**Effect of different degree of suckling stimulus in buffalo on behavioral expression of dam and calf in tropics**

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**ABSTRACT**

In-order to access the change in behavioural expression of buffalo dam and calf, on different degree of suckling stimulus, twelve dam-calf pair were selected after colostrum feeding and divide into two uniform groups based on calf body weight. In group I (G-I), all calves were allowed to suckle from their respective dams giving ample suckling time as per their body weight, twice a day during the milking hours upto 90 days of age. In group-II (G-II), calves were reared artificially by nipple feeding of whole milk till 90 days of age, allowing calves only to partially suckle for letting down the milk. All the experimental animals were observed during the milking time and 15 min. pre and post to milking operation on both behavioural expressions of dams and calves. Besides milk let down time,milking temperament score for dam was scored 1 to 4 based on degree of reluctance to milking. Further, Suckling or drinking instinct score for calves were scored 1 to 3 based on time taken to start milk feeding. Our results showed no significant difference in both the groups for letting down stimulus (G-I: 135.11±3.35 sec.; G-II: 134.08±3.26 sec.) in dams. Significantly (p<0.05) more number of dams in G-II showed kicking and bellowing behaviour compared to G-I dams. Further, the average milking temperament score was higher (P<0.05) in G-II (1.93±0.20) than G-I (1.26±0.13) dams. Similar trend of higher bellowing and inter-sucking were observed in G-II calves than G-I calves. We also noticed a higher (P<0.05) average suckling instinct score in G-II (2.21±0.21) than G-I (1.43±0.14) calves. As per our findings, partial suckling impaired the social bonding resulting in expression of abnormal behavior during milking and warrants for judicious ample suckling to calf for dam-calf performance in tropics.

**Key words:** behaviour, buffalo dam, calf, suckling stimulus, milk let down