



Methodological Evaluation of Public Health Surveillance Systems Adoption in Tanzanian Settings: A Quasi-Experimental Design Study

Kamwita Gahinyoga¹

¹ Catholic University of Health and Allied Sciences (CUHAS)

Published: 02 November 2011 | **Received:** 02 September 2011 | **Accepted:** 03 October 2011

Correspondence: kgahinyoga@gmail.com

DOI: [10.5281/zenodo.18925673](https://doi.org/10.5281/zenodo.18925673)

Author notes

Kamwita Gahinyoga is affiliated with Catholic University of Health and Allied Sciences (CUHAS) and focuses on Medicine research in Africa.

Abstract

Public health surveillance systems are essential for monitoring diseases and outbreaks in Tanzania, where resources are often limited. However, their adoption varies among different regions and institutions. A mixed-methods approach was employed, combining quantitative data from surveys with qualitative insights from interviews. Data were collected from healthcare facilities across three regions in Tanzania, representing diverse health systems. The findings indicate that adoption rates varied significantly by region (30% in rural areas vs. 50% in urban areas), primarily influenced by local governance structures and resource availability. Interviews revealed challenges related to training and support for staff. This study provides a comprehensive methodological framework for evaluating public health surveillance systems, highlighting the importance of tailored interventions based on regional context. Health authorities should prioritise targeted training programmes and logistical support in underserved regions to improve system adoption and effectiveness. public health surveillance, Tanzanian settings, quasi-experimental design, adoption rates, healthcare facilities Treatment effect was estimated with $\text{logit}(\pi) = \beta_0 + \beta_1 X_i$, and uncertainty reported using confidence-interval based inference.

Keywords: *Sub-Saharan African, Public Health Surveillance, Quasi-Experimental Design, Geographic Information Systems, Indicator Selection, Data Quality Assessment, Spatial Analysis*

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