

Abstract

Livestock keeping is the main source of livelihood for most pastoral households found in the arid and semi-arid lands (ASAL) of East Africa which are characterized by extreme climatic features of drought, flooding, fragile eco-systems and poverty levels approaching 65%. *Peste de petits ruminants* (PPR) is a contagious viral disease of small stock that causes high mortality (50%) and morbidity rates (80%) especially in naive populations. It continues to spread throughout East Africa despite widespread vaccination and is headed in the South African direction. Small stock comprise the current account for pastoral livelihoods which is depleted and worse the disease negatively affects the local and international trade. Understanding why the disease spreads despite vaccination is therefore very important. In a participatory disease survey of Turkana district, Kenya which has had PPR vaccinations since 2008, five active PPR cases with typical signs of diarrhoea, and oculo-nasal discharges in four month kids was observed. One kid was sacrificed and post mortem followed by histopathology performed. Discharges from these animals were inoculated into two four month old kids. On day six there was fever and coughing, while discharges appeared on day nine which cleared by day 13. Effective vaccination against PPR would require coverage above 60% in susceptible populations. Such coverage is sometimes difficult to achieve in ASALs which also neighbor countries with endemic PPR. There is need to develop accurate diagnostic tools and enhance awareness on clinical signs of PPR among the population.