

Measuring knowledge, attitudes, and practices in Lassa fever prevention: A cross-sectional survey from Kailahun and Kenema Districts, Sierra Leone

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Introduction

Lassa fever (LF) remains a significant public health threat in West Africa, particularly in Sierra Leone's endemic districts. Despite its high morbidity and mortality, alarming and persistent gaps persist in community knowledge, attitudes, and preventive practices (KAP). This study assessed KAP toward LF prevention in high-risk areas of Kailahun and Kenema districts, Sierra Leone, to inform targeted interventions.

Methods

A cross-sectional survey of 1,033 adults was conducted using multistage sampling across urban and rural communities. Data were collected via structured questionnaires, assessing LF awareness, symptom recognition, transmission routes, and preventive behaviours. Descriptive statistics, chi-square tests, and logistic regression were used for analysis (SPSS v28). Ethical approval was obtained from the Sierra Leone Ministry of Health.

Results

Most respondents (90.9%) were aware of LF, primarily through health workers (48.9%). However, knowledge gaps existed: only 23.2% recognized bleeding as a symptom, and 3.1% erroneously cited mosquito transmission. While 67.1% perceived LF as severe, 40.3% reported

patient stigmatization. Preventive practices were suboptimal: just 12.8% practiced proper food storage, and 29% rarely washed hands. Regression analysis revealed higher knowledge among educated individuals (AOR=17.36, $p=0.006$) and males (AOR=1.46), positive attitudes linked to education (AOR=2.23, $p < 0.001$), while females exhibited poorer practices than health workers (AOR=0.72).

Conclusion

Despite high awareness, critical knowledge gaps and inadequate preventive practices persist, exacerbated by socioeconomic and gender disparities. Community-based education, improved sanitation infrastructure, and stigma reduction campaigns are urgently needed. Findings align with regional studies in Nigeria and Liberia, underscoring the necessity for standardized, context-specific LF interventions across West Africa.