



Methodological Evaluation of District Hospitals Systems in Nigeria: Randomized Field Trial for Risk Reduction Assessment

Usman Musa^{1,2}, Abubakar Adam^{1,3}

¹ University of Benin

² Bayero University Kano

³ Department of Internal Medicine, Bayero University Kano

Published: 23 August 2010 | Received: 05 May 2010 | Accepted: 12 July 2010

Correspondence: umusa@outlook.com

DOI: [10.5281/zenodo.18904976](https://doi.org/10.5281/zenodo.18904976)

Author notes

Usman Musa is affiliated with University of Benin and focuses on Medicine research in Africa.
Abubakar Adam is affiliated with University of Benin and focuses on Medicine research in Africa.

Abstract

Nigeria's district hospitals face significant challenges in risk reduction due to inadequate resources and staffing. A randomized field trial was conducted across three districts in Nigeria. Hospitals were randomly assigned to either receive immediate intervention or serve as controls. Data collection included pre- and post-intervention assessments of operational metrics such as patient wait times, staff turnover rates, and equipment utilization. Immediate intervention led to a statistically significant reduction ($p < 0.05$) in average patient wait time by 34% compared to control hospitals. The randomized field trial demonstrated that targeted interventions can effectively mitigate risks associated with understaffing and resource scarcity, leading to improved operational efficiency in district hospitals. District health authorities are encouraged to implement similar strategies based on the findings of this study. Nigeria, District Hospitals, Intervention Study, Risk Reduction Treatment effect was estimated with $text \{ logit \} (\pi) = beta 0 + \beta^{-1} p X_i$, and uncertainty reported using confidence-interval based inference.

Keywords:

Nigerian

Geographic

Terms:

Methodological

Randomization

Evaluation

Comparative

Qualitative

Quantitative

Terms:

Study

Research

Analysis

Theoretical

Risk

Public

Healthcare Systems Reform

Terms:

Assessment

Health

ABSTRACT-ONLY PUBLICATION

This is an abstract-only publication. The complete research paper with full methodology, results, discussion, and references is available upon request.

✉ **REQUEST FULL PAPER**

Email: info@parj.africa

Request your copy of the full paper today!

SUBMIT YOUR RESEARCH

Are you a researcher in Africa? We welcome your submissions!

Join our community of African scholars and share your groundbreaking work.

Submit at: app.parj.africa



Scan to visit app.parj.africa

Open Access Scholarship from PARJ

Empowering African Research | Advancing Global Knowledge