

## **Incidence and risk factors of per parturient conditions in smallholder dairy cattle herds in Kikuyu Division of Kiambu District, Kenya**

Abuom, T.O.; Njenga, M.J.; Wabacha, J.K.; Tsuma, V.T.; Gitau, G.K.

Date: 2012

### **Abstract**

A study was carried out on 117 smallholder dairy cattle herds in Kikuyu Division of Kiambu District Kenya between April 2004 and December 2004 to determine the incidence of periparturient conditions (downer cow syndrome, dystocia, milk fever and retained placenta among others) in smallholder dairy cattle herds and the associated factors (plausible predictor variables; age, parity and management systems among others) from a total of 206 dairy cattle. Data were collected during farm visits by observation, interviews using semi-structured questionnaires and clinical examination of animals. The most common conditions encountered were downer cow syndrome (12.6 %), dystocia (17.0 %), mastitis (9.5 %), metritis (7.3 %) milk fever (13 %) and retained afterbirth (26.6 %). The overall cumulative incidence of the periparturient conditions was 67 %. Animals with milk fever were 5 times more likely to develop retained placenta ( $P=0.04$ ) while those with a history of having developed retained placenta in a previous parturition were at 2 times more likely to develop retained afterbirth ( $P=0.05$ ). Cows with milk fever were 9 times more likely to develop owner cow syndrome ( $P < 0.001$ ) while those that were not given supplemental feed in the last trimester were 4.8 times more likely to develop downer cow syndrome ( $P=0.007$ ). Animals that had dystocia were 3.9 times more likely to develop metritis ( $P=0.02$ ) and while those with retained placenta were 5.2 times more likely to develop metritis ( $P=0.03$ ). In addition, animals with dystocia were 10.55 times more likely to develop postpartum haemorrhage ( $P=0.01$ ) and 58.9 times more likely to develop injuries to the birth canal ( $P < 0.01$ ). From this study it can be concluded that downer cow syndrome, dystocia, mastitis, metritis, milk fever and retained placenta were the most common per parturient conditions in smallholder dairy cattle herds in Kikuyu division of Kiambu district.