Trend of Foot and Mouth Disease and Adopted Control Measures in Limpopo Province during the Period 2014 to 2020

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Abstract: Background: Foot and mouth disease is a real challenge in South Africa. The disease is a serious threat to the viability of livestock farming initiatives and affects local and international livestock trade. In Limpopo Province, the Kruger National Park and other game reserves are home to the African buffalo (Syncerus caffer), a notorious reservoir of the picornavirus, which causes foot and mouth disease. Out of the virus's seven (7) distinct serotypes, Southern African Territories (SAT) 1, 2, and 3 are commonly endemic in South Africa. The broad objective of the study was to establish the trend of foot and mouth disease in Limpopo Province over a seven-year period (2014-2020), as well as the adoption and comprehensive reporting of the measures that are taken to contain disease outbreaks in the study area. Methods: The study used secondary data from the World Organization for Animal Health (WOAH) on reported cases of foot and mouth disease in South Africa. Descriptive analysis (frequencies and percentages) and Analysis of variance (ANOVA) were used to present and analyse the data. Result: The year 2020 had the highest prevalence of foot and mouth disease (3.72%), while 2016 had the lowest prevalence (0.05%). Serotype SAT 2 was the most endemic, followed by SAT 1. Findings from the study demonstrated the seasonal nature of foot and mouth disease in the study area, as most disease cases were reported in the summer seasons. Slaughter of diseased and atrisk animals was the only documented disease control strategy, and information was missing for some of the years. Conclusion: The study identified serious underreporting of the adopted control strategies following disease outbreaks. Adoption of comprehensive disease control strategies coupled with thorough reporting can help to reduce outbreaks of foot and mouth disease and prevent losses to the livestock farming sector of South Africa and Limpopo Province in particular.

Keywords: livestock farming, African buffalo, prevalence, serotype, slaughter

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