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Opinion

Ethnoveterinary Practices Used at Farmer's Field

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India is agro-based country having agriculture and animal husbandry and management as primary occupation. As agriculture is a key source of income in India, animal husbandry and maintaining the quality and quantity of animal products are also important parts of our country's economy. Livestock are also impacted by today's period of moderanization, pollution, and environmental deterioration. They suffer from a variety of illnesses that have a negative impact on their health and productivity. Dairy farmers generally refuse to utilise allopathy treatments since they are expensive and have several negative effects, preferring instead to rely on their own indigenous ethnoveterinary procedures.

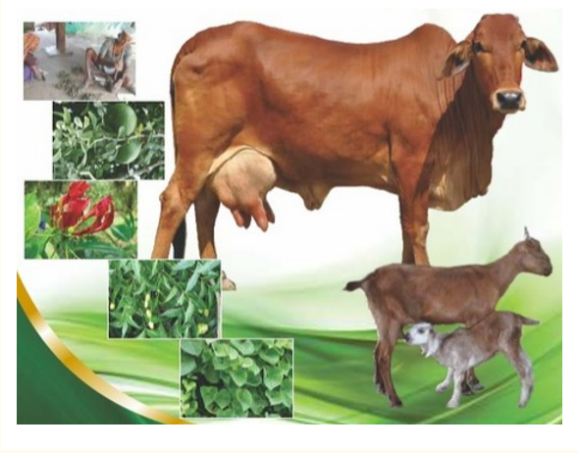

Figure 1

In developing countries, even if the extensive network of hospitals exist to provide the modern veterinary facilities, dwindling financial resources and poorly developed necessary infrastructures (e.g. roads, clinics, laboratories and cold chains to keep heat-sensitive vaccines refrigerated at all times) make government-run veterinary services unable to provide good quality health.

In addition, India has a shortage of veterinarians, with just 34,500 veterinarians available compared to the needed 67,000. Because veterinarians are not available 24 hours a day, especially at night and during off-hours, they are only consulted in emergency situations or when things go out of hand.

Ethnoveterinary practices

The use of native medicinal plants to prevent, cure, and treat numerous illnesses in animals is included in ethnoveterinary practises (EVP). It is regarded traditional knowledge that is applied to the welfare of animals. Ethnoveterinary methods have been practised in India since the *Vedic era*. EVPs are based on indigenous information that has been passed down in a community from generation to generation. Ethnoveterinary medicine is the study of people's beliefs and faith in the use of plants and plant products to treat animals. This traditional knowledge is valuable and limited to a few individuals, and it has to be recorded and implemented in society. Plants and products can be used in treatment since they are inexpensive, readily available, and have no negative effects.

EVP is getting prominence since it is cost-effective for farmers in underdeveloped countries such as India. Local people depend on traditional medicines to prevent and cure a wide range of livestock ailments because they have limited access to veterinary healthcare facilities due to their mobility and isolation from many distant places.

Importance of ethnoveterinary practices

- EVPs are cost effective, easy and cheaper to use.
- Locally available and faith in herbal drugs.
- EVPs present a sustainable alternative to synthetic medications.
- Farmers are knowledgeable with the various materials available in their environment and know how to make the best use of them.

List of ethnoveterinary practices used at farm

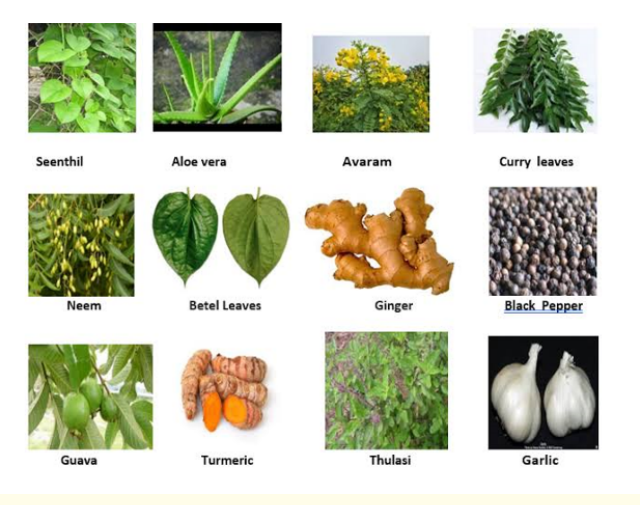

Figure 2

Mastitis

Mastitis is commonly treated with baking soda and lemon (*Citrus limon*), black pepper (*Piper nigrum*) and ghee, aloe vera (*Aloe barbadensis*), turmeric (*Curcuma longa*) and lime (paste) and ginger (*Zingiber officinale*), chilli (*Capsicum frutescens*) and lemon. Aloe vera and turmeric are used in mastitis because of their antimicrobial, anti-inflammatory and immunomodulation properties.

Bloat

To treat bloat, churn (ajwayein, jeera, black pepper and black salt) is given most commonly. Farmers are also using mustard and vegetable oil, hing (*Ferula asafoetida*) and lemon pickle. Carrom seeds (*Trachyspermum ammi*) and fennel seeds (*Foeniculum vulgare*) are used to reduce the gastrointestinal tract spasms that helps in passing of gas and thus relieve bloating in animals.

Cuts and wounds

Cuts and wounds are treated by using turmeric (*Curcuma longa*) and mustard oil. Turmeric contains curcumin, which reduces inflammation and oxidation, which aids wound healing.

Diarrhoea

Diarrhoea is treated by using carrom seeds and lemon, turmeric and cannabis (*Cannabis sativa*), fennel seeds and black salt and rice peach (chawal ki peach). Carrom and fennel seeds reduces the GIT spasms and thus used in case of Diarrhoea. Rice peach is used in case of diarrhoea as it is low in fibres thus reduces bowel movement.

Fever

Giloy (*Tinospora cordifolia*) and Kadha (ajwayein, sonf, kali mirch, jeera etc) are given in case of fever. Giloy contains a substance called javarghana, which has anti-fever effects. Also, it contains anti-inflammatory effects that assist the body to maintain a healthy temperature by attacking the source of the fever.

Ectoparasite

Mustard oil and salt and Mud (garra) are used to treat ectoparasitic diseases. Farmers use mud because they think that when mud is applied on an animal's body and let to dry, ectoparasite will shed along with the mud.

Warts

Spinach (*Spinacia oleracea*) is given orally to animal to treat warts cases.

Postpartum

Wheat bran (Triticum *aestivum* L.), jaggery (*Saccharam officinarum*) and ghee mixture is commonly given by farmers after parturition. Jaggery as well ghee is also good source of energy and therefore given after parturition.

Foot and mouth disease

Lime and ghee and turmeric paste are given to treat FMD in animals. Turmeric having curcumin helps in inhibiting the replication of enterovirus thus prevents FMD.

Retention of placenta

For ROP, colostrum and molasses is given by farmers. They are good source of energy and helps in easy expulsion of placenta.

Conclusion

Knowledge and usage of wonder herbs have been largely forgotten over time as a result of rising mechanisation and current treatment trends in many systems. However, with vaidyas, farmers, and traditional healers, our traditional knowledge has persisted. Folklore herbal veterinary treatments have a lot of potential for future investigation. This knowledge is extremely valuable and restricted to a few number of people in society, and it must be widely disseminated in order to ensure the survival of medicinal plants. Such medicinally significant plants must be grown in our area so that they might be easily accessible to our community.