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Research Article

ASSESSING THE KNOWLEDGE LEVEL OF ETHNO VETERINARY PRACTICES IN SHEEP AND GOAT AMONG TRIBALS OF KALRAYAN HILLS

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ABSTRACT

Ethno knowledge inherited from progenitors through their traditional culture, belief and rituals in the tribal community were the key factors in shaping the range of ethno-veterinary practices. However, "local treatment" has induced the systematic procedure were responding to healing the minor diseases in domestic animals. The tribal community orient with animal production with unique ethno knowledge approaches were used to diagnose and treat various sheep and goat diseases. The traditional followers of the tribal community practiced the healing treatment rather complex with ethno veterinary practices are viable to treat the sick animals. The present study was conducted to assess the knowledge level of ethno veterinary practices of prevalent sheep and goat farming systems in the Kalrayan Hills of Tamil Nadu, India. Three hundred tribal farmers in Villupram district were selected by proportionate random sampling method and the data were collected through an interview schedule and analyzed with appropriate statistical tools for pertaining the result. The study was conducted to survey the ethno-veterinary practices which were frequently used in managing their sheep and goat around the tribal track of Kalrayan hills. The tribal community is known for its long history of traditional sheep and goat keeping. Countrified livestock production is the predominant alternative livelihood empowerment in for tribal, where-in disease was prioritized as the major constraints. The study resulted that the knowledge of ethno veterinary practices are efficient in curing the animal health care towards the benefit of socio economical development in the tribal community of kalrayan hills in Villupuram district.

Keywords: Knowledge level, Ethnoveterinary Practices, Sheep and Goat diseases, Tribal, Kalrayan hills.

INTRODUCTION

The domestication of animals started during the Neolithic period, along with the cultivation of crops. First goat and sheep, second cattle and pigs, and finally draft animal srearing had centered on for food, religion, culture and economy from ancient times. India's ruminant biodiversity is enriched with 42 breeds of sheep and 26 breeds of goats (ICAR–NBAGR- 2016). Tamil Nadu has ten sheep breeds viz., Coimbatore Sheep, Kilakakarsal, Madras Red, Mecheri, Nilgiri, Ramnad White Trichy Black, Vembur, Katchai Katty-Black, and Chevaadu and two goat breeds viz., Kanni Adu and Kodi Adu. India also ranks second in goat and third in the sheep population. Such impressive genetic resources availability, sheep rearing continues backward profession, primarily in the hands of poor, tribal, landless or smallholder and marginal farmers who own either an uneconomical holding or no land at all. Only limited efforts have been made for improving goats. There were no major technological interventions in sheep and goat rearing. Sheep rearing is no madic in the hilly region, whereas goat rearing is specific to certain areas that show the sheep and goat farming are still traditionally oriented and managed traditionally in small ruminant production. Burman and Singh observed that alarge body of indigenous technical knowledge(ITK)still exists in the farming communities, which helps the min practicing successful farming. Even though the considerable literatures noted the treatment of animals using indigenous medicines/herbals. The vast references denoted that ethno veterinary practices in sheep

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and goat farming are still growing in the hilly region. Under this background, the study was conducted to assess the knowledge level of ethno veterinary practices prevalent in sheep and goat farming systems.

MATERIALS AND METHODS

Sample collection

The Kalrayan hills in Villupuram district of Tamil Nadu were purposively selected for the study considering the availability of tribal farmers engaged in ethno veterinary practices. Among fifty revenue villages in Kalrayan hills, ten villages were selected based on the maximum numbers of tribal farmers engaged in ethno veterinary practices. Rationality of twenty ethno veterinary practices were determined based on the judge's opinion, accordingly, fourteen ethno veterinary practices in sheep and goat were found rational and six ethno practices were found irrational. Finally, fourteen ethno veterinary practices under sheep and goat were collected. Three hundred tribal farmers in Villupram district were selected by proportionate random sampling method. The data collected from 300 tribal were to analyze the knowledge level sought under two categories with correct and incorrect. The data were analyzed with appropriate statistical tools to reveal the result and discuses in elaborate.

RESULT AND DISCUSSION

The Table revealed that out of 2 ethno veterinary practices under blue tongue disease, in sheep and goat above one fourth of them possessed acknowledge viz., smearing banana fruits with sesame oil and feed to animals for 2 to 3 times (42.00 percent) and feeding leaf pulp of *Aloe vera* 100 gm has to be administered daily (39.33 percent). Most of the respondents followed this practice traditionally, but nowadays they are aware of the veterinary treatment, traditional medicinal uses Tamizhazhagan and Pugazhendy (2017) hence the knowledge of ethno veterinary practices is not commonly followed in the study area. This may resulted that most the respondents possess very low level of knowledge on ethno veterinary practices. This finding is similar to the findings of Reddy *et.al* (2010). The Table 1 revealed that under eradication of the ecto-parasite, the result observed that above one fourth of the respondents possessed the knowledge level viz. applying of tobacco powder and edible oil mixture over the entire body of the animal (58.66 percent). This may be due to ecto- parasite causes is ineffective now a days because of veterinary doctors give adequate treatment to get better result than the ethno veterinary practices. This shows the respondent aware about the medical treatment is better than the ethno veterinary practices followed in the tribal track.

The above Table showed that in flatulence practices of animal husbandry, 3 practices observed that above one third of them knowledge possessed by the respondents viz. feeding of suspension of edible oil (100g), water and kerosene oil to the animals (42.66 percent) and feeding a mixture of onion and aerial root of banyan tree to the animal (40.66 percent), followed by feeding of plant tuber with onion mixture and applying salt in the animal's tongue (39.33 percent). The flatulence disease is common in the tribal track. This disease commonly cures by giving the treatment only by the skilled labours in recent days. The skilled labour is very less to give it in the tongue or mouth. So the people moved towards the advance medical treatment given by the veterinary clinics in the study area. The above Table under skin diseases in animal husbandry above one fourth of the respondents possessed knowledge in the below practices viz., applying of used engine oil over the skin (39.33 percent). This is due to the respondents' belief that the traditional practices take more time of duration to cure the skin diseases. This shows the respondents had a low level of knowledge in applying ethno veterinary practices in recent decades. The Table under cold practices in animal husbandry resulted that above one fourth of the respondents possessed knowledge in, dropping of bhoyrogni juice in the nose (32.66 percent) because the tribal respondents traditionally followed these practices in a simple procedure and low-cost method in a isolated place of the tribal track. This may occur with low knowledge in the above practices. This finding is in accordance with the findings of Natarajan (2002).

The Table 1 observed under diarrhea in animal husbandry, 2 practices resulted that above one fourth of the respondents had possessed knowledge in following practices viz., oral administration of charcoal powder (58.00 percent), followed by feeding the leaf extract hupai (50.00 percent) and feeding of 3 kg of steamed varagu grains (42.66 percent) respectively. This may be because the tribal respondents followed the practices commonly in all places which given immense knowledge given by their forefathers. The Table revealed unsuccessful conception in animal husbandry,2 practices observed that near and above half proportionate of the respondents possessed knowledge viz., feeding 200–300ml of castor oil (50.66 per cent) followed by feeding of banana leaf extract (42.66 per cent). This may be due to the reason that tribal respondents followed the practices traditionally in their belief of their ancestors. The above Table revealed that under post–calving care practices in animal husbandry that above one fourth of the respondents possessed knowledge on feeding of 1- 2 kg jaggery dissolved in water to the animal immediately after calving (59.33 per cent). This might be due to the tribal respondents followed the practices commonly which were followed by their progenitors and also traditional medicinal uses Tamizhazhagan and Pugazhendy (2017).

Table 1. Distribution of tribal respondents according to their knowledge level of ethno veterinary practices in sheep and goats (n=300).

S.No	Ethno Practices in sheep and goats	Respondents	Percentage
	Blue tongue disease		
1.	Smearing a banana fruits with sesame oil for feed to animals for 2 to 3 times	126	42.00
2.	Feeding leaf pulp of Aloe vera 100gm has to be administered daily.	118	39.33
	Eradication of the ecto–parasite		
1.	Applying tobacco powder and edible oil mixture over the entire body of the animal	176	58.66
	Flatulence		
1.	Feeding a mixture of onion and aerial root of banyan tree to the animal	122	40.66
2.	Feeding of plant tuber with onion mixture and is applying salt on the tongue of the animal	118	39.33
3.	Feeding of suspension of edible oil (100g), water and kerosene oil to the animals	128	42.66
	Skin diseases		
1.	Applying used engine oil over the skin	118	39.33
	Cold		
1.	Dropping of bhoyrogni juice in the nose	98	32.66
	Diarrhea		
1.	Oral administration of charcoal powder	174	58.00
2.	Feeding leaf extract of hupai	152	50.00
3.	Feeding 3kg of steamed varagu grains	128	42.66
	Unsuccessful conception		
1.	Feeding 200–300 ml of castor oil	152	50.66
2.	Feeding of banana leaf extract	128	42.66
	Post–calving care		
1.	Feeding of 1- 2 kg jaggery dissolved into water to the animal immediately after calving	178	59.33

CONCLUSION

Ethno knowledge systems are time immemorial and are passed from generation to generation. By the way of experience they lessons from the elderly farmers in the tribal society. Ethnoknowledge systems have the potential of "the more you explore, the more information you get". Hence, more exploration by the veterinary clinic associated with livestock development on ethnoveterinary practices and beliefs is certainly given a guaranty as observed in the study. The study concluded that most of the respondents followed the ethno veterinary practices was less when compared to the ethno agriculture practices. Hence, the result vividly concluded that the tribal respondent believes that the clinical treatment is better than the ethno veterinary practices. This shows the ethno knowledge is turned the direction to follow the clinical treatment in the veterinary hospital which spends less money and better treatment of curing the animals.

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REFERENCE

ICAR-NBAGR (2016).Available from: www.nbagr.res.in/ Accessionbreed.html.

Malik J K, Thacker A M & Ahmed A (1996). Ethnoveterinary medicine in western India, in: Ethno veterinary Research and Development, McCorkle C(Ed), (Intermediate Technology publication. U.K.), 148.

Reddy YK, Punniamurthy N, Manohar BM (2010). Ethno veterinary practices to minimize losses due to bluetongue in sheep. In: comeadium related during International conference on ethno veterinary practices. 2010. Jan 4-6 TANUVAS, VUTRC, Thanjavur, India, 1-91.

Natarajan, M. (2002). Adoption of indigenous farm practices among tribal women of kalrayan hills, Unpublished M.Sc. (Ag) Thesis, Annamalai University Annamalainagar.

Malik BS. Meen BS. Rao SVN(2007). Study of existing dairy housing and health care management practices followed by the owner. *Indian Journal of Animal Research*. 41 (2), 79-86

Kumaravelu N, Ravimurugan T, Pandian (2010). Traditional knowledge systems of sheep farmers-anempirical study. In: Compendium released during International Conference on Ethno Veterinary Practices, 2010Jan4–6, TANUVAS, VUTRC, Thanjavur, India, p.156.

Tamizhazhagan, V., and Pugazhendy, K. (2017). Ethnobotanical and Phytopharmacological review of *Pisonia alba* Span. *Asian Journal of Pharmaceutical and Clinical Research*, 69-71.