ETNOVETERINARY PRACTICES BY TRIBALS OF NEARBY VILLAGES OF DNYANGANGA WILD LIFE SANCTUARY, BULDHANA MAHARASHTRA

Rasika N. Patil* and Sahadeo P. Rothe

India.

ABSTRACT

West vidarbha region of the Maharashtra state include Buldhana district. The forest type of this region is typically of dry deciduous; at some patches fluctuation of season occurs by various habitats of plants. During the exploration visits to forest and nearby villages, lots of medicinal plant uses by tribal have been discussed with them, for their regular purposes as well as ethnoveterinary practices. Tribal peoples to treat various human and veterinary diseases such as basic first aid for food poison, snake bite, indigestion, physio-therapeutic treatment for bone fracture, antibacterial, antifungal activity over cuts and wounds, insect repellent, deworming in cattle, diarrhea and increases cattle lactation. The present information provided in this study would bring new ideas on the development of environmental friendly, effective medicines and vaccines to control veterinary diseases in the future. In addition, this study may also be highly useful to protect and conserve the endemic flora species among sanctuary.

KEYWORDS: Dry deciduous forest, tribal people, ethnoveterinary, cattle, effective medicine, endemic flora, etc.

INTRODUCTION

Nature is provided with a lot of herbal medicinal plants which play an important major role in the treatment of various types of diseases. Plants are considered as the significant and elemental sources of medicinal traits. Medicinal plants form the richest entity in medicines, food supplements, pharmaceutical and chemical industries for manufacturing drugs.[1] Application of these medicinal plants as a source of drugs in treating human and animal diseases has been a traditional practice. Many studies have been carried out on treating specific ailments with the help of herbal medicines and its derivatives. The traditional use of
medicinal plants in treating veterinary diseases is of paramount significance in developing countries; where in, typical therapies for animal health care becomes financially difficult for resource of poor farmers.[2] United Nations Food and Agricultural Organization (FAO) stated that the loss in the breeding sector of many developing countries was due to insufficient drugs to treat diseases and infections, which hindered the increased production.[3] Ethnoveterinary medicine has become well known worldwide as an elemental factor of primary health care, as it has been the blessing for marginalized and poor communities. The best reason for using traditional methods of treating veterinary diseases are: (a) cost effectiveness of the developed technology (b) no side effects noted (c) lack of accessibility to modern veterinary facilities and treatment.[4] These reasons offer an inclined response over the field of ethnoveterinary research and development.[5] So far, the information available on ethnoveterinary medicine is not only scanty but failed to reach to rural farmers in India.[6][7] An extensive understanding of this concept involves an indirect interaction between plants and people. This course is known as Ethnobotany which deals with complete health care and diagnosing diseases of animals.[8] Many studies concerning the ethnoveterinary medicinal plants of the tribe in the Sanctuary areas have been attempted in the past[9] but still the detailed information remain deficient. Hence, the current study forms the first report to elucidate the ethnoveterinary medicinal plants used by Various tribes to treat and control veterinary diseases.[10]

MATERIALS AND METHODS

Study area
Buldhana is western district of West Vidarbha; the name of the district is derived corrupt from of Bhil’s Thana i.e. the place of Bhil’s. The district is situated partly in Tapi river basin and partly Godavari river basin. The northern half of the district is broadly called Payan Ghat and is drained by Penganga and Katepurna rivers, which are tributaries of Godavari. The Payan ghat and Balaghat occupy the vast fertile of the district between hill ranges of Satpuda. The district is situated between latitudes 19º 51’ and 21º 17’ North and 75º 57’ and 76º 49’ East longitudes. The district extends over an area of 9,745 sq.kms of which 1,558 sq.kms constituted of forests which comes to less than 16% of the total area of district. The district includes Buldhana, Chikhali, Mehkar, Deulgaon Raja, Motala, Nandura and Sonala tehsil’s. The climate of district is dry and hot in general and considered to be healthy. An average rainfall of the district is 754 mm and topology is uneven most part of the district unevenly constructed by rocky hills. About the botanical exploration point of view the district is almost virgin.

**Ethnic communities of nearby villages of sanctuary**

In this areas tribes like Gond, Gawali, Pawra, Bhils are dominant in such remote areas very few persons are so called vaidos and taboos, a well informant of medicinal plants.

**Forest dwellers**

As per residing populations in nearby villages, some other tribal communities also present in villages and reside as forest dwellers. According to their medicinal study they practices ethnoveterinary medicines.

**Field work**

The present field work included survey and documentation of Ethnoveterinary useful plants. The methodology used for documenting information through interviews of forest dwellers with knowledge of plants for medicinal purposes. Seasonal Interviews consisted with open and semi-structured questioning and the information collected was verified during different occasions with same informant and in different localities with other informers on different occasions. Plants identified in the laboratory using keys for botanical determination given in different floras such as, Singh et al, (2000 & 2001) Cooke (1958), Pradhan and Singh (1999), etc. Some earlier studies on ethnoveterinary practices are Jain (1999); Kumar & Sharma (1996); Reddy & Sudarshana (1987); Sebastian (1984); Sabastain & Bhandari (1984); Sensarma (1991); Sharma & Singh (2001). Enumeration of plants include botanical name and
family in which is followed by local name and uses with detailed formulation and information, mode of use and doses for various ailments.

Enumeration
The various types of gathered information discussed with local healers and tribal peoples in the villages for the uses of different medicinal plants for ethnoveterinary practices are enumerated with used quantities and doses given to diseased animals.

Medicinal plants name with common name and Family

_Achyranthus aspera_ L. (Aghada)
(Amaranthaceae)
Uses: Leaf juice is applied externally as a lotion against wounds and maggot or septic wounds once a daily till cured.

_Alternanthera sessilis_ L. (Kanchari)
(Amaranthaceae)
Uses: Feed leaves of as green fodder daily to the cattle for 15 days against Galactogogues.

_Balanites aegyptiaca_ (L.) Del (Hingan)
(Balanitaceae)
Uses: Fruit paste is applied on the affected eye one daily for 3 days against Corneal opacity

_Dendrocalamus strictus_ (Roxb.) Nees (Bamboo)
(Poaceae)
Uses: Feed leaves a day for two days against Diarrhea and Dysentery.

_Digera muricata_ L. (Kunjar)
(Amaranthaceae)
Uses: Whole plant is given against indigestion and urinary disorders.

_Ficus bengalensis_ L. (Wad)
(Moraceae)
Uses: Milk sap is applied on the wound to kill maggots twice daily for two days against septic

_Ficus religiosa_ L. (Pimpal)
(Moraceae)
Uses: Leaf extract are given orally to cure against dysuria.

_Gmelina arborea_ Roxb. (Shivan)
(Verbenaceae)
Uses: Stem bark juice is drenched for one time daily against difficulty in delivery.

*Mangifera indica* L. (Amba)
(Anacardiaceae)
Uses: 50 of leaves are boiled in half liter of water for 15 mins and 200 ml of this decoction is given orally twice a day for one day against Retained placenta

*Moringa oleifera* Adans. (Shevaga)
(Moringaceae)
Uses: Decoction of bark is massaged on the affected on the parts is given to the animal to get relief from the arthritis pain.

*Mucuna pruriens* L. (Khaj kuiiri)
(Fabaceae)
Uses: 4g bristles of Mucuna pruriens are mixed with 50 ml of butter milk and it is given orally as a single dose against Intestinal worms.

*Securinega virosa* (Roxb.) Baill (Kodarsi)
(Euphorbiaceae)
Uses: 10 ml leaves extract mixed with 200g of curd and drenched twice a day for two days against Diarrhea and Dysentery.

*Tectona grandis* L. (Saag)
(Verbenaceae)
Uses: Apply resin collected from stem bark externally on the affected hooves once daily till cured against foot rot.

*Terminalia chebula* Retz. (Kadu Badam)
(Combretaceae)
Uses: Few drops of leaf paste are poured in the eyes of animals suffering from eye disease.

*Zygophyllaceae* (*Tribulus terrestris* L.) (Gokharu)
Uses: Fruits are given to the animal as fodder to cure diarrhea.

*Triumfetta rotundifolia* Lamk. (Zhila)
(Tiliaceae)
Uses: root infusion is applied to neck of animal twice a day for three days to cure neck sores.

*Verbenaceae* (*Vernonia cinera*) (L.) Less (Sahadevi)
Uses: seeds are given to the animal to treat food poisoning. Seed infusion is given to the animal for three days to cure fever.
RESULT AND DISCUSSION
The present study revealed that the rural folklore communities of Buldhana district have an immense knowledge on medicinal plants available in their surrounding for veterinary health care treatment against several diseases. In all the uses remedies 17 veterinary disease recorded of given conditions.

The author has recorded numerous forms of medicines such as fresh juice from the fresh plant materials in the form of mixtures, decoctions, powders, etc. Local healers generally used fresh plant materials from leaves and bark or either to make juice and decoction to shows effluent results against treated diseases.

CONCLUSION
As per today various from of studies on ethnoveterinary plants healing processes by various type of tribal communities against several types of diseases and other folklore healers are still in possession of tremendous ancestral traditional knowledge on medicinal plants of their surroundings. The study established that the importance of dependency of the rural people on folklore medication.

According to the discussions with several types of communities with rural peoples even today upto 20 to 25% of villagers is dependent on the ethnoveterinery health care problems. This revealed that social impact of the medicinal drug is found to be profound and still plays an immense role in their lives respectively.
So as per due to various changes in the social and environmental pattern these traditional healers are losing their sheen in their medicinal practices. Thus they affecting the loss of their livelihood. There is a shift in the mindset of the people which is also one of the causes for the loss of the forest and subsequently loss of Biodiversity.

REFERENCES