
Assessment of Pain in Friesian Dairy Cows Reared in Two Upcountry NLDB Farms as Relief from Pain an Indicator of Welfare

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Dairy cows are attended to painful situations either under natural circumstances or management practices. However, pain assessment was not much focused for research. Objective of the study was to get an understanding of occurrence, persistency and associated behavioural changes of and relief from pain induced under natural and on farm management practices. Study was conducted in Bopaththalawa and Manikpalama NLDB farms. Randomize Complete Block Design was adopted. Blocking was done against cow category; calves, heifers, dry cows (DC) and milking cows (MC). Animals those attended pain were purposively selected and identified the causes of pain. In Bopaththalawa farm, calves, heifers, DC and MC (n=171) were assessed for natural pain while for hoof trimming; HT (n= 22) and all for milking. In Manikpalama, calves, heifers, DC and MC (n=228) were experienced natural pain where HT (n=34), dehorning (n=7) and all were assessed for milking. Normal behaviours and behaviours upon induction of pain were assessed by following scan sampling method with direct visual scans at 15 minutes' intervals for 2 hrs. Behaviors observed were; standing, resting, freezing, walking, lying, eating, animal interaction, body shaking, drinking, urination, fecal discharge, running, rumination, kicking, licking own body, licking others, sniffing, lameness and restless. Farm averages for normal behaviors indicated that first, second and third highest behaviors for standing (37%), lying (17%), running (15%) by MC and standing (25%), resting (15%) and walking (12%) by calves respectively. Milking and HT showed significant ($p<0.05$) increase of pain related behaviours. Monitoring changed behaviours in relation to artificial insemination and vaccination were difficult as persistent time was comparatively short. Persistency of pain related to diarrhea in calves was comparatively longer. It is concluded that the calves and milking cows are more frequently attended pain compared to heifers and dry cows. Further research are suggested to investigate different precautions to relief these animals from pain to ensure welfare.

Keywords: Friesian cows, NLDB, Pain, Upcountry farms, Welbeing