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Assessing The Knowledge Level Of Ethno-Veterinary Practices In Cow Among Tribals Of Kalrayan Hills

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ABSTRACT

In recent decades ethno science is the major study of anthropological theory often referred to an "indigenous knowledge", ethno science also a perception study based a native perception. It is the study of a culture system of analysingknowledge, ideas (such as its taxonomy of plant). The study was conducted to survey the ethno-veterinary practices which were frequently applied in managing their cows around the tribal track of Kalrayan hills. The tribal community is well known for its long history of traditional cow keeping in the hilly zone. Countrified livestock production is the predominant alternative livelihood empowerment in kalrayanhills;wherein disease was prioritized as the major production constraint. The poor accessibility of a convention of veterinary practices shows the below poverty, family mobility characterizing in the production system of domestic animals, has left by tribal population with no other choice to uphold the traditional livestock treatment systems passed from one generation to another generation. The tribal community orients with animal production with unique ethno practice approaches were used to diagnose and treat various cow 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. Indigenous knowledge inherited from tribal progenitors with traditional culture, belief and rituals in the tribal community were the main factors 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 study resulted that the knowledge of ethno veterinary practices is efficient in curing the animal health care towards the benefit of economical development in the tribal community of Kalrayan Hills in Villupuram District.

ISSN:0971-1260
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Key words: Ethno-veterinary practices, knowledge level of ethno practices in cow, tribal traditional healers.

INTRODUCTION

In sustainableof livestock development in tribal track, with animal health as the main component, has been implemented in India for decades, mainly targeting the tribal pastoralist areas (IBC, 2004). However, diseases still persist in the tribal zone as themajor challenge for livestock production. The high cost expensive method is not recommended largely in animal protection and healthcare in cow care is natural of followers by their tribalprogenitors as the pastoral production method. These facts show the failure in the past generation inIndia and in the tropic zone to led them a ideal model in terms of indigenous knowledge within the community to expressand alternate approaches care the livestockhealth (Grum *et al.*, 2012).“Ethno-veterinary knowledge is often “tacit” rather than expressed knowledge and is structured differently from scientific knowledge and takes participatory approaches to make such knowledge visible and channel it towards development projects” (Koehler, 2005). The tribal community is a pastoral community with a long history of cow breed (Gebreyesus *et. al.* 2013). Nature of cowproduction system of the tribal community makes it easy for implementation of normal veterinary practices. The results are interpreted the tribal pastoralists hada high degree of self-reliance and confidence in animal health management and usually treat sick animals themselves by theirindigenous practices to cure in the density of forest area residence.The various studies also indicate, however the high level of indigenous knowledge and various types of ethno-veterinary practice in the tribal zone adoption ismoreoverdifferences among different tribal communities. In this context the study is essential for documentation and designing the various indigenous practices in first step towards the intervention of many systems of intervention schemes tailored to the specific needs of the tribal communities. This paper reports the ethno-veterinary knowledge and practices of the tribal community in kalrayanhills were employed in managing their cow population.

MATERIALS AND METHODS

The kalrayan hills in Villupuram District of Tamil Nadu' werepurposefully selected for the study considering the availability of tribal farmers engaged in ethno- veterinary

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Vol-22-Issue-10-November-2019

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 and tradition familiarity with the Tamil Dialect culture of people. The rationality of thirty collected indigenous veterinary practices was sent to the judge's opinion, accordingly twenty two indigenous- veterinary cow practices are found to be rational and eight indigenous practices are found to be irrational in cow practices.The study documented twenty two indigenous practices was found for the purpose of the survey and the data was collected from 300 tribal respondents with fifteen indigenous practices in cow were sought under two categories with correct and incorrect to measure the knowledge level. A well-structured interview schedule was prepared for collection of the data and analysisthe knowledge level of the respondents. The frequency of the farmer's knowledge was calculated byappropriate statistical tools.

RESULT AND DISCUSSION

Table: Distribution of tribal respondents according to their knowledge level of ethno-veterinary practices in cow **(n=300)**

INDIGENOUS PRACTICES UNDER COW			
Cow - Foot and mouth disease (FMD)			
1.	Giving local liquor or wine	192	64.00
2.	Rubbing of jaggery in the mouth	176	58.66
3.	Applying salt solution inside the mouth and between the hooves of the animal	126	42.00
Selection of breed and feeding			
4.	Selection of indigenous breed	236	78.66
5.	Feeding dry roughages such as straw and hay to calving cows	172	57.33
6.	Feeding all types of fodder to cows	270	90.00
7.	Giving drinking water adequately to the cows	265	88.33
Care and management of dairy and pregnant cow			
8.	Isolation of pregnant cows from the rest area	270	90.00
9.	Stopping milking 50 to 60 days before the expected date of calving	256	88.66

ISSN:0971-1260

Vol-22-Issue-10-November-2019

10.	Feeding roughages to pregnant cows	252	84.00
Ulcer on neck of the bullock			
11.	The boiled and cooled edible oil is applied over the neck	196	65.33
12.	Application of powdered coal paste on the ulcer part to minimize the pain	152	50.66
Respiratory tract infection			
13.	Leaves of Thulasi (*Ocimum canum*), Arusha (*Adhatodavasica*), Ginger, Pepper, Jaggerymixture, mixing withboiled water to make a decoction to feed 2-3 times daily.	128	42.66
14.	Fruits of Kantakari (*Solanum surattense*) are crushed and soaked in goat urine overnight and filtered and few drops are squeezed into the nostrils.	124	41.33
Dropping of placenta			
15.	Two or three seeds of value koundumani (*Abrus precatorius*) given with boiled Bajra(*Pennisetum glaucum*) to the animal immediately after delivery .	118	39.33
16.	Feeding the animal with bamboo leaves to release of the placenta.	120	40.00
Mastitis in dairy animals			
17.	Gheekumari (Aloe Vera) – 1 or 3 petals Turmeric powder – 50 gm Lime stone – 10 gm are grounded well and made it as a paste to apply over the udder thrice a day.	126	42.00
Treatment for the dislocated / fractured part			
18.	Application of mixture of honey and pure ghee mixture in the fractured part.	192	64.00
19.	Application of perandai pulp (*Cissus quadrangularis*) on the fractured part.	126	42.00
20.	Application of mixture of Salt, Jaggery and Turmeric	124	41.33

ISSN:0971-1260

Vol-22-Issue-10-November-2019

	mixture in the fractured part.		
21.	Application of twovilvam fruits is partially burnt and then ground along with agave leaves are applied on the fractured part.	112	37.33
22.	Application of fenugreek seed paste and bandaged in the fractured part.	156	52.00

The Table revealed that out of 3 indigenous practices under animal husbandry in Foot and mouth disease (FMD) Practices in cow, 2 practices were observedthat more than half proportionatehad knowledge like the practices viz. Control by giving local liquor or wine (64.00 per cent) and Rubbing of jaggery in the mouth (58.66 per cent), followed by Applying salt solution inside the mouth and between the hooves of the animal (42.00 per cent). This may be due to the reason of most of the tribal respondents followed the indigenous practices traditionally which was followed by their progenitors. Due to advanced treatment to be given in the local area by the veterinary doctors, also viable than the indigenous practices slowly changes to the advanced practices followed in the tribal community. This may indicate that, the tribal respondents had a medium level of knowledge in the indigenous practices. This finding iscontradictory with the findings of Devaki. K and P. Mathialagan (2015).

The Table observed that out of 4 indigenous practices under animal husbandry in Selection of breed and feeding Practices, 3 practices observed that above one fourth of the respondents had high level of knowledge like the practices viz., Feeding all types of fodder to cows (90.00 per cent), Giving fresh drinking water to the cows (88.33 per cent) and Selection of indigenous breed (78.66 per cent), followed by Feeding dry roughages such as straw and hay to calving cows (57.33 per cent). This may be due to the reason indicate that many tribal respondents followed the practices traditionally which was followed by their forefathers. This may show the high level of knowledge in selection of breed and feeding of indigenous practices. This finding is in accordance with theChigasil M. Sangma and Santha Govind (2016).

The Table also revealed that out of 3 indigenous practices under animal husbandry in Care and management of dairy and pregnant cows, 3 practices observed that above one fourth of the respondents hada high knowledge level in the practices viz., Isolation of pregnant cows from the restarea (90.00 per cent), Stopping milking 50 to 60 days before the expected date of

ISSN:0971-1260
Vol-22-Issue-10-November-2019

calving (88.66 per cent) and Feeding roughages to pregnant cows (84.00 per cent). This may be due to the reason of many of the tribal respondents followed the practices traditionally which was followed by theirprogenitors. This may showa higher knowledge level ofin care and management of dairy and pregnant cow indigenous practices. This finding is in line with the findings of Saha (2014).

The Table observed that out of 2 indigenous practices under animal husbandry in Ulcer on the neck of the bullock, all practices foundedthat above one fourth of the respondents had a medium level of knowledge in the practices viz., The boiled and cooled edible oil is applied over the neck (65.33 per cent) and Application of powdered coal paste on the ulcer to minimize the pain (50.66 per cent) percent. This may be due to the reason of many of the tribal respondents followed the practices traditionally which was followed by their progenitors. This may shows the medium level of knowledge in Ulcer on the neck of the bullock indigenous practices. This finding is similar to the findings of Saha *et.al.* (2010) and Mishra (2013).

The Table also revealed that out of 2 indigenous practices under animal husbandry in Respiratory tract infection, all the practices observed that above one fourth of the respondents had low level of knowledge in the practices viz., Leaves of Thulasi (*Ocimum canum*), Arusha (*Adhatoda vasica*), Ginger, Pepper, Jaggery mixture diluted with boiled water to make decoction to feeding 2-3 times daily (42.66 percent) and Fruits of Kantakari (*Solanum surattense*) are crushed and soaked in goat urine overnight and filtered solution squeezed few drops in to the nostrils (41.33 percent).This may be due to the veterinary hospital availability in the local area give adequate treatment might slowlychange them to advance treatment. This might shows the indigenous practices are slowly disappearing in the tribal tracts. This mightshows the low level of knowledge in Respiratory tract infection indigenous practices. This finding is in line with the findings of tribes, which shows less than 20 per cent of indigenouspractices should cure the respiratory infection of livestock by indigenous method Callaby.R *et.al.*(2016).

The Table revealed that out of 2 indigenous practices under Dropping of the placenta, all practices observed that above one fourth of the respondents had low of knowledge in the practices viz., Feeding the animal with Bambusa leaves for release of placenta (40.00 percent), and two or three seeds of Vellai koundumani(*Abrus precatorius)* given with boiled

ISSN:0971-1260
Vol-22-Issue-10-November-2019

Bajra(*pennisetumglaucum*) to the animal immediately after delivery (39.00 per cent). This mightdue to the veterinary hospitals availability the indigenous practices are slowly disappearing in the tribal tracts. This may indicate the low level of knowledge in Dropping of placenta indigenous practices. This finding is similar to the findings of Chigasil M. Sangma and Santha Govind (2016).

The Table revealed that in Mastitis in dairy animals, the above one fourth of the respondents hada low level of knowledge in Gheekumari (Aloe Vera) 1 or 3 petals, Turmeric powder- 50gmLime stone- 10 gm are grounded well and made it as a paste to apply over the udder thrice a day (42.00 per cent). This may be due to the reason of many of the tribal respondents not followed the practices in advance medical treatment given by the veterinary doctors. This might indicate the low level of knowledge in Mastitis in dairy animals indigenous practices. This finding is similar to the findings of Gnanasekar. R and R. John Christy (2013).

The Table also observed that out of 5 indigenous practices under animal husbandry in Treatment for the dislocated / fractured part Practices, 3 practices revealed that the respondents had medium level of knowledge in the practices viz., Application of mixture of honey and pure ghee mixture in the fractured part(64.00 per cent), Application of fenugreek seed paste and bandaged (52.00 per cent), followed by Application of perandai pulp (*Cissus quadrangulari*s) on the fractured part (42.00 per cent), Application of mixture of salt, jaggery and turmeric mixture in the fractured part (41.33 per cent), and Application of two fruits of partially burnt vilvam and then grounded along with agave leaves are applied in the fractured part (37.33 per cent), This may be due to the reason of many of the tribal respondents followed the practices traditionally which was followed by their ancestors. This findingon treatment of for cow is reported that mediumlevel of knowledge is contradictory with the findings of Saha *et.al.* (2010) and Mishra (2013) reported that high level of knowledge abouttreatment of dislocated and fractured part of the cow.

CONCLUSION

The study shows that the disease is the major constraints in the hilly area. It was also found that the local people have a complex knowledge in identifying, diagnosing and treating diseases. Indigenous knowledge is the collection of inherited practices from their progenitors with their belief and rituals in the tribal group were the main theme of shaping the level of

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Vol-22-Issue-10-November-2019

ethno- veterinary practices However, " the local analysis" have reinforced the system's to respond the major diseases. Their methods of diagnosis and naming of diseases are found to be different from the conventional approach. Traditional healers are the main person in domestic animal health protection. Implementing community-based animal health management is highly recommended to mitigate the threats from diseases. The study also concluded that many of the tribal respondents had a rich knowledge in controlling the domestic animals and the result also concluded that the tribal respondents possesses high knowledge in healing the cow diseases in kalrayan hills. Local traditional healers identified in this study may be used as focal points to put some technical trainings and facilities at their disposal to support pastoralist communities in the area.

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Vol-22-Issue-10-November-2019

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