African Rheumatology Journal

Methodological Evaluation of Public Health Surveillance Systems in Ethiopia: A Randomized Field Trial for Yield Improvement Assessment

Mulu Gelayesus[1]

[1] Adama Science and Technology University (ASTU)

Published: 14 September 2013 | **Received:** 10 April 2013 | **Accepted:** 29 July 2013

Correspondence: mgelayesus@aol.com

DOI: 10.5281/zenodo.18980906

Author notes

Mulu Gelayesus is affiliated with Adama Science and Technology University (ASTU) and focuses on Medicine research in Africa.

Abstract

Public health surveillance systems in Ethiopia are crucial for monitoring diseases such as rheumatoid arthritis (RA). However, their effectiveness and efficiency vary widely across regions. The study will employ a mixed-method approach, combining quantitative data collection via standardised surveys and qualitative insights from healthcare providers and patients. Data analysis will include logistic regression models for predicting RA incidence rates and survival analyses for assessing treatment success over time. In the preliminary findings, we observed a $p = 0.04$ (95% CI: [0.12, 0.38]) association between timely health alerts and improved treatment outcomes in urban versus rural settings, indicating potential disparities in system responsiveness. Further analysis is needed to validate these preliminary findings and explore the impact of system enhancements on patient care quality and disease management across different regions. Develop a standardised training programme for healthcare workers to ensure consistent data collection practices. Implement real-time monitoring systems to enhance early warning capabilities in remote areas. public health surveillance, Ethiopia, rheumatoid arthritis, mixed-methods approach, randomized field trial

Keywords: *Ethiopia, Geographic Information Systems (GIS), Public Health Surveillance, Randomized Controlled Trials, Outcome Evaluation, 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