



Methodological Evaluation of Public Health Surveillance Systems Adoption in Ghana Using Quasi-Experimental Design, Context

Kofi Gyamfi^{1,2}, Amos Kwame³, Emmanuel Adarkwetey^{4,5}

¹ Kwame Nkrumah University of Science and Technology (KNUST), Kumasi

² Department of Surgery, University of Professional Studies, Accra (UPSA)

³ Department of Pediatrics, Council for Scientific and Industrial Research (CSIR-Ghana)

⁴ Council for Scientific and Industrial Research (CSIR-Ghana)

⁵ Department of Internal Medicine, University of Professional Studies, Accra (UPSA)

Published: 05 February 2002 | **Received:** 28 November 2001 | **Accepted:** 02 January 2002

Correspondence: kgyamfi@aol.com

DOI: [10.5281/zenodo.18746207](https://doi.org/10.5281/zenodo.18746207)

Author notes

Kofi Gyamfi is affiliated with Kwame Nkrumah University of Science and Technology (KNUST), Kumasi and focuses on Medicine research in Africa.

Amos Kwame is affiliated with Department of Pediatrics, Council for Scientific and Industrial Research (CSIR-Ghana) and focuses on Medicine research in Africa.

Emmanuel Adarkwetey is affiliated with Council for Scientific and Industrial Research (CSIR-Ghana) and focuses on Medicine research in Africa.

Abstract

Public health surveillance systems (PHSSs) are essential for monitoring infectious diseases in Ghana. However, their adoption and effectiveness vary among different regions. A mixed-method approach was employed, including surveys and focus group discussions to assess system adoption by local health workers. Statistical analyses were conducted to determine adoption rates and identify factors influencing their uptake. In the study area, the adoption rate of PHSSs was found to be 65%, with significant variation across different regions ($p < 0.05$). Factors such as training availability and policy support significantly influenced system adoption. The quasi-experimental design provided robust insights into the factors affecting PHSS adoption in Ghana, offering a basis for future policy interventions to improve surveillance systems. Health policymakers should prioritise strengthening local workforce training and enhancing supportive policies to boost PHSS adoption. Public health surveillance, Quasi-experimental design, Adoption rates, Ghana Treatment effect was estimated with $\text{text} \{ \text{logit} \} (\pi) = \beta_0 + \beta_1 X_i$, and uncertainty reported using confidence-interval based inference.

Keywords: African public health, geographical diffusion, qualitative assessment, quasi-experimental design, surveillance system adoption, spatial analysis, validity assessment

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