

Research Article

HEALTH CARE PRACTICES OF SHEEP IN JODHPUR DISTRICT OF RAJASTHAN

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ABSTRACT

A survey on health care practices of sheep in Jodhpur district of Rajasthan was conducted. The study indicated that the health care practices were not satisfactory. Only 36.11% farmers adopted the practice of vaccination. Majority of farmers followed deworming to control parasites but dusting was practiced by 34.44% sheep breeders only. It was also observed that some farmers used ethno veterinary treatment for their animals.

Keywords: *Health Care, Vaccination, Deworming, Sheep and Parasites*

INTRODUCTION

Sheep is an important species of livestock contributing to the livelihood of poor farmers in rural areas. The role of small ruminants is more pronounced in the arid and semi-arid zone of country, where the risk and uncertainty of crop failure is high due to low availability of water and frequent natural vagaries like drought (Chaturvedi *et al.*, 2008).

Rearing of small ruminants is preferred by farmers because (1) They are less expensive to purchase and require minimal input and maintenance costs; (2) they are less susceptible to stress due to adverse change in climatic conditions (drought); and (3) they have a relatively high reproduction rate and are easy to dispose off (Misra *et al.*, 2006).

Sheep are reared for mutton, wool, manure, milk etc. In the economics of sheep husbandry wool is now of secondary importance as mutton fetches maximum return to the sheep farmers (Mehta *et al.*, 1995). There are several constraints in sheep husbandry like reduction of grazing lands, diseases, climatic conditions, water shortage, low wool prices, little knowledge of medicines and treatment.

In which diseases are the second biggest constraints in sheep husbandry (Singh and Rollefson, 2005). Diseases cause much loss to sheep flock and deteriorate the quality and quantity of the products. To maintain the profitability, animals must be protected from various diseases.

Therefore, a survey was conducted to study the health care management practices followed by sheep rearers.

MATERIALS AND METHODS

The study was conducted in Jodhpur district of Rajasthan. A total of 180 farmers belonging to 15 villages of 3 tehsils were selected for the study. Information on health care management practices were collected through formal interview using a structured questionnaire personally. The data were tabulated and percentage was calculated.

RESULTS AND DISCUSSION

Diseases are the major source of economic loss to the sheep production. In intensive animal production system, diseases cause loss through mortality (Mathur and Dubey, 1994). About 15 to 20% of sheep die due to various diseases in India.

Grazing on wet areas, overfeeding, sudden change in climate and unhygienic condition of houses are the main reasons for diseases. Since sheep always live in flock immediate attention is required to check the spread of contagious diseases. In the study area, most common diseases were enterotoxaemia, sheep pox, foot and mouth disease (FMD), pneumonia, parasitic diseases etc. The most serious health problem of sheep was internal parasites.

Research Article

Table 1: Health care practices followed by sheep farmers

Particulars	Category	n(180)	Percentage (%)
Vaccination	Yes	65	36.11%
	No	115	63.89%
Deworming	Yes	163	90.55%
	No	17	9.45%
Deworming agent	Self	134	74.44%
	Veterinarian	46	25.56%
Control of ectoparasites	Yes	62	34.44%
	No	118	65.56%
Drugs used	Home made	22	12.22%
	Market/ Govt. aid	158	87.78%

The survey revealed that only 36.11% of farmers adopted the practice of vaccination. It was observed that the practice of vaccination was generally adopted at the time of migration of flock or if there was an outbreak in the nearby areas. Majority of farmers did not vaccinate the animals, although State Government Animal Health Department vaccinate free of cost/nominal cost, but breeders were generally not aware of it or showed no interest. These observation agrees well with the finding of Pali districts (Geerlings, 2001), whereas in Tonk district of Rajasthan, practice of vaccination was much higher than the present findings (Suresh *et al.*, 2008). Higher adoption rate for vaccination could be the impact of extension programme undertaken by CSWRI, Avikanagar.

Helminthes are important endoparasites of sheep. Several species of flat worms, tape worms and round worms are present in the digestive tract of sheep. Ticks and lice are important ecto parasites of small ruminants. Ticks do not cause skin disease but are responsible for transmission of a few protozoans, bacterial and viral infection (Miranpuri and Singh, 1978). In the present study most of the farmers (90.55%) followed deworming to control parasites. 100% deworming was reported in Rajasthan and Telangana region of Andhra Pradesh by Swarnkar and Singh (2010) and Rajanna *et al.*, (2013) respectively. Although regular deworming is a good practice but overuse of drug can cause resistance. The observation in the study that drenching was done 2-3 times in a year agrees with the finding of western Rajasthan (Porwal *et al.*, 2006). Whereas 3-4 times drenching was reported in Telangana region of Andhra Pradesh (Rajanna *et al.*, 2013). It was also observed that majority of farmers (74.44%) dewormed their flocks on their own while (25.56%) farmers took the advice of veterinarian for selection of drug. In our study it was found that dusting was practiced by 34.44% sheep breeders only. These findings were in accordance with earlier reports of Swarnkar and Singh (2010). It was also observed that 12.22% breeders used homemade medicines for the treatment of their animals. Practice of some indigenous traditional knowledge for treatment of sheep was also reported by Behura *et al.*, (2009). Sometimes these medicines cause serious problems due to higher dose and adverse effects.

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REFERENCES

Behura NC, Parida GS, Mishra SK and Dehuri PK (2009). Contribution of small ruminants to sustainable livelihood of villagers in koraput district of Orissa. *Indian Journal of Small Ruminants* **15**(1) 62-67.

Chaturvedi OH, Sankhyan SK, Mann JS and Karim SA (2008). Livestock holding pattern and feeding practices in semiarid eastern region of Rajasthan. *Indian Journal of Small Ruminants* **14**(2) 224-229.

Research Article

Geerlings E (2001). Sheep husbandary and ethnoveterinary knowledge of Raika sheep pastoralists, *MSc Thesis*, Wageningen University, Deventer, The Netherlands.

Mathur PB and Dubey SC (1994). Sheep and goat diseases. *Indian Council of Agricultural Research*, New Delhi.

Mehta SC, Vij PK, Nivsarkar AE and Sahai R (1995). Sheep husbandry practices in Sonadi and Malpura breeding tract. *Indian Journal of Small Ruminants* **1**(1) 1-7.

Miranpuri GS and Singh J (1978). Tick and mites from domestic animals in Assam, India and their possible role in transmission of diseases. *Indian Journal of Parasitology* **2** 11.

Misra AK, Subrahmanyam KV, Babu MVS, Reddy TY, Shivarudrappa B and Ramakrishna YS (2006). Improving the livelihood of landless and marginal farmers through sheep rearing in rainfed agro-ecosystem of India. *Livestock Research for Rural Development* **18** (5).

Porwal K, Karim SA, Sisodia SL and Singh VK (2006). Socio-economic survey of sheep farmers in western Rajasthan. *Indian Journal of Small Ruminants* **12**(1) 74-81.

Rajanna N, Mahendar M, Thammiraju D, Nagalashami D and Sreenivasarao D (2013). Housing and health care management practices adopted by sheep farmers in Telngana region of Andhra Pradesh. *Medwell Journals, Veterinary Research* **6**(3) 64-67.

Singh C and Rollefson IK (2005). Sheep pastoralism in Rajasthan: Still a viable livelihood? *Lokhit Pashu-Palak Sansthan*, Sadari, Pali, Rajasthan.

Suresh A, Gupta DC and Mann JS (2008). Farmers' management practices and economics of sheep farming in eastern semi-arid region of Rajasthan. *Indian Journal of Small Ruminants* **14**(2) 236-242.

Swarnkar CP and Singh D (2010). Questionnaire survey on sheep husbandry and worm management practices adopted by farmers in Rajasthan. *Indian Journal of Small Ruminants* **16**(2) 199-209.