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Role of Ethno-Veterinary Medicine in Livestock Sector

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Abstract

Several plant species have been in use to treat various disorders of animals since the dawn of human civilization. Due to less availability of modern healthcare facilities in field conditions many farmers and livestock owners rely upon local medicinal plants for the well being of their animals in developing countries like India. Ethnoveterinary medicine is the scientific term for traditional health care providing low priced alternatives to allopathic drugs. This branch of holistic medicine is considered as a part of community –based approach to make the animal life better in rural areas.

Keywords: Plant, Ethnoveterinary, holistic, civilization

Introduction

Ethnoveterinary medicine (EVM) is an indication of people's knowledge, skills, methods, practices and beliefs for the care of their animals. In the 1980s, the term "Veterinary Anthropology" was mentioned for a particular approach to animal health care, which was researched through using the basic repertoire of anthropology's research skills and techniques, including observation, interview and participation. The most refined definition of Ethnoveterinary medicine (EVM) was given by McCorkle in 1998 which stated as:

" The holistic, interdisciplinary study of local knowledge and its associated skills, practices, beliefs, practitioners, and social structures pertaining to the healthcare and healthful husbandry of food, work, and other income-producing animals, always with an eye to practical development applications within livestock production and livelihood systems, and with the ultimate goal of increasing human well-being via increased benefits from stockraising."

In fact, ethnoveterinary medicine (EVM) considers those traditional practices of veterinary medicine which are legitimate and has some validation. According to the World Health Organisation (1988), ethno-medical or traditional medical practises are still used by 85% of people in developing countries as their first line of medical defence. The Food and Agricultural Organisation (FAO) also advocates the use of traditional medicinal practises for various ailments of animals in developing countries. A large number of rural people use local herbal medicines for treatment of their domestic animals and the role of ethnoveterinary medicine in livestock development is beyond dispute. However, Ethnoveterinary medicine is in danger of extinction due to lack of institutional support.

ANTHRA is an organization of women veterinary scientists that has been documenting and validating EVM since 1996 in different parts of the states of Andhra Pradesh and Maharashtra in India. ANTHRA chose to study EVM because women farmers performed 50 – 90% of all daily activities related to livestock care but were denied aspects of the local EVM as knowledge was traditionally passed from father to son.

According to Tabuti (2003) and others, systematic studies on EVM can be justified for three main reasons:

1) It generate useful information for livestock healing practices and methods that are most suited to the local environment.
2) It function as a key of veterinary resource and add useful new drugs to the pharmacopoeia.
3) It contributes to biodiversity conservation.

Advantages of EVM

- Ethnoveterinary medicine is cost effective & also dynamic.
- These can provide useful alternatives to conventional animal health care.
- It is easily administered, usually topically or orally.

Difficulties in practising EVM

- Plants used for treatment are getting scarce and are not available in the summer (seasonal).
- Not enough experienced people or healers are available.
- Preparation of medicine is time consuming. Emerging diseases like Enterotoxaemia in cattle and Blue tongue in sheep have no traditional cures.
- Excessive use of chemicals in agriculture (Pesticides /Fertilizers) results in animals not responding to treatment.
- There is confusion between superstitious beliefs *(Bhoot vaidya)* and Ethnoveterinary treatment.
- Large herd sizes or flocks.
- Impractical mode of administration.
- EVM treatments are too site specific.
- Little or nothing is mentioned against acute viral diseases.

Table 1: Some extensively used traditional treatment methods in animals

S.No.	Ailments	Traditional Applications
1.	Mastitis	Application of turmeric on udder
2.	Anestrous	Oral administration of 500 g of *satavari* leaves daily for 4-5 days .
3.	Retention of placenta	500g fresh bark of *peepal* is boiled in 2 litre of water for one hour and decoction is given orally.
4.	Cough and Cold	Drenching of root decoction of *ashwagandha* once daily.
5.	Diarrhoea	Drenching about 1 kg fruit pulp extract of Aegle marmelos and mango seed kernal for 2-3 days
6.	Urinary problem	About 100 g leaves of *Bryophyllum* **(**Patherchat) twice daily
7.	Tympany	Drenching linseed oil along with a mixture of ginger, turmeric and asafetida; keeping the animal's mouth open by tying a piece of wood into it.

Conclusion

In conclusion, it can be said that ethnoveterinary medicine provides economical and safe option to treat various disorders of animals. However, there is still a need to standardize ethnoveterinary techniques. An indigenous animal health care system should be included in the curricula of veterinary colleges and universities. This integration of animal health care provides wide spectrum of available choices to farmers, veterinarians and livestock owners in the most appropriate and economical way.

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