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Research Article

A STUDY ON KNOWLEDGE OF CATTLE OWNERS OF JUNAGADH DISTRICT ABOUT INDIGENOUS VETERINARY PRACTICES

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Abstract- Livestock industry provides for a major source of livelihood for many people worldwide, particularly the rural poor in developing countries. Ill-health is a major constraint to livestock production and development in rural and peri-urban communities where a half of the world's livestock population is found. Most of these communities live in marginal areas affected with endemic pathogens, vectors and diseases. These areas are not easily accessible to modern veterinary information and services and people are less economically endowed albeit coping with enormous animal health problems. The survival mechanisms and strategies are simply based on people's own local and inherent centuries' old knowledge that has withstood the test of time in all aspects of human evolutionary life. Any attempts to improve the lives of these people through livestock industry, must therefore begin by understanding and recognizing the evolution, application and management of indigenous veterinary medicine in their cultural lifestyle. This approach offers sustainable strategies directed towards developing sound and appropriate animal health care systems suitable and relevant to rural communities in improving livestock performance and production and hence, livelihood. This study was undertaken in Visavadar and Mendarada talukas of Junagadh districts to know the level of knowledge of cattle owners regarding indigenous veterinary practices.

Keywords- Cattle owner, animal health, Indigenous veterinary practices

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Introduction

India has the largest livestock population in the world. Animal husbandry plays a prominent role in the rural economy in supplementing the income of rural households. The returns from livestock and mixed farming in small and medium holdings are good and sustainable. Animal husbandry consists of various practices of livestock management like breeding, feeding, housing, grazing, health, hygiene etc. Livestock farmers have their own traditional wisdom for all their management practices. Indigenous knowledge of livestock owners forms the foundation for and complements the success of all sustainable animal healthcare programs in developing countries.

Need for investigation into indigenous system of veterinary medicine is widely recognized [2,7] One fruitful approach in this direction is systematically survey in small tracts the age-old knowledge and experience of rural folk in the treatment of cattle. Khanna (1997) [3] studied the indigenous system of veterinary medicine, which is unknown to modern veterinary practices, yet this seems to be working well. Each rural area boasts of its own repertoire of indigenous veterinary medicines, which are formulated from locally available medicinal plants. Indigenous knowledge of healing, prevention and control of diseases, surgery, toxicology and pharmacology exists in the area under study.

The study was conducted in the south saurashtra zone of the state, the study was made by direct persistent observation interspersed with scanty questioning related to general indigenous practices, indigenous practices for feed, dropping of placenta, increasing milk production, treatment of tympani/flatulence, treatment of wound, treatment of yolk gall, treatment of fever, treatment of skin diseases, treatment of constipation, treatment of foot and mouth disease (FMD) etc.

Objective

To find out the knowledge level of the cattle owners regarding indigenous veterinary practices.

Materials and Methods

The study was conducted in Visavadar and Mendarada talukas of Junagadh district of Gujarat State. By using proportionate random sampling technique, 3 villages of Mendarada named Araniyala, Samadhiyala, Moti Khodiyar and 3 villages from Visavadar named Miyavadla, Sarsai and Moti Monpari were selected for this study. Total 120 farmers were selected by random sampling method. The data of the study was collected by personal interview. The interview schedule was prepared keeping in view the objective of the study. The statistical measure such as frequency and percentage was used to analyze the data.

Results and Discussion

To measure the knowledge of cattle owners about indigenous veterinary practices, a teacher made knowledge test was developed and used.

Table-1 *Distribution of respondents based on their knowledge about indigenous veterinary practices*

N=120

Category	Frequency	Percentage
Low	28	23.33
Medium	64	53.34
High	28	23.33
Total	120	100.00

The collected data showed in [Table-1] revealed that majority of the cattle owners (53.34 per cent) having medium level of knowledge followed by high level of knowledge (23.33 per cent) and low level of knowledge (23.33 per cent) about indigenous veterinary practices.

The result is in line with the studies of Temkar and Chauhan (2002), Bhatt (2006), Sarma *et al.* (2010) and Solanki *et al.* (2011) [1,6,8,9].

Practice wise knowledge of cattle owners regarding indigenous veterinary practices

As indicated in the [Table-2] that the percent was highest for the knowledge of indigenous veterinary practices in case of juice of leaves of panafad helps in healing the wound of cattle (87.50 per cent), Ghughry made from bajara grain is given to milch animal (82.50 per cent), Datura fruits induce heat in cattle (65.83 per cent) and flatulence is cured, if cattle is given groundnut oil to drink (65.00 per cent).

Table-2 *Knowledge level of cattle owners regarding indigenous veterinary practices*

Sr. No.	Name of indigenous practices	Frequency	Percentage
1	Colostrum should not be drawn until dropping of placenta	66	55.00
2	Ghughry made from bajra grain should be given to milch animal	99	82.50
3	Boiled rice increases milk production in cattle	60	50.00
4	Cotton seed improves fat per cent in milk	70	58.33
5	Constipation in cattle can be cured by castor oil	75	62.50
6	Juice of nagod leaves is given to cattle suffering from fever	57	47.50
7	Mamejvo leaves cures diarrhea in cattle	79	65.83
8	Paste of gram flour and buttermilk cures skin diseases in calf	39	32.50
9	Flatulence is cured, if animal is given groundnut oil to drink	78	65.00
10	Tea and pepper are boiled in water and given to cattle suffering from cold	58	48.33
11	Paste of turmeric and butter heals ulcer in mouth of cattle	38	31.66
12	Boiled mixture of camphor and groundnut oil is applied on the yolk gall to relieve the pain	58	48.33
13	Datura fruits induce heat in cattle	85	70.83
14	Juice of banana stem prevents abortion in cattle	28	23.33
15	Seeds of chanothi and leaves of jamun is fed to animal for dropping placenta	64	53.33
16	Juice of leaves of panafad leaves help in healing of wound in cattle	105	87.50
17	Cattle should be walked on hot sand to cure FMD	50	41.66
18	Any boiled oil should be poured on feet of cattle suffering from FMD	41	34.16
19	Paste of lime should be applied on feet of cattle suffering from FMD	44	36.66
20	Dried flowers of mahuda and bark of date palm is given to cattle to cure gal sundha	61	50.83

Most probable reason for the highest knowledge about the application of juice of *panafad* leaves to heal the wound in cattle is its easy availability, ease of application and proven efficacy to heal the wound. As it was used since time immemorial most of the respondents knew it.

Majority of the cattle owners were aware about application of ghughry made from bajara grain to milch animal because of its importance in providing the supplement energy to the milch animal, which is highly essential at the time of calving.

Dhtura fruits induce heat in cattle was perceived as an age old practice by majority of the respondents. This finding is in line with the study of Yadav *et al.* (2015)[10].

In the same way mamejvo leaves cure diarrhoea is known by majority of the respondents, as it is an important medicinal herb available in local area and also useful in treatment of many other ailments.

Respondents had medium knowledge about practices like constipation in cattle can be cured by castor oil (62.50 per cent), cotton seed improves fat per cent in milk (58.33 per cent), colostrums should not be drawn until dropping of placenta (55.00 per cent), dried flowers of mahuda and bark of date palm is given to cattle to cure gal sundha (50.83 per cent) and boiled rice increases milk production in cattle (50.00 per cent). This finding was in conformity with the finding of Ponnysami *et al.* (2009) [4].

Less than half respondents were aware about the practices like tea and pepper boiled in water and given to animal suffering from cold (48.33 per cent), juice of nagod leaves is given to cattle suffering from fever (47.50 per cent), and cattle should be walked on hot sand to cure FMD (41.66 per cent). This finding is in confirmation with the study of Saha *et al.* (2010) [5].

The practice which was least known to the farmers was juice of banana stem prevent abortion in cattle (23.33 per cent). This might be due to the fact of unavailability of this material in the local area. Though, before a decade this area was enjoying a plenty of water and farmers were taking crops around the year, in which banana crop was one of them. So, this phenomenon might be passing from one generation to another.

Conclusion

It can be concluded that more than half (53.34 %) of the cattle, owners had medium level of knowledge about indigenous veterinary practices. Whereas, 23.33 per cent had low and 23.33 per cent had high extent of knowledge about indigenous veterinary practices.

Conflict of Interest: None declared

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