

Abstract title: Outbreak of Lassa Fever among Internally Displaced Persons in Madinatu Camp, Jere Local Government Area, Borno State, March 2017

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Background: Lassa fever is an infectious and virulent viral hemorrhagic fever caused by Lassa fever virus. It is a zoonotic disease transmitted by rodents in the *mastomys natalensis* species. In Nigeria, between weeks 1 and 17 (2017), 242 suspected Lassa fever cases with 58 laboratory confirmed cases and 46 deaths (CFR, 19.01%) from 50 Local Government Areas(LGA) in 20 States were reported. We conducted this outbreak investigation to establish the existence of the outbreak, characterize the cases in person, place and time, identify possible exposure factors and provide technical support to the state in investigation and control of the outbreak.

Methods: We obtained detailed clinical history of the index case and established contacts all of which we followed up using the standard viral hemorrhagic fever contact monitoring form. We collected blood sample from case. Overall, 54 contacts were followed up for 21 days with their temperature monitored using a temperature thermometer. We conducted an environmental assessment in Zabarmari village and Madinatu IDP camp.

Results: Index case is a 32-year-old housewife and internally displaced person on a rural community in Zabarmari village. Her symptoms began with fever and bleeding per vaginum and later developed bleeding from the nose, mouth and urethra. There was history suggestive of exposure to rodents and poor environmental hygiene. Houses in the village are made of mud. Villagers practice open defecation and waste disposal. We collected blood samples and sent it to the laboratory. Blood tested positive for Lassa fever by Real time PCR. Full blood count showed PCV 21%, WBC 11.4×10^9 /L, platelets 121×10^9 /L and differentials showing Neutrophils 53% & Lymphocytes 40%

Conclusion: In conclusion, there was an outbreak of Lassa fever in Madinatu internally displaced persons camp in Zambari Village. Borno State Ministry of Environment in collaboration with the Ministry of Health conducted public health education on prevention of Lassa fever and instituted good sanitary measures.

Key Words: Lassa fever, Outbreak, Borno State, Nigeria