



Methodological Evaluation of Community Health Centres Systems in Nigeria: A Randomized Field Trial on Cost-Effectiveness Evaluations

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Abstract

Community health centres in Nigeria face challenges in delivering effective healthcare services, necessitating a methodological evaluation to enhance their systems and ensure cost-effectiveness. A randomized controlled trial design was employed to evaluate the performance of selected community health centres. Data collection included patient satisfaction surveys and cost records over a one-year period. Statistical analyses were conducted using linear regression models to estimate cost-effectiveness ratios (CER) with robust standard errors. The study found that patients in randomly assigned control groups reported significantly higher levels of dissatisfaction compared to those in the intervention group, indicating potential areas for improvement in service delivery. While preliminary findings suggest room for enhancement in patient satisfaction and cost efficiency, further analysis is required to fully determine the effectiveness of community health centre systems across different regions in Nigeria. Future research should focus on implementing evidence-based interventions to improve service quality and explore potential public-private partnerships to enhance resource allocation and operational sustainability. Treatment effect was estimated with $\text{logit}(\pi) = \beta_0 + \beta_1 X_i$, and uncertainty reported using confidence-interval based inference.

Keywords: *Sub-Saharan, African, BiasAnalysis, Randomization, RiskAssessment, HealthInequalities, ResourceAllocation*

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