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Practices of Folk-Phytoveterinary in Eastern Uttar Pradesh, India

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ABSTRACT: Ethno-medicines have gained new dimensions in the present days through phyto-chemical research in India and abroad. Information on medicinal plants and folk drugs recorded during fieldwork is now being subjected to investigation in the search for new biodynamic compounds of therapeutic value. The curative properties of plants acquired by trial and error over centuries in "Human Laboratories" of tribals/folk hold high esteem all over the globe. The present study is based on this rationale and provides first-hand information on contemporary ethno-pharmacological and phytoveterinary prescriptions involving many taxa of medicinal plants collected and identified from certain rich tribal inhabited forest zones of Eastern Uttar Pradesh, India

KEYWORDS-ethno-medicines,phytochemical,therapeutic, folk-phytoveterinary

I. INTRODUCTION

Folk-Phytoveterinary Medicine (FPVM) is the use of medicinal plants, surgical techniques and traditional management practices to prevent and treat spectrum of livestock diseases. Folk-Phytoveterinary practices used by goat farmers in different areas by folks of Eastern Uttar Pradesh were studied for rhinitis, bronchitis (coughing), pyrexia of unknown origin, enteritis, skin disorders, mouth ulcer and udder abnormality, and information collected from different folk respondents. In case of Rhinitis commonly used ingredients were neem oil, mustard oil, ajwain (*Trachyspermum ammi*), ginger (*Zingiber officinale*), jaggery, garlic (*Allium sativum*) and asafoetida. For treatment of Bronchitis, mostly respondents used neem oil and ajwain. Neem oil, mustard oil, ajwain. Salt, ginger and garlic were used to treat pyrexia. Heeng, Sesam leaves and neem oil were used for treatment of enteritis. Local application of neem oil and neem leaf paste was the most common practice for treatment of skin disorders. For treatment of mouth ulcer, maximum respondents used neem oil and 40% folk respondents used neem leaf. Alum, salt, neem oil and amla were used to treat udder abnormality by in Eastern Uttar Pradesh.[1,2,3]

II. DISCUSSION

As an essential element of Eastern Uttar Pradesh Folk-phytoveterinary legislation provides the powers necessary for Veterinary Authorities to ensure animal and public health. The Veterinary Legislation Support Programme (VLSP) aims to identify gaps and weaknesses in national veterinary legislation, and to assist Members in revising or developing new legislation. By contributing to disease surveillance, detection and control, laboratories support health systems and reduce risks posed to animal, human and environmental health.[5,7,8] Sustainable Laboratories missions provide an in-depth analysis of the efficiency and sustainability of the Eastern Uttar Pradesh Folk-phytoveterinary network and provide elements for authorities to develop the case for investment.

An adequate, well-trained veterinary workforce is essential to ensure the health and well-being of animals and the people who depend on them. To carry out their mission effectively, Eastern Uttar Pradesh Folk-phytoveterinary Services need adequate numbers of qualified staff, working in a positive, enabling environment. Eastern Uttar Pradesh Folk-phytoveterinary supports its Members in assessing their workforce needs and in establishing appropriate regulatory, educational and training frameworks to prepare and deploy veterinary personnel across public and private sectors. To strengthen the effectiveness of Eastern Uttar Pradesh Folk-phytoveterinary Services in the long term, collaborations between the public and private sectors are invaluable. This partnership mechanism enables the pooling of resources and creation of synergies. To help its Members explore, plan and implement such collaborations, WOAH has developed dedicated guidelines, online courses and an open-access database on Public-Private Partnerships. [9,10,11]

The analysis of the Eastern Uttar Pradesh Folk-phytoveterinary details showed that keratoconjunctivitis is quite often registered in cattle. Therefore, new medicinal substances have been developed for its treatment, namely, a polycomponent ointment and a phyto-ointment from local plant raw materials. As a result of the conducted research, reliable data were obtained indicating the beneficial effect of the developed ointments on individual biochemical blood parameters in sick animals. Studies have established that the complex application of the

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developed ointments contributes to the bio-correction and bio-normalization of metabolic processes in the body of sick animals, which is expressed by a significant increase in the quantitative values of hematological parameters, total protein and its fractional composition, ß-lysine, lysozyme, lactoferrin, and bactericidal activity of blood serum. In the course of treatment by Eastern Uttar Pradesh Folk-phytoveterinary legislation, the greatest therapeutic effectiveness was established in experimental group of animals, which used a combined treatment regimen with the alternating use of multicomponent ointment the Scientific Research Veterinary Institute in different areas of Uttar Pradesh, India, and phyto-ointment .[12,13,15] After applying the combined scheme, 33.3% of animals recovered by the 10th day from the start of treatment, and the full recovery of the majority of sick animals occurred within 11-16 days (66.7%). The obtained results of the research and production experiment showed that the most acceptable method was the use of a combined treatment regimen for sick animals, where the absolute effectiveness was 100%, as compared to 80% in the control group.

III. RESULTS

During research, it was discovered certain species of plants reported from Eastern Uttar Pradesh Folk-phytoveterinary practices .The seeds of *Amaranthus blitum*, the leaves of *Morus alba, Ficus palmata, Vitex negundo, Juniperus semiglobosa*, the roots of *Ulmus wallichiana*, and *Rumex nepalensis* were used against black magic and evil eyes[17,18,19]. The mixture of burning powder is then burnt to produce smoke in traditional fire pots called kangri and circulated seven times around the animal, particularly cows, to get rid of black magic and the evil eye . *Heracleum candicans* were used to increase the milk production of cattle. The sap of leaves and stems from *Sambucus wightiana* was applied for wound healing in cattle. The unique fodder preparation from the seeds of *Brassica campestris*, locally called Kaj, is traditionally used as a nutritive food for cattle in the winter season. The various dry fodder preparations (gaaslov, pan baath, kaandbaath, Lovgooad, Karb, and Phungma) .Gasslov is made by bundling six to ten handfuls of *Oryza sativa* and drying it in the sun; pan baath is obtained by gathering the leaves of *Salix alba* along with small branches and dried, used in winters, especially for sheep and goats; lovgooad is made by drying and bundling different species such as *Trifolium fragiferum, Trifolium pretense*, *Trifolium repens,* and *Cynodon dactylon*.[20,21,22]

Various veterinary diseases were found in Eastern Uttar Pradesh areas viz. gastrointestinal issues, wounds, weakness, urine issues, swelling, skin diseases, sexual issues, gynecological issues, foot and mouth diseases, endoparasites, nasal worms, kidney stones, fever, cough, constipation, black quarter, red-water disease, tongue infections, fractures, liver issues, eye issues, and joint issues as treated with the Eastern Uttar Pradesh Folk-phytoveterinary practices. Endoparasites were second in importance, treated with eight species of plants. Cough was treated using six plant species, which included *Berberis lycium, Vitex negundo, Nasturtium officinale, Bauhinia variegata, Cuscuta capitata*, and *Justicia adhatoda*. Gastrointestinal problems were common diseases in animals .[23,25,27] These gastric diseases were commonly treated by medicinal plants by folk people in areas of Eastern Uttar Pradesh. It is important to mention that scientific phytochemical evaluation of these plant species is essential, as this might provide novel compounds with potential medicinal attribution, which, in turn, can prove beneficial for going against antibiotic-resistant pathogens, which are of prime concern to the Eastern Uttar Pradesh Folk-phytoveterinary legislation.[28,29]

Cow slaughter in state is banned. Cow is worshipped as mother not only in Uttar Pradesh but across country. Uttar Pradesh is divided in 5 cultural Regions;

- Awadh/ Oudh Region
- Braj Region
- Bundelkhand Region
- Ruhelkhand/Rohilkhand Region
- Bhojpuri Region

Braj Region :
Braj region is basically comprised of Mathura, Agra, Aligarh and surrounding Districts. Society is agrarian but tourism is more developed in this region as Agra and Mathura are two regions that attract tourists more than any region.

Awadh or Oudh Region :
Awadh is the largest cultural division of Uttar Pradesh. Awadh has been the region of princely states and famous for its Royal Grandeurs. All royalty you can see in the culture of this region. This was a region which gave most infantry to

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the Colonial British Army. This region comprises of Lucknow, Kanpur, Faizabad, Barabanki and Rae Bareli districts of Uttar Pradesh.

Bundelkhand Region :
This region has Jhansi, Mahoba, Lalitpur and surrounding districts. This is the region where Rani Lakshmibai fought British regiment and chose martyrdom. This region has also great and valorous Orchha Rulers who fought for their honor.[29,30]

Ruhelkhand or Rohilkhand Region :
Ruhel or Rohilkhand region of Uttar Pradesh mainly comprise of Badaun, Bulandshahr, Pilibhit, Bijnor, Meerut, Ghaziabad and cities of N-W UP. This is the most commercialized and urbanized region of Uttar Pradesh. The main reason for its advancement is its location around capital city Delhi.

Bhojpuri Region : remaining part of Uttar Pradesh

The study plant species could be selected for screening to identify active phyto-chemical compounds and develop new drugs by the Eastern Uttar Pradesh Folk-phytoveterinary legislation.

The rich and diversified flora of Eastern Uttar Pradesh Folk-phytoveterinary 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 animal diseases/veterinary diseases. Scientists are now documenting various Phyto-ethnoveterinary practices based on plant drugs. The plant wealth of Eastern Uttar Pradesh Folk-phytoveterinary also offers the tribals who tend livestock a rich reservoir in treating the diseases and ailments of the animals. In Eastern Uttar Pradesh Folk-phytoveterinary, livestock plays a key role in the tribal-farmers life, they provide farm power, rural transport, manure, fuel, milk and meat, but also a major role in tribal economy by providing income and employment to the small hold tribal-farmers and other weaker sections of the society. The indigenous knowledge of the veterinary health care system acquired by traditional herbal healers and elderly learned tribal-farmers and is orally transformed from one generation to other. It is less systematic and less formalized and is usually transferred by word of mouth rather than in writing.

Eastern Uttar Pradesh Folk-phytoveterinary practices, deal with tribal-traditional animal health care which encompasses the knowledge, skills, methods, practices and beliefs about animal health care. Eastern Uttar Pradesh Folk-phytoveterinary medicine is developed by tribal-farmers in fields and barns, rather than by scientists in laboratories and clinics. Folk-phytoveterinary medicines often provides cheaper options than comparable western drugs and the products are locally available and more easily accessible. In the face of these and other factors, there is increasing interest in the field of folk-phytoveterinary research and development.The possible benefit of plant derived medications constitutes a rewarding area of research, particularly in Eastern Uttar Pradesh Folk-phytoveterinary regions which have a rich biodiversity of natural plant resources coupled with a high prevalence and variety of infectious diseases in animals. The characteristics, sophistication, and intensity of the folk-phytoveterinary medications differ greatly among individuals, societies, and regions. Hence, documentation of these medicines from Eastern Uttar Pradesh having a rich ethnographic and biodiversity setting would be of great significance. [30,31]

IV. CONCLUSION

Traditional knowledge of Eastern Uttar Pradesh Folk-phytoveterinary practices and their use by indigenous cultures are not only useful for conservation of cultural traditions and biodiversity but also for community healthcare and drug development in the present and future. Documentation of indigenous knowledge and evaluation of the use of plants for a variety of purposes assume greater significance, not just to retain it, but also to keep it alive and make it available for future use because of rapid socio-economic and cultural changes that are taking place across the tribal community of the region.[32]

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