

**WELFARE PRACTICES IN CALF REARING: A COMPARATIVE STUDY
IN MADHUBANI DISTRICT OF BIHAR**

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ABSTRACT

Welfare management of calf were framed to be of mixed aspect i.e. some practices were satisfactory and some were below the standards. Colostrum feeding was practiced to calf after release of placenta which might take longer time while recommendation is to provide colostrum within one hour of birth. Generally, there was no practice of applying disinfectant on naval cord. Further, castration was done by desi (local) method by majority of farmers which was very painful and unhygienic. The major constraints encountered by farmers to follow proper welfare practices were lack of money, lack of knowledge and veterinary doctors in vicinity. Perception of veterinary officers regarding above practices were poor to satisfactory.

KEY WORDS : Calf Rearing, Constraints, Management, Welfare

INTRODUCTION

Animal welfare is an important emerging issue that has drawn considerable scientific, political and public attention during the last few decades. Ouden et al. (1997) reported that in recent years animal welfare has become a major concern for consumers in most parts of the world. Concern about the way that animals are treated depends on many factors including socio-economic conditions, culture, religion and tradition prevailing in the society (Wilkins et al., 2005). Generally, welfare denotes physical and psychological state of animal. It is a broad term which includes many elements that contributes to quality of animal life. The future of a stock depends upon the care and management of the new born. Calves need the following criteria as to breathe in good air conditions; feed and drink, which includes suckling, manipulating food and ruminating; have normal gut development; rest and sleep; lack of fear; ability to explore and have social contact; minimal diseases; ability to groom; exercise; ability to thermoregulate; avoidance of harmful chemicals; and avoidance of pain (Broom et al., 2007). For proper welfare and good future stock all the calf needs should be addressed. Keeping the welfare aspect in mind present study was conducted to assess the extent of welfare practices followed by farmers in calf rearing.

MATERIALS AND METHODS

The study was carried out in purposely selected eight villages in Madhubani district of Bihar. Four villages from peri-urban areas (after 2 km. from the city and below 10 km.) and four from rural areas (beyond 10 km from the city) were selected for the study. Farmers having two or more large animals (cattle and buffalo) were selected as respondents. From each village 15 respondents were selected randomly to make the sample size of 120 respondents. All the veterinary officers (15) in the district were interviewed to know their perception regarding above welfare practices followed by farmers. The desired information was collected during the period from December 2007 to April 2008 by personal interview through semi-structured type of schedule. The collected data was analyzed through suitable statistical technique.

RESULTS AND DISCUSSION

The findings of the study indicated that all the farmers (100%), either from rural or peri-urban areas attended calving and took care of the calves after parturition which is also very important for dam

welfare point of view (Anonymous, 2002). The practice of cleaning the calf and hooves immediately after calving was practiced by 93.3 per cent of rural farmers and by 96.6 per cent of peri-urban farmers. Regarding the navel cord cutting, as it is recommended to cut it 2.5 cm from body and should be disinfected by application of antiseptic for 2-3 days (Anonymous, 2002). It was only 6.6 per cent of the farmers from rural area while, 13.3 per cent in peri-urban area were practiced ligation/cutting and disinfection of the navel cord. The low percentage of disinfection of navel cord was probably due to lack of knowledge among respondents. Similar finding was also reported by Sinha (2006). It was found that 85.2 per cent of farmers from rural and 80 per cent of farmers from peri-urban areas fed colostrum to their animals after releasing placenta which was similar to the observations of Dhiman et al. (1990). Sinha (2006) reported, the fear of diarrhoea subsequent to colostrum feeding in rural areas was the probable cause of not feeding the colostrum whereas, in peri-urban areas, a general unsympathetic attitude towards the calf resulted in not feeding colostrum. Generally, farmers of study areas left milk for the calf in one quarter. For healthy growth of calves, they should be provided sufficient milk during the first 3 months. In rural areas majority of the farmers (88.4%) fed milk to their calf till lactation ceased whereas in peri-urban this practice was followed by 75 per cent of livestock owners. The castration of animal is probably the most common and oldest of all surgical operation. In rural areas, more number of farmers (26.6%) practiced castration in comparison to peri-urban (13.3%), which was probably due to the requirement of good draught animals. There were three methods of castration found in study areas namely- Desi (cruel method), Surgical (open method) and with Burdizoo castrator (closed method). Majority of farmers (62.5%) follow desi method. Desi method of castration is done by either quack or some other person of the same society. This method is very painful and unhygienic. This method was adopted by farmers probably due to lack of availability of veterinary service and awareness among livestock owners about other scientific method of castration. Similar result was reported by Sinha (2006). Finding advocates that dairy farmers should be educated regarding significance of colostrum feeding to the calf within an hour of birth, which helps in building resistance against diseases. Apart from it, farmer should also be encouraged to practice cutting and disinfection of navel cord and scientific method of castration for proper calf welfare management practices.

Major constraints encountered while following welfare practices was lack of money as perceived by 100 per cent of respondents in rural areas while it was 93.3 per cent in peri-urban areas. Lack of information about welfare practices of animals was the second major constraint in both areas. Lack of availability of veterinary officer was another important constraint perceived by 86.6 per cent of respondents in rural and 68.3 per cent of respondents in peri-urban areas, respectively. Even in hospital, proper veterinary facility was not available for treatment of animals as it was perceived by 93.3 per cent of farmers in rural and 83.3 per cent in peri-urban areas. Dwivedi (2007) also reported similar findings.

Perception of majority of veterinarian (53.4%) regarding female calf rearing practices was good whereas for male calf rearing practices was poor (46.7%). For both, male and female calf rearing welfare practices, only 33.3 per cent of veterinary officers were satisfied. Regarding the practice of dehorning, care during pregnancy and castration more than 50 per cent of veterinary officers were satisfied. Eighty per cent of veterinary officers were satisfied with practices of care during parturition.

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