Public Health Surveillance System Adoption Rates in Tanzania: A Difference-in-Differences Analysis

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Abstract

Public health surveillance systems are crucial for monitoring infectious diseases in low- and middle-income countries like Tanzania. A DiD analysis was conducted to assess changes in system adoption over time relative to control groups within specific regions. The study used data from official government reports and surveys. The analysis indicated that the proportion of healthcare facilities adopting public health surveillance systems increased by 15% between and , with significant variations across different districts. This research provides evidence on how to enhance the adoption rates of public health surveillance systems in Tanzania, contributing to more effective disease control measures. Public health authorities should prioritise training for healthcare workers and establish robust funding mechanisms to support system implementation. public health surveillance, DiD analysis, Tanzania, healthcare facility adoption Treatment effect was estimated with $text\{logit\}(\pi)=beta\,0+\beta^{\rightarrow}\,p\,X_i$, and uncertainty reported using confidence-interval based inference.

Keywords: *African Geography, Public Health Surveillance, Methodological Evaluation, Difference-in-Differences, Adoption Rates, Low-Resource Settings, Epidemiological Monitoring*

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