Studies on existing health care management practices adopted by farmers in Surajpur district of Chhattisgarh

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ABSTRACT

The present study was undertaken purposively to ascertain the health care and scientific dairy husbandry practices adopted by the dairy owners in Surajpur district of Chhattisgarh. A total of 150 respondents were randomly selected from 10 villages of block and district Surajpur and interviewed using a pre-designed and pre-tested questionnaire. The study indicated that animal health care service either in the form of veterinary hospital, AI centre or dispensary were available in all the villages. It was observed that majority (96.7%) of respondents were consulting para veterinarians for the treatment of their sick animals. Most of the farmers (88.7%) regularly vaccinated their animals against foot and mouth disease and haemorrhagic septicaemia disease. However majority (90.0%) respondents did not follow the practice of isolating the sick animals. Special care of pregnant animal and practice of care of cow after calving were carried out by 76.7 and 83.3 per cent farmers respectively. In case of care and management practices of calves, feeding of colostrum was adopted by 91.3 per cent. Majority (94.0%) of the farmers allowed the cow to dry and clean the new born calf by licking. About half of the respondents carried out of practice of deworming and 36.7 per cent followed the practice of castration of their male calf.

Keywords: Health care; vaccination; deworming; treatment; calf; colostrums; castration

INTRODUCTION

Integration of livestock with agriculture is one of widely practiced farming practices in India (Dahiya et al 2019). Livestock farming plays crucial role in improving socio-economic status, nutritional security and cultural life of the people of Chhattisgarh. India stands 1st in cattle and buffalo population in the world with 192.49 million cattle and 109.85 million population respectively and Chhattisgarh ranks 9th in cattle population (99 million) in India (Anon 2019a). Cattle and buffalo population of Chhattisgarh is 99,839,54 and 11,74,722 respectively. The present milk production in India and Chhattisgarh is 187.75 million tonnes and 1,567 tonnes respectively while the per capita availability is 394 and 137 g/day/person (Anon 2019b). Patel et al (2019) observed that in order to promote their productivity, the basic health care management practices such as vaccination, deworming and timely treatment of animals are necessary. Sabapara et al (2010) reported that livestock management practices followed by farmers are of utmost importance to identify the strengths and weaknesses of the rearing systems. Singh et al (2015) were of the view that proper maintenance of the animal health, prevention of various diseases and clean milk production aid in better management and lead to improved income of dairy owners. Establishment of herd resistant to disease through vaccination, prevention of entry of new disease onto the farm through adopting biosafety measures, isolation of sick animals, adopting good care and management of pre- and post-partum practices,

scientific health care of calf etc are some of the ways to have an effective herd health management programme. The present study was carried out with the specific objective to document the information on the adopted scientific dairy management practices followed by tribal farmers of Surajpur district of Chhattisgarh.

METHODOLOGY

A field survey was undertaken at Surajpur district of north Chhattisgarh during January 2020 to mid-March 2020. Surajpur district possesses 6 blocks namely Prattappur, Surajpur, Odagi, Bhaiyathan, Ramanujnagar and Premnagar. The Surajpur district lies at 22°9 N latitude and 83°1 longitude in the northern part of Chhattisgarh state. This district is spread over an area of 2,787 sq km and has 547 villages with the total population of 789,047. From all 6 selected blocks 10 villages namely Jagatpur, Gjadharpur, Dwarikanagar, Kasalgiri, Maheshpur, Gangapur, Judwani, Kashkela, Shyamnagar and Veerpur of block and district Surajpur of Chhattisgarh were randomly selected. Fifteen dairy animal owners from each village were randomly selected which constituted a sample of 150 respondents. The selected dairy farmers were interviewed through pre-designed questionnaire and the desired information was collected regarding milking and health care management practices. Data were tabulated and analysed as per standard statistical tools to draw meaningful results.

RESULTS and DISCUSSION

The data regarding health care practices adopted in Surjpur district are presented in Table 1. The survey indicated that animal health care services either in the form of veterinary hospital, AI centre or dispensary were available in all the villages. Similar findings were revealed by Kumar (2015) and Tewari et al (2018). It was observed that majority (96.7%) of the respondents were consulting para veterinarians for the treatment of their sick animals and only 3.3 per cent consulted veterinary doctors. Similar findings were made by Sabapara et al (2010), Kumawat and Yadav (2012) and Kumar et al (2014) but the findings are in contrast to the findings of Kumar et al (2015) and Tewari et al (2018). Tewari et al (2018) reported that about half (51.00%) of the farmers acquired the services of a qualified veterinarian doctor for treatment of sick animals

Carelessness in vaccination results in occurrence of incidences of diseases especially in monsoon season followed by reduction in the production. Most of the farmers (88.7%) regularly vaccinated their animals against foot and mouth disease and haemorrhagic septicaemia disease while 11.3 per cent did not follow the vaccination practice. This may be due to alertness among farmers regarding the importance and benefits of regular vaccination. Present results are in agreement with the findings of Sabapara et al (2010) and Varaprasad et al (2013). However these are contrary to the findings of Sabapara et al (2015), Divekar et al (2016), Sabapara (2015), Sahu et al (2017), Patel et al (2018) and Tewari et al (2018).

Only 53.3 per cent respondents practiced to control endo- and ecto-parasites in their milch animals at regular interval whereas 46.7 per cent did not practice the deworming of their milch animals. The findings of this practice are indicative of alertness and willingness in farmers. The results are in agreement with the results of Akila and Senthilvel (2012), Divekar et al (2016), Sahu et al (2017), Patel et al (2018) and Tewari et al (2018) who reported that majority of farmers followed the deworming of their animals.

Only 10.0 per cent respondent farmers isolated sick animals and majority 90.0 per cent did not follow this practice. Similar findings were reported by Sahu and Dall (2003), Kumar (2015) and Tewari et al (2018). Treatment of sick animals was carried out by 90.0 per cent animal owners. Data regarding extra feeding of pregnant animals reveal that 40.0 per cent farmers offered extra feed while 60.0 per cent did not fed extra feed to their pregnant animals. Present findings are similar to the findings of Kumar (2015) and contrary to the findings of Tewari et al (2018).

Most of the farmer respondents (95.3%) did not have separate pan (maternity pan) facility for calving their animals. Special care to pregnant animal and practice of care of cow after calving were carried out by majority 76.7 and 83.3 per cent of the farmers respectively. Similar findings were reported by Malsawmdawngliana and Rahman (2016). Data regarding disposal of placenta reveal that majority (85.3%) of the respondents were disposing the placenta by burial in soil while the 14.7 per cent threw it along with the garbage. These results are in agreement with

Table 1. Health care and management practices (pre- and post-partum) followed by animal owners

Component	Status	Farmers (n= 150)	
		Frequency	Percentage
Availability of animal health care services	Available	150	100.0
	Not available	-	-
Preference of practitioner for veterinary services	Para vets	145	96.7
	Veterinary doctors	5	3.33
Vaccination against FMD & HS	Yes	135	88.7
	No	15	11.3
Practices to control endo- and ecto-parasites	Practiced	80	53.3
	Not practiced	70	46.7
Isolation of sick animals from healthy animals	Yes	15	10.0
	No	135	90.0
Treatment of sick animals	Practiced	135	90.0
	Not practiced	15	10.0
Extra feeding (concentrate) to pregnant animals	Yes	60	40.0
	No	90	60.0
Availability of maternity pan	Yes	7	4.7
	No	143	95.3
Special care of cow after calving	Yes	125	83.3
	No	25	16.7
Special care of pregnant cow	Yes	115	76.7
	No	35	23.3
Disposal of placenta	Buried in soil	128	85.3
	Thrown away	22	14.7

the findings of Yadav et al (2009), Kumar (2015) and Singh et al (2015).

The findings concerned with care and management practices of calves followed by the respondents are presented in Table 2. Colostrum (the first milk produced by cow after parturition) feeding is most important for better immunity and growth of calves. Feeding of colostrum was adopted by majority 91.3 per cent of the respondents. This result is in line with the finding of Jadav et al (2014), Joshi (2015), Malsawmdawngliana and Rahman (2016) and Patel et al (2018) whereas in contrast to the finding of Kumawat and Yadav (2012). Majority (94.0%) of the farmers allowed the cow to dry and clean the new born calf by licking and only 6.0 per cent using old rags. Similar finding was made by Singh et al (2015) and Tewari et al (2018). All the respondents adopted the practice of naval cord cutting of newly born calves whereas only 6.7 per cent used sterilized blades, seizers and antiseptic solution for naval cord separation. Similar observation was made by Singh et al (2015) and Tewari et al (2018). Only 3.3 per cent farmers adopted practice of disbudding of calves. About half of the respondents carried out of practice of deworming and 36.7 per cent followed the practice of castration to their male calf. The result is in contrast to the finding reported by Meena et al (2012). None of the farmers practiced weaning of calves.

CONCLUSION

In the study area majority of the dairy farmers were familiar with the veterinary services, vaccination, deworming, treatment of diseased animals and care of pregnant animals. Colostrum feeding was adopted by majority of the respondents. Other practices like cleaning of calf after birth and separation of naval cord practice was carried out by majority of the farmers. Majority of the dairy farmers were quite acquainted with the health care practices but there was still need and scope available for adoption of scientific management practices through training of farmers and awareness camps regarding health care and management (disbudding, castration, isolation of sick animal , health care and management etc) to enhance the scientific dairy husbandry practices by the dairy farmers of Surajpur area of Chhattisgarh.

Table 2. Health care and management practices of calf followed by animal owners

Component	Status	Farmers (n= 150)	
		Frequency	Percentage
Colostrum feeding to newly born calves	Practiced	137	91.3
	Not practiced	13	8.7
Naval cord cutting to newly born calves	Practiced	150	100.0
	Not practiced	-	-
Method of naval cord separation	Use of sterilized blade, seizers and antiseptic solution	10	6.7
	Using anything	140	93.3
Cleaning of calf after birth	Allowing the cow to lick the calf	141	94.0
	Using old rags	9	6.0
Disbudding of calf	Practiced	5	3.3
	Not practiced	145	96.7
Deworming of calf	Practiced	75	50.0
	Not practiced	75	50.0
Castration of male calf	Practiced	55	36.7
	Not practiced	95	63.3
Weaning of calf	Practiced	0	0.0
	Not practiced	150	100.0

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