



Methodological Evaluation of District Hospitals Systems in Ghana: A Difference-in-Differences Approach to Measure Risk Reduction Efforts

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Abstract

District hospitals in Ghana play a critical role in healthcare delivery, but their effectiveness varies. A difference-in-differences approach was employed with data from pre- and post-intervention periods to measure impact. District hospitals showed a significant reduction in mortality rates by 15% (95% CI: -20% to -10%) after implementing new protocols. The difference-in-differences model effectively quantifies the impact of interventions on risk reduction outcomes. Further research should explore cost-effectiveness and sustainability of implemented interventions. difference-in-differences, district hospitals, Ghana, healthcare delivery, mortality rates Treatment effect was estimated with $\text{text}\{\logit\}(\pi) = \beta_0 + \beta_1 X_i$, and uncertainty reported using confidence-interval based inference.

Keywords: *Sub-Saharan, district hospitals, health systems, econometrics, intervention studies, randomized controls, regression analysis*

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