



Methodological Evaluation of District Hospitals Systems in Ethiopia Using Difference-in-Differences Approach to Measure Yield Improvement

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Abstract

District hospitals in Ethiopia play a crucial role in healthcare delivery but face challenges related to resource allocation and service efficiency. The study employed the DiD model to analyse data from Ethiopian district hospitals. The analysis compared pre- and post-intervention outcomes, accounting for potential confounders such as baseline differences and time trends. A significant increase in patient throughput was observed ($p < 0.05$), indicating improved service delivery efficiency. The DiD model demonstrated its effectiveness in measuring yield improvements in district hospitals, providing a robust framework for future policy development. Further research should explore the scalability of this method across different regions and interventions. district hospital systems, Ethiopia, difference-in-differences (DiD), healthcare efficiency, yield improvement Treatment effect was estimated with $\text{text}\{\text{logit}\}(\pi) = \beta_0 + \beta_1 X_i$, and uncertainty reported using confidence-interval based inference.

Keywords: *Ethiopia, District Hospitals, Resource Allocation, Service Efficiency, Difference-in-Differences, Methodological Evaluation, Healthcare Delivery*

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