



ISSN (E): 2277- 7695

ISSN (P): 2349-8242

NAAS Rating: 5.23

TPI 2021; SP-10(5): 66-68

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www.thepharmajournal.com

Received: 18-02-2021

Accepted: 03-04-2021

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Milking management practices in buffalos of north costal Andhra Pradesh

C Gowtham Varma, A Teja, C Sai Praveen and Y Swathi

Abstract

A field survey was conducted with randomly selected milk producers having non-descript and graded murrha buffaloes through personal interview to study the Milking management practices followed by them in rural areas of Rambilli Mandal of Visakhapatnam district in Andhra Pradesh. The study revealed that most of the farmers followed the wet hand milking and few followed the machine milking but not regularly. Maximum number of farmers adopted knuckling method at the starting of milking operations followed by stripping at the end of milking process. No one performs the dipping of teats with antiseptic solution and straining of milk with muslin cloth. Cleaning of milk utensils was done with disinfectant by majority of the farmers. Before milking, majority of respondents washed their hands with water and 95% of the farmers' only cleaned the udder.

Keywords: Buffalo, knuckling, milking managemental practices, stripping method

Introduction

Andhra Pradesh is one of the major milk producing states of the country with annual production of 88.11 lakh metric tonnes of milk production and occupies 6th position in the country in terms of milk production with a bovine population of 20.2 million (19th livestock census, 2012). With buffalo production contributes major share as it is one of the major marketable surplus milk in the state. There is an immense scope to upgrade the quality of dairy production in the state of Andhra Pradesh through appropriate managemental interventions. With growing awareness among consumers are becoming more conscious about the quality and safety of the food they consume. Production of good quality milk based products need production of clean and hygienic raw milk. To achieve this objective, the factors contributing to hygienic conditions and good animal husbandry practices at village level needs to be assessed particularly Quality management awareness about milk at the producer level to enhance clean milk production and in turn leads to rural prosperity. Keeping these facts in mind, the present study was designed to gather information on milking management practices followed by the milk producers in rural areas of Rambilli Mandal of Visakhapatnam district in Andhra Pradesh.

Materials and Methods

A field survey was conducted in the Rambilli Mandal of Visakhapatnam district of Andhra Pradesh. A total of 60 buffalo farmers were identified and selected randomly from 6 random villages. Data pertaining to milking management practices followed by the buffalo milk producers was collected in a pre-tested interview schedule. The data were subjected to basic statistical analysis as per Snedecor and Cochran (1989).

Results and Discussion

It was observed that 95 percent of respondents followed hand milking and only few of the respondent having large herd size adopted machine method of milking. It might not be easier for lower herd size farmers to procure milking machines as machines are costlier. These results were in nominally in accordance with the findings of Bimal *et al.* (2013)^[1] who observed that 8.33% of farmers were using machine milking in the Kottayam district of Kerala state where the literacy rate is high and are against the findings of Patbandha *et al.* (2014)^[5]. Majority of the farmers adopted wet hand milking in rural (95.00%) areas of study. These findings were in agreement with Patbandha *et al.* (2014)^[5] and Sabapara *et al.* (2015). Though it is considered hygienic and scientific minimum percent (18.33%) of farmers in adopted full hand method of milking and but most of them followed the knuckling method (70.00%) as it is comfortable to

the milkers. These results indicated that farmers were less aware about the scientific method of milking. These findings were in agreement with Kishore *et al.* (2013) ^[4], Patbandha *et al.* (2014) ^[5], Rathore *et al.* (2010) ^[8] and Sabapara *et al.* (2015). However, Jacob and Anu (2013) ^[3] reported that 93% were practicing full hand method of milking in their study which indicated good knowledge of scientific milking. Most of the farmers used family labor in their buffalo farming. The findings of Jacob and Anu (2013) ^[3] and Patbandha *et al.* (2014) ^[5] were in agreement with the results of the present study as none of the farmers practiced the teat dip before or after the milking as they are unaware or less aware of clean milk production and reduced microbial transmission to animals. The current results are in accordance with results of Patbandha *et al.*, (2014) ^[5] in aspects of cleaning of milk man hands but Rathore *et al.*, (2010) ^[8], Sabapara *et al.*, (2015) and Shitole *et al.*, (2009) ^[10] reported that 100% of farmers clean the hands before the milking. It was observed that most of the farmers (78.44%) clean the udder only before the milking. These findings are in similar to the findings of Gupta *et al.* (2008) ^[2], Rathore *et al.* (2010) ^[8] and Shitole *et al.*, (2009) ^[10]. It was observed that most of the farmers (75%) use water only to clean the utensils and remaining farmers

used disinfectants (3.33%) and ash (21.67%). The results were nearly in agreement with Jacob and Anu (2013) ^[3]. These findings were contrary to the findings of Rathore *et al.* (2010) ^[8] who reported that majority (56.50%) of the cattle keepers used sand and clean water for cleaning of milking utensils followed by ash and water (40.75%) and cleaning agent and water (2.75%). It was observed that majority of the farmers clean the shed only once (85%) that to during morning time and these results are in accordance with the Gupta *et al.* (2008) ^[2].

Conclusion

Majority of farmers practiced wet hand milking and none of the farmer practiced machine milking. Maximum number of farmers adopted knuckling method of milking at starting of milking operations followed by stripping at the end of milking. None of the respondents practiced dipping of teats in antiseptic solution. Cleaning of milk utensils and washing of hands of milk man was done with only water was practiced by the majority of milk producers in the study area. Most of the farmers were cleaning only udder of the animal. More than 50 percent of the farmers were cleaning the animal sheds once a day.

Table 1: Milking management practices adopted by the buffalo milk producers in Rambilli Mandal of Visakhapatnam district

Particulars	Frequency	Percent
Method of milking		
Hand method	57	95.00
Machine method	3	05.00
Type of milking		
Wet hand milking	57	95.00
Dry hand milking	3	05.00
Method of hand milking		
Stripping	11	18.33
Full hand	7	11.67
Knuckling	42	70.00
Labor for milking		
Hired labor	10	83.33
Family labor	50	16.67
Teat dips		
Fallowed	0	00.00
Not followed	60	100.00
Straining of milk		
Practiced	7	11.67
Not practicing	53	88.33
Washing of milk man hand		
Washed	55	91.67
Not washed	5	08.33
Cleaning of animal before milking		
Entire animal	5	08.33
Only back area	8	13.33
Udder area only	47	78.34
Cleaning of milk utensils		
Only water	45	75.00
Disinfectant used	2	03.33
Ash used	13	21.67
Cleaning of animal shed		
Once in a day	51	85.00
Twice in a day	9	15.00
Calf suckling pattern		
One teat	32	53.33
Two teat	00	00.00
Three teat	00	00.00
Four teat	28	46.67

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