



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

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## Abstract

Public health surveillance systems are critical for monitoring infectious diseases in Kenya. However, their effectiveness varies across different regions and settings. A stratified random sampling approach was employed to select study sites within three geographical zones. A logistic regression model with robust standard errors was used to analyse data collected from 150 healthcare facilities across the country. In one selected zone, adoption rates were found to be significantly higher among facilities that received additional training (OR = 2.45, CI: 1.38-4.37), suggesting a need for targeted educational interventions. The randomized field trial demonstrated the feasibility of assessing public health surveillance system adoption in Kenya and identified key factors influencing implementation. Facilities with lower initial adoption rates should be prioritised for additional training to improve surveillance capabilities.

**Keywords:** Kenya, Surveillance Systems, Methodology, Randomization, Field Trials, Evaluation, Public Health

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