African Thoracic Surgery

Methodological Evaluation of District Hospitals Systems in Tanzania: A Randomized Field Trial for Measuring Cost-Effectiveness

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Abstract

The healthcare landscape in Tanzania is characterized by a significant disparity between district hospitals and more advanced tertiary care facilities. A mixed-methods approach was employed, including a stratified random sample of 50 district hospitals across Tanzania. Data collection involved quantitative metrics for resource allocation and qualitative assessments for patient satisfaction and staff morale. Statistical analysis utilised regression models to predict cost-effectiveness based on hospital size and geographical location. The findings indicate that smaller district hospitals with fewer resources are more susceptible to inefficiencies, particularly in the procurement of essential medical supplies (mean supply delay: 2 weeks). While initial results suggest potential for targeted interventions to enhance efficiency, further research is required to validate these preliminary observations. District health authorities should prioritise training programmes for staff and implement standardised purchasing protocols to mitigate delays in essential medical supplies. Treatment effect was estimated with $text\{logit\}(\pi) = beta 0 + \beta^{\rightarrow} p X_i$, and uncertainty reported using confidence-interval based inference.

Keywords: *Tanzania, District Hospitals, Resource Allocation, Cost-Benefit Analysis, Randomization, Data Collection Techniques, Outcome Evaluation*

ABSTRACT-ONLY PUBLICATION

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