Methodological Evaluation of Public Health Surveillance Systems in Rwanda: A Randomized Field Trial on Adoption Rates

Gashabarye Nkubamoto[1], Umugiribiza Bizimana[1], Kizito Mukabe[1], Ingabiro Byaruhanga[1,2]

[1] African Leadership University (ALU), Kigali

[2] Rwanda Environment Management Authority (REMA)

Author notes

Gashabarye Nkubamoto is affiliated with African Leadership University (ALU), Kigali and focuses on Medicine research in Africa.

Umugiribiza Bizimana is affiliated with African Leadership University (ALU), Kigali and focuses on Medicine research in Africa.

Kizito Mukabe is affiliated with African Leadership University (ALU), Kigali and focuses on Medicine research in Africa.

Ingabiro Byaruhanga is affiliated with Rwanda Environment Management Authority (REMA) and focuses on Medicine research in Africa.

Abstract

Public health surveillance systems in Rwanda are crucial for monitoring disease prevalence and implementing targeted interventions. A randomized field trial design was employed to assess the impact of incentives (financial, informational) on system adoption. Data collection included surveys and observational studies over two years. In rural areas, 65% of healthcare facilities adopted the surveillance system within six months compared to 40% in urban settings, with a 95% confidence interval for this difference being (32%, 87%). The intervention strategies showed significant regional disparities in adoption rates. Future studies should consider tailoring incentives based on specific community needs and health system infrastructure. Public Health Surveillance, Adoption Rates, Incentives, Randomized Field Trial, Rwanda Treatment effect was estimated with $text\{logit\}(\pi)=beta\,0+\beta^{\neg}\,p\,X_i$, and uncertainty reported using confidence-interval based inference.

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