



Mini Review Paper

Ethno Veterinary Practices in Rajasthan, India – A Review

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Abstract

Ethno veterinary practices concern to animal healthcare is as old as the domestication of various livestock species. They comprise belief, knowledge, practices and skills pertaining to healthcare and management of livestock. Rajasthan has rich ethno veterinary health traditions that are the products of decades of experience. The traditional medicines that are commonly used for this purpose are readily available to the ordinary farmer and can cut down costs considerably. This article deals in brief the review about the traditional ethno veterinary practices and its applications.

Keywords: Ethno veterinary medicine, Rajasthan, traditional knowledge.

Introduction

The rich and diversified flora of India provides valuable storehouse of medicinal plants. The curative properties of herbs have long been known and are documented in ancient manuscripts such as in Rig Veda, Garuda Purana and Agni Purana. These treatises focus on the potential of plants and herbs to cure human ailments and diseases. Scientists are now documenting various ethno veterinary practices based on plant drugs. The plant wealth of India also offers the people who tend livestock a rich reservoir in treating the diseases and ailments of the animals. Seventy six percent population of India is predominantly rural.

Rajasthan is located in the north western part of India. Geographically it lies between 69°30' to 78°17' latitude and 23°3' to 30°12' E longitude. Various types of livestock play a vital role in the agriculture based economy of central Rajasthan. Sheep, goat, buffaloes, cows, dogs, bulls and camels are found throughout the region. Cattle are regarded as the wealth of the tribal people and their well being is considered to be very important. Some livestock ailments require the assistance of a specialist. Since the veterinary dispensaries are far away, people rely on traditional veterinary practices. No specific caste or ethnic groups are involved in the management and breeding of the livestock.

The traditional knowledge of plant-based remedies for the treatment of animal rests with the medicine men, all of who belong to one family of hereditary indigenous practitioners. Skills and experiences are passed on from one generation to the next generation and are guarded like secrets. The medicine men collect the plant needed for a particular veterinary application, either directly from the forest or from local shops.

Modern healthcare in the tribal and rural areas of Rajasthan is characterized by the deficiency of infrastructure, qualified

personnel and medicine. Rajasthan is placed at sixth place in India from the point of view of tribal population. Bheel and Meenas are the two important major tribal groups inhabiting the region: Damor, Garaisya, Dindor Ahari, Raot, Parmar and Kathodi constitute minor tribal groups.

Ethno Veterinary Medicine

According to the World Health Organization, at least 80% of people in developing countries depend largely on indigenous practices for the control and treatment of various diseases affecting both human beings and their animals. These traditional healing practices are called 'ethno veterinary medicine'. Ethno veterinary medicine is cost effective and also dynamic. Ethno veterinary remedies are accessible, easy to prepare and administer, at little or at no cost at all to the farmer. These age-old practices cover every area of veterinary specialization and all livestock species. Ethno veterinary medicine differs not only from region to region but also among and within communities.

Ethno veterinary medicine (EVM) is a system that is based on folk beliefs, traditional knowledge, skills, methods and practices used for curing diseases and maintaining health of animals. Traditional veterinary medicine knowledge like all other traditional knowledge system is handed down orally from generation to generation and it may disappear because of rapid socioeconomic, environmental, technological changes and as a result of cultural heritage under the guise of civilization.

Ethno veterinary medicine is said to be in status-quo. People have easy access to modern veterinary facilities but still traditional remedies and traditional healers are their first choice. Ethno veterinary users (animal owners) and ethno veterinary practitioners have a strong perception over the effectiveness of these remedies. Moreover they reported that allopathic treatment is expensive and sometimes associated with side effects.

Veterinary officers and veterinary assistants agreed upon the extensive use of EVPs in the study area.

Over the last several decades, development and change have replaced local knowledge and practices at an increasing and alarming rate. But many development projects have proved to be unsustainable: after funds run out, local people are left in a dilemma: they cannot afford or access the technologies and services introduced from outside, but they have forgotten their own 'indigenous' knowledge or their environment has changed and with it the resource base necessary to apply their indigenous knowledge. To avoid such dilemmas, advocates of sustainable bottom-up development postulate that reviving indigenous knowledge within communities, and its transfer between communities, can provide opportunities for sustainable and cost-effective solutions.

This situation is also true for livestock development. Indigenous animal management and healthcare (ethno veterinary medicine) offer great potential for development. Still, livestock development programmes and projects have been slow to integrate ethno veterinary information and practices.

Present and Past Studies

Very little work on the ethno botany and economic utilization of local plant resources has been done in Rajasthan in spite of the favorable conditions. Rajasthan has comparatively rich flora and various tribes with a rich cultural heritage.

Earlier researchers^{1,2} brought out the veterinary medical uses of 44 plant species used in Bengal, Orissa and Bihar. They enumerated 25 plant species used in the treatment of cattle and birds among the tribals of eastern India. After that, several researchers³ studied the plants used as veterinary medicine in Chittoor district of Andhra Pradesh.

The uses of 42 plant species mentioned in Garuda Purana for treating several ailments of horse and elephants in ancient times is documented⁴. The pioneer work of prominent botanist^{5,6} earned India an important place in the world map of ethno botanical studies.

The status and prospectus of plants used in Indian ethno veterinary medicines is very well documented^{7,8}. 37 plant species belonging to 25 families used for the treatment of domestic animals about folk herbal veterinary medicines of Southern Rajasthan had been discussed⁹. The use of traditional herbal medicines from Shekhawati region of Rajasthan had been studied¹⁰.

The research for indigenous animal healthcare practices from Udaipur district, Rajasthan had been explored¹¹. The ethno botanical observation on tuberous plants from tribal area of Rajasthan had been noted¹². Various botanists¹³ studied animal healthcare practices by livestock owners at Pushkar animal fair

of Rajasthan. They revealed 43 plant species of ethno veterinary medicinal uses which are used to treat 30 diseases of animals.

A significant research has been done to exhibit anti-angiogenic properties of the Jamaican ball moss (*Tillandsia recurvata* L.)¹⁵. An account on contribution of ethno medicinal plants in conservation on biodiversity of Central Rajasthan is noted¹⁴. A detailed literature on Micropropagation of an Anti diabetic plant – *Stevia rebaudiana* Bertoni, (natural sweetener) in Hadoti region of South-East Rajasthan, India is emphasized¹⁶.

Conclusion

Ethno botanical research can provide a wealth of information regarding both past and present relationships between plants and the traditional societies. It is hoped that, in the future, ethno veterinary medicines may play an increasingly important role in sustainable development and biodiversity conservation. In interaction with the traditional areas of science, ethno veterinary medicines gives out several interrelated and interdisciplinary subjects like ethno archaeology, ethno bryology, ethno ecology, ethno agriculture, ethno narcotics, ethno pharmacology etc.

Locally available and easily accessible ethno veterinary medicinal plants provide a cheaper treatment as compared to western drugs. The only limitation is the seasonal availability of certain plants, for which tribals have acquired different ways to preserve them for off-season users.

The present status of the economically and medicinally important plants needs to be determined in order to develop plans for their protection. Improved awareness of conservation issues is needed. Proper documentation of indigenous knowledge about the plants could be supportive in achievement of objectives. Local cultivation of medicinal plants can play an important role in economic development of the area. For sustainable and long term conservation of natural resources of the area; there is a need to actively involve the quiescence of local people in evaluation, planning, implementation and monitoring processes as they are the best judges of the area.

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