

Knowledge and behaviour regarding Lassa fever among residents in Taraba State, Nigeria

Lukman Ismaila¹, Muhammad Sani Usman^{1,&}, Ali Wada Aliyu¹, Yetunde Abioye¹, Kamji Jan⁴, Munzali Shamsu Zubair², John Oghenetega Okotete³, Fatima Saleh¹

¹Nigeria Centre for Disease Control and Prevention, Abuja, Nigeria, ²Centre for Epidemic Preparedness Innovation, Abuja, Nigeria, ³Nigeria Field Epidemiology Training Program, Abuja, Nigeria, ⁴Federal Ministry of Environment, Abuja, Nigeria

&Corresponding author: Muhammad Sani Usman, Nigeria Centre for Disease Control and Prevention, Abuja, Nigeria, **Email:** muhammad.usman@ncdc.gov.ng

Citation: Lukman Ismaila et al., Knowledge and behaviour regarding Lassa fever among residents in Taraba State, Nigeria. Journal of Interventional Epidemiology and Public Health. 2025;8(Conf Proc 5):00294.

DOI: <https://doi.org/10.37432/JIEPH-CONFPRO5-00294>

LINK: <https://afenet-journal.org/knowledge-and-behaviour-regarding-lassa-fever-among-residents-in-taraba-state-nigeria/>

Received: 24/03/2025 **Accepted:** 09/07/2025 **Published:** 12/08/2025

Keywords: Knowledge, Behaviour, Lassa fever, Taraba, Nigeria

This is part of the proceedings of the ECOWAS 2nd Lassa fever International Conference in Abidjan, September 8 – 11, 2025

© Lukman Ismaila et al. Journal of Interventional Epidemiology and Public Health. This is an Open Access article distributed under the terms of the Creative Commons Attribution International 4.0 License (<https://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Introduction

Lassa fever (LF) is a zoonotic viral haemorrhagic disease caused by *Arenavirus*. It is primarily transmitted from rodent to human through contact with food or household items contaminated by the urine or faeces of an infected *Mastomys natalensis*, a Natal multimammate peridomestic rat. Human-to-human transmission also occurs via exposure to bodily fluids such as blood, particularly in healthcare settings. The outbreak of LF is recurrent in Nigeria, with Taraba being one of the top five (5) most affected states. This study assessed the knowledge and behaviours towards LF as well as associated factors that predispose the population to LF in Taraba State, Nigeria.

Methods

The study used a cross-sectional mixed methods approach to collect both quantitative and qualitative data from respondents aged fifteen (15) years and above across Local Government Areas (LGAs) with a history of LF outbreaks in Taraba state. A sample size of 420, calculated using Yamane's formula, was used in this study. Percentages, charts, and tables were used to present descriptive statistics. In contrast, inferential statistics, including chi-square and logistic regression, were used to identify the association

between sociodemographic variables and study outcomes.

Results

The study found that 74% of the respondents had adequate knowledge, and 51% had safe behaviours regarding Lf. All sociodemographic factors tested in this study were found to be associated with the knowledge and behaviours regarding Lf to varying degrees; occupation ($p < 0.001$) and area of residence [OR: 2.45 (1.60 – 3.80)] were significantly associated with knowledge and behaviour, respectively.

Conclusion

These results highlight the need for context-specific interventions to enhance health education and community engagement efforts, addressing occupational and geographic disparities in disease knowledge and preventive behaviours to reduce the risk of Lassa fever transmission in Taraba State.