

Retaining participants in a prospective epidemiological study involving blood draws through sustained engagement: Lessons from ENABLE 1.0 incidence study on Lassa fever infection in Abakaliki, South-East Nigeria

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Introduction

Participant retention is crucial in longitudinal epidemiological studies involving repeated blood draws. The Enable 1.0 Incidence Study on Lassa Fever at Alex Ekwueme Federal University Teaching Hospital Abakaliki explored community engagement strategies to sustain retention in a high-risk, Lassa-endemic region of Nigeria. Despite initial misconceptions surrounding blood use, the study achieved 90.5% retention rate over 24 months. This study evaluated the effectiveness of community engagement strategies in retaining participants in a prospective study involving repeated blood draws.

Methods

Enable 1.0 was a multisite, prospective cohort study (2020-2023) that tracked Lassa virus seroconversion among 1,000 healthy participants from 10 communities in three Local Government Areas of Ebonyi State, Nigeria. Community Liaison Officers, village guides, and study teams sustained participants engagement through biweekly home visits and sensitization meetings. Data on participant reception, retention threats, and

engagement strategies were collected from 713 participants using a semi-structured questionnaire via Google Forms and analyzed with IBM-SPSS Statistics Version 25.

Results

91.4% of participants reported on were retained, while 8.6% did not complete the study. Reported retention threats (14.3%) included inadequate compensation (7.3%), family pressure (6.7%), and fear of blood rituals (5.2%). Non-completion reasons included relocation (3.2%), refusal (2.1%), family opposition (0.8%), and death (0.8%). Effective retention strategies included engaging village guides (61.6%), financial support (41.1%), family members' encouragement (21.3%), and engaging traditional leaders (21.2%). Despite rumours of blood rituals, sustained community engagement, education, sensitization on the study's objectives, along with consistent reassurance from study team, helped dispel misinformation. As a result, 86.7% of participants remained warmly receptive and cooperative throughout the study.

Conclusion

Enable 1.0 demonstrated that culturally sensitive community engagement and proactive rumour management are effective for maintaining high retention in longitudinal studies. These findings provide valuable guidance for future studies aiming to mitigate sociocultural barriers and sustain community and participant.