



Improving Infection Prevention and Control during a Lassa fever outbreak: Experience from a Military Hospital in Nigeria



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Background

- Lassa fever remains a serious public health threat in Nigeria, with annual outbreaks.
- Affects healthcare workers due to inadequate Infection Prevention and Control (IPC) measures.
- In 2024, Nigeria reported: 806 confirmed cases, 150 deaths, 32 infections among healthcare workers
- A Military Hospital outbreak resulted in 4 deaths (3 healthcare workers)
- A multidisciplinary emergency team from Irrua Specialist Teaching Hospital (ISTH) was deployed in response to the confirmed outbreak
- **Objectives**
 - To assess and strengthen IPC facilities in the isolation ward of the Military hospital
 - To support clinical case management at the Isolation ward of the Military hospital

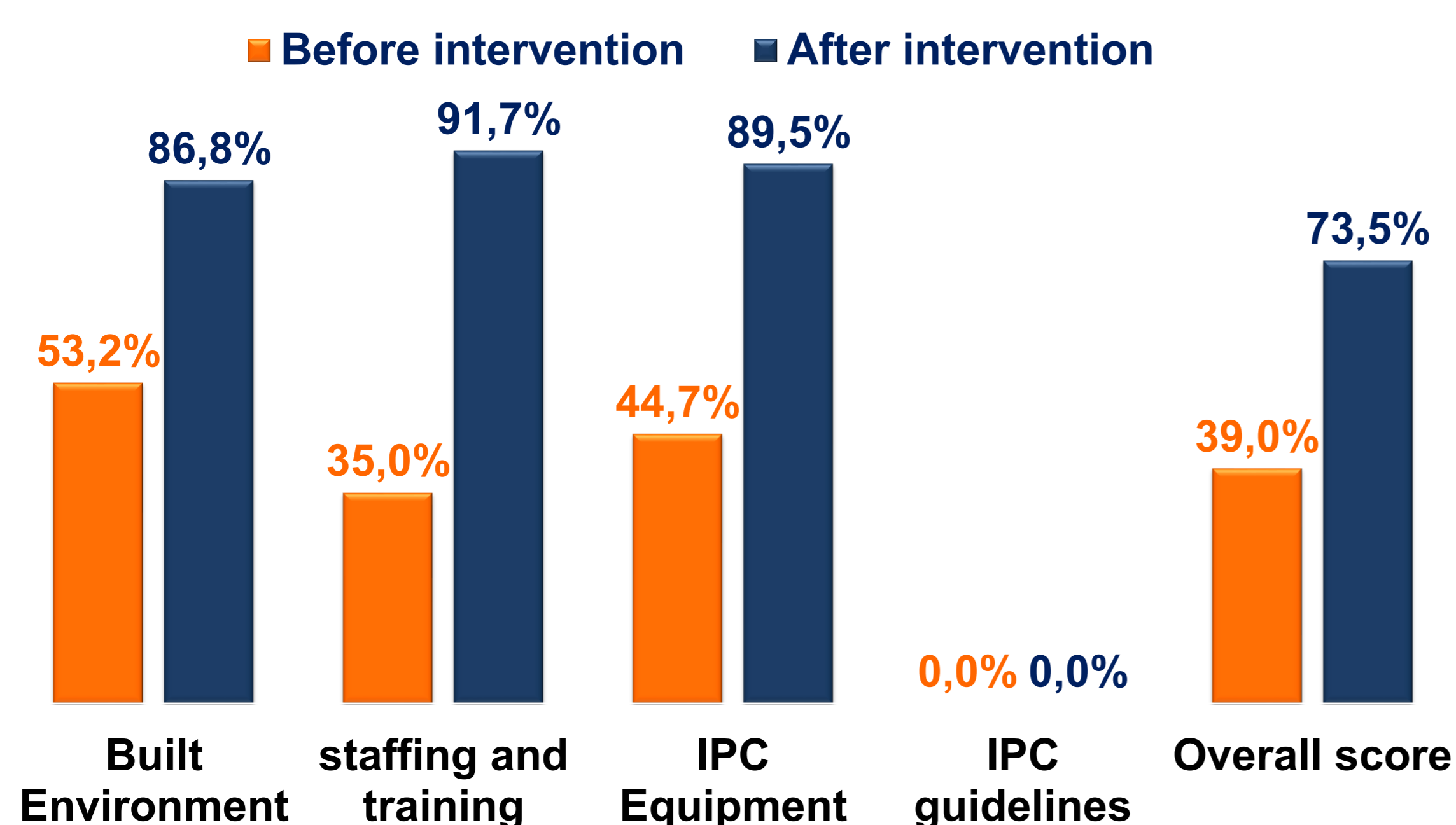
Methods

- Targeted intervention from 27th February to 29th March 2024
- IPC Assessment: A checklist adapted from World Health Organization IPC Assessment Framework (2017) and Nigeria Centre for Disease Control and Prevention Guidelines on Infection Prevention and Control for Viral Haemorrhagic Fevers (2023) was used to assess:
 - Built environment and infrastructure
 - Staffing and training
 - IPC Equipment and materials
 - IPC guidelines/SOPs for the isolation ward
- IPC assessment conducted before and after IPC interventions
- Structural modifications of the ward to reduce transmission risks and facilitate effective barrier nursing
- Real-time Lassa PCR testing by ISTH mobile laboratory, enabling prompt confirmation and management of suspected cases
- Isolation and treatment of confirmed cases in the structurally modified ward
- Comprehensive training sessions on IPC measures including hand hygiene, appropriate use of personal protective equipment, environmental disinfection, waste disposal and chlorine preparation.

Results

IPC Assessment:

- The initial overall assessment score was 39.0%, improved to 73.5% after key interventions
- The built environment improved from 53.2% to 86.8% after structural intervention while staffing and training improved from 35.0% to 91.7%

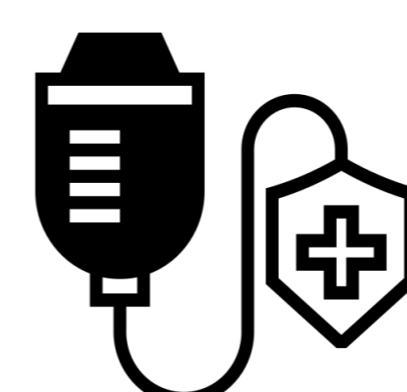


IPC ASSESSMENT SCORES



key improvements:

- Demarcation of clean and contaminated zones
- Creation of separate entry and exit points and separate entry points for staff and patients
- Establishment of donning and doffing areas
- Installation of hand hygiene stations at strategic points



Case management:

- Three confirmed cases were admitted, treated with intravenous ribavirin and supportive care and discharged without further deaths
- No additional health worker infection occurred



Challenges:

- Staff shortages, limited guidelines and limited resources

Conclusions and Recommendations

The targeted IPC interventions and clinical support by ISTH effectively curbed the Lassa fever outbreak at the Military hospital preventing further healthcare worker infections. Sustained investment in IPC infrastructure and personnel training is essential in strengthening preparedness and ensuring effective responses to future outbreaks.

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