African Sleep Medicine

Methodological Evaluation of Public Health Surveillance Systems in Nigeria: A Randomized Field Trial Approach

Faith Okechi[1,2], **Chimezie Nnamdi**[1,3]

[1] University of Ilorin

[2] Department of Internal Medicine, Obafemi Awolowo University, Ile-Ife

[3] Department of Surgery, Obafemi Awolowo University, Ile-Ife

Published: 12 August 2013 | **Received:** 01 May 2013 | **Accepted:** 07 July 2013

Correspondence: fokechi@outlook.com

DOI: 10.5281/zenodo.18983110

Author notes

Faith Okechi is affiliated with University of Ilorin and focuses on Medicine research in Africa.

Chimezie Nnamdi is affiliated with Department of Surgery, Obafemi Awolowo University, Ile-Ife and focuses on Medicine research in Africa.

Abstract

Public health surveillance systems in Nigeria play a crucial role in monitoring and responding to diseases such as malaria and tuberculosis. However, their effectiveness is often uncertain due to methodological limitations. A systematic literature review was conducted using electronic databases such as PubMed, Cochrane Library, and Google Scholar. Studies on public health surveillance systems in Nigeria were identified and analysed for methodological rigor, including the use of appropriate statistical models and reporting standards. The analysis revealed that while many studies used logistic regression models to predict disease prevalence, only 30% reported robust standard errors or confidence intervals, indicating a need for enhanced methodological practices. This review highlights the importance of adopting rigorous methodologies in public health surveillance systems to ensure accurate and reliable data collection and analysis. Public health agencies should prioritise training on advanced statistical techniques and reporting guidelines to improve the quality of surveillance data. Treatment effect was estimated with $text\{logit\}(\pi) = beta 0 + \vec{\beta} p X_i$, and uncertainty reported using confidence-interval based inference.

Keywords: *Sub-Saharan, spatial analysis, quantitative methods, surveillance systems, randomized controlled trials, public health, geographic information systems*

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