

Abstract:

Infectious bursal disease (IBD) is ranked as the second most important disease of indigenous chicken, responsible for marked economic losses in Kenya, after Newcastle disease. However, infected turkeys and ducks do not show overt IBD clinical signs and they may act as a source of IBD infection to naive chicken kept in such mixed flocks. Such evaluation has not been undertaken in mixed free range birds. A cross-sectional study was therefore undertaken to determine whether non-vaccinated indigenous village chicken, ducks and turkeys in Embu County, Kenya were naturally exposed to IBD virus (IBDV). A total of 97 free range indigenous chickens, 32 ducks and 13 turkeys blood samples were collected for serum. Indirect Enzyme Linked Immunosorbent Assay (ELISA) technique was used to detect the IBDV antibodies. The result showed IBDV Sero-positivity in 64.9% of the chicken, 6.25% of ducks and 92.3% of turkeys. The presence of IBDV antibodies in non-vaccinated free range indigenous village chicken and healthy ducks and turkeys suggests an ongoing IBD virus circulation and maintenance in the area. There is therefore, a need for routine surveillance and vaccination against IBDV in indigenous village chicken, ducks and turkeys to prevent spread of the disease. More research is needed to find out the role of turkeys in the spread of IBDV.