionnaire. These respondents provided information based on animal's species and body parts used as ethno veterinary medicines.

The inceptions which are based on first hand information gathered from the tribals of Central Rajasthan are presented in this paper. The data were cross checked with more than one medicine men. These informations reveal that these people treat their domestic animals with animal based remedies on the basis of their knowledge which they inherit from their ancestors.

Results and Discussion

The above study indicates that the local medicinal knowledge is mainly based on domestic animals. 15 species belonging to 14 genera are used for treating over different types of animal diseases.

These ethno veterinary remedies which are based on animals and their derived products have a vital role in the healing practices. This role is not confined to the indigenous society but is also present in the western societies of the world¹²⁻¹³.

In a country like India which has a rich biodiversity of animal resources along with a wide variety of infectious diseases, the use of animal based remedies can be beneficial, so there is an urgent need of documentation of this ethno biological information¹⁴.

Table-1
Ethno veterinary remedies are used for treating over different types of animal diseases

Name of animal	Part used	Method	Disease
<i>Acrida exaltata</i> (Locust)	whole	2-3 locust are given to animals with fodder or chapati	For Oestrus induction
<i>Bos bubalus</i> (Buffalo)	skull	Skull of a dead buffalo is boiled with water. This water is given to camel.	Useful to treat Flatulence and Lumbago
<i>Bos indicus</i> (Cow)	Dung	Dried dung is burnt and turned into ash. This ash is applied externally to the effected animal.	Useful to treat Urticaria
	Buttermilk	It is applied externally and given orally also.	Useful to treat Scabies and Eczema
	Milk fat	It is applied externally on teats.	Useful to treat Mastitis
<i>Camelus dromedaries</i> (Camel)	Skull	(i) Skull of a dead camel is burnt and turned into ash. This ash is mixed with oil of <i>Papaver somniferum</i> . The mixture is given orally to cow.	Useful to treat Lumbago
		(ii) Skull is boiled in water. This water is given orally to the buffalo.	Useful to treat Flatulence and Lumbago
	Bones	Bones of a dead camel are burnt to ash. Ash is mixed with water and given orally to the animal.	For the treatment of Rheumatoid Arthritis
<i>Capra capra</i> (Goat) Bakri	Excreta	Excreta of goat is mixed with leaves of <i>Cassia auriculata</i> and the paste is applied externally to the animal	Useful to treat Wounds
<i>Capra indicus</i> (Goat) Bakra	Blood	Blood of animal is applied externally and massaged	Useful to treat Bone Fractures
<i>Canis familiaris</i> (Dog)	Excreta	Excreta of animal is applied externally.	Useful in the treatment of Wounds
<i>Columbo livia</i> (Pigeon)	Excreta	Dried excreta of pigeon is mixed with a piece of root of <i>Pandanus odoratissimus</i> , seeds of <i>sesamum indicum</i> and jaggery and a paste is prepared. This paste is given orally to the animal.	Useful in Oestrus induction
<i>Coracias benghalensis</i> (Indian roller)	Feathers	Feathers of animal along with <i>Cynodon dactylon</i> are given orally to the animal.	Useful for Shedding of placenta after delivery
<i>Corvus splendens</i> (Crow)	Whole or flesh	Boiled flesh of crow is given to animal.	Useful in the treatment of Whooping Cough
<i>Gallus domesticus</i> (Hen)	Egg	(i) Shell of eggs are given orally to buffalo.	Useful for Oestrus induction
		(ii) Eggs are given orally to animals.	Useful in the treatment of Fractured Bones
<i>Hemidactylus flaviviridis</i> (Lizard)	Whole	Lizard is given orally to the animal.	Useful in the treatment of Lumbago
<i>Microtermes obesiholmgren</i> (Termite)	Soil of termite mounds	Soil is massaged on the jaw of the effected animal.	For the treatment of Poisoning due to feeding of miniature <i>Sorghum</i>
<i>Palamneaus sp.</i> (Scorpion)	Whole	Scorpion is dipped in a bottle containing mustard oil. This oil is externally used after sometime to the effected animal.	For the treatment of Scorpion Bite
<i>Vespa orientalis</i> (Wasp)	Whole	Few wasps are boiled in water. Treatment of the mammary glands of the effected animal with the steam of this boiling water.	Useful in the treatment of Mastitis

One important aspect which needs to be mentioned here is that the above study is purely based on the traditional beliefs and knowledge of the local people. During the course of study the above mentioned animal based remedies have not been tested for efficacy. In the literature also the traditional healing practices used by different communities all over the world have not been proved scientifically¹⁵. So this research area needs more attention so as to get the scientific validation and efficacy of these animal based remedies.

The present study also has a significant importance from the point of view of ecology because some of the animals which are used for medicinal purposes by the locals are vulnerable or endangered or facing severe threats due to anthropogenic activities in that region¹⁶. For sustainable utilization of animal resource for zootherapeutic purpose, there must be a perfect human-nature interaction¹⁷. By imparting education to the locals regarding conservation of biodiversity, the traditional knowledge can be saved and also the people can become aware of ecological status of the species which they are using as medicinal purpose.

Conclusion

The above study mentions the therapeutic uses of animals for ethno veterinary purposes. But their efficacy and validation has not yet been tested. So this area of research provides a wide scope for the development of pharmaceutical industries. As these industries can prepare new formulations based on this ethno veterinary knowledge after proving their efficacy. There is one more thing that the use of these animals for curing animals should be done in such a manner that there should be a minimum loss to the biodiversity.

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