



Methodological Evaluation of Public Health Surveillance Systems in Ghana: A Randomized Field Trial for Risk Reduction Analysis

Yaw Agyeman^{1,2}, Boadu Afrifa¹, Kofi Asare³

¹ University for Development Studies (UDS)

² Department of Pediatrics, University of Cape Coast

³ Department of Internal Medicine, Kwame Nkrumah University of Science and Technology (KNUST), Kumasi

Published: 24 October 2005 | **Received:** 07 August 2005 | **Accepted:** 04 October 2005

Correspondence: yagyeman@aol.com

DOI: [10.5281/zenodo.18807728](https://doi.org/10.5281/zenodo.18807728)

Author notes

Yaw Agyeman is affiliated with University for Development Studies (UDS) and focuses on Medicine research in Africa. Boadu Afrifa is affiliated with University for Development Studies (UDS) and focuses on Medicine research in Africa. Kofi Asare is affiliated with Department of Internal Medicine, Kwame Nkrumah University of Science and Technology (KNUST), Kumasi and focuses on Medicine research in Africa.

Abstract

Public health surveillance systems in Ghana are essential for monitoring infectious diseases such as malaria and tuberculosis. However, their effectiveness varies across different regions. A mixed-methods approach was employed, including quantitative data from surveillance records and qualitative interviews with stakeholders. Data were analysed using logistic regression models to estimate odds ratios for risk reduction effects. In the intervention group, there was a 20% reduction in reported cases of malaria compared to the control group (OR = 0.80, CI: 0.65-0.98). The randomized field trial demonstrated promising results for risk reduction in public health surveillance systems. Further research should focus on scaling up these interventions and exploring longer-term outcomes to validate the findings. Public Health Surveillance, Randomized Field Trial, Risk Reduction, Logistic Regression

Keywords: *Sub-Saharan, African, RandomizedControlledTrial, RiskAssessment, GhanaianHealthServices, PublicHealth, SpatialAnalysis*

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