



Evaluating the Impact of Community Health Centre Systems on Clinical Outcomes in Tanzania

A Quasi-Experimental Assessment

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ABSTRACT

Background: Community health centres are a cornerstone of primary healthcare delivery in sub-Saharan Africa, yet robust evidence on their systemic impact on clinical outcomes remains limited. Existing evaluations often lack rigorous counterfactual designs, hindering causal inference.

Purpose and objectives: This study aimed to quantify the causal effect of a structured community health centre system on key clinical outcomes in a rural setting, using a quasi-experimental approach to address selection bias.

Keywords: *sub-Saharan Africa, primary healthcare, health systems evaluation, quasi-experimental design, clinical outcomes, Tanzania*

Article Highlights

- Difference-in-differences design quantifies causal impact of phased health centre rollout.
- Significant 14.3 percentage point increase in facility-based deliveries attributed to the system.
- No statistically significant effects found for postnatal care or childhood vaccination completeness.
- Study demonstrates utility of quasi-experimental methods for health systems evaluation in sub-Saharan Africa.

Methodological Note

Analysis employed a difference-in-differences design with centre and time fixed effects, using cluster-robust standard errors to estimate the average treatment effect on 120 centres.

This study provides novel causal evidence on which specific clinical outcomes are affected by community health systems.

ABSTRACT-ONLY PUBLICATION

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