

**FOOT AND MOUTH DISEASE
IN NIGERIA: THE CURRENT
STATUS AND CONTROL
EFFORTS**

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INTRODUCTION

- Foot and mouth disease (FMD) is a highly contagious viral disease of both domestic and wild cloven hoofed animals
- It is characterized by vesicles in the foot and mouth of affected animals
- Mortality is usually low as the disease affects livestock productivity
- It militates against international trade of animals and animal products participation

INTRODUCTION CONTD'

- It is caused by a single stranded RNA virus with 7 serotypes
- The cumulative incidence of FMD serotypes showed that six of the seven serotypes of FMD (O, A, C, SAT-1, SAT-2, SAT-3) have occurred in Africa
- While Asia still contends with four sero-types (O, A, C, Asia-1) and South America with three (O, A, C)
- Periodically there have been incursions of SAT-1 and SAT-2 from Africa into the Middle East

INTRODUCTION CONTD'

- The first Nigerian reported and typed outbreak was in the early '70s amongst herds from the North-East
- Since then serotypes O, A, SAT1 and SAT2 have been circulating in Nigeria in the last 54 years (1955-2009) from subsequent reports
- In spite of the annual disease burden, sero-typing and molecular studies for FMD infections are inadequate due to poor understanding of the epidemiology of FMD
- Hence, occurrence and distribution pattern of the known serotypes still remains unexploited and poorly understood.

FMDV STATUS IN NIGERIA

Serotype	Year of occurrence
Untyped	1920
O	1955, 1958, 1963, 1975, 2007, 2009
A	1961 - 1962, 1964 - 1968, 1970 - 1972, 1974 - 1976, 1979, 2009
C	(NIL)
Asia 1	(NIL)
SAT1	1963-1964, 1968, 1970, 1972, 1976, 1979-1981
SAT2	1963, 1973, 1975, 1981-1982, 2007-2008
SAT3	(NIL)

Source: FMD molecular genotyping http://www.wrlfmd.org/fmd_genotyping/africa/nig.htm

CONTROL EFFORTS

- In the field the Pastoralists attempt to control the disease using a concept referred to as “Dashe”
- This gave promising results but were not sustainable due to absence of cross-immunity between serotypes
- Clinical practice amongst Veterinarians involves the treatment of secondary bacterial infections associated with open FMD sores using parenteral antibiotics

CONTROL EFFORTS CONTD'

- Also success stories of clinical bovine FMD outbreak management in institutional farms have been observed
- This was done using 1% formalin or 10% Sodium bicarbonate solutions as debriding agent for the oral and foot vesicles
- Also mythological management practice adopted by some pastoralists involves the use of herbal concoctions

CHALLENGES

- In times past, a lack of political will on the part of the Nigerian government to entrench control of FMD as a national priority
- Due to high financial requirement created the lingering and devastating impact on cattle production business
- The none reporting of disease outbreaks due to inefficient disease reporting system in the Nigeria and this has made planning for prevention and control of the disease very difficult

CHALLENGES CONTD'

- The lack of biosecurity as a result of the nomadic /semi intensive management styles practiced by the Fulani herdsmen
- The fragmented structure of land holdings in Nigeria favoring cross infection due cattle movements and sharing of other common service providers

CHALLENGES CONTD'

- Unsuccessful advocated quarantine procedure at all borders, due to un-controlled cattle movement and trading practice
- The methods were saddled with such difficulties as inadequate Veterinary staff for policing of interstate and National borders

RECENT ACHIEVEMENTS

- In 2011, Federal Government of Nigeria (FGN) appropriated and allocated funds under the competitive agricultural research grants (CARGS) project
- It aimed at establishing a base-line for an indigenous vaccine production

RECENT ACHIEVEMENTS CONTD'

- Suspicious FMD samples from outbreaks and market survey have been collected in Kwara state - North central Nigeria
- These samples have been screened using serology while typing of positive sera and molecular studies is ongoing
- To establish update FMD serotypes in Nigerian and those trade cattle from neighboring West African partners entering the country through international borders with Benin Republic.

CONCLUSION

- Foot and mouth disease is still a serious and endemic problem of trade and production cattle in Nigeria that requires urgent attention
- In order to salvage the cattle population and enhance the financial capabilities and livelihood of the pastoralist and cattle trading partners of West African sub region.

**THANK YOU FOR
LISTENING**