



Methodological Assessment of Community Health Centre Systems in Rwanda Using Quasi-Experimental Design for Clinical Outcome Measurement

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Abstract

Community health centers in Rwanda are crucial for delivering healthcare services to underserved populations. However, their effectiveness and efficiency need methodological assessment. A mixed-methods approach was employed, including quantitative data analysis for clinical outcome measurement and qualitative interviews to gather insights into service delivery processes. A multivariate regression model was used to analyse the impact of various factors on clinical outcomes. The quasi-experimental design revealed that community health centers in Rwanda achieved an average improvement rate of 15% in patient satisfaction scores compared to baseline, with significant differences observed between urban and rural settings ($p < 0.05$). This study provides evidence for the effectiveness of community health centre systems in improving clinical outcomes in Rwanda. Enhanced training programmes should be implemented for healthcare providers at all levels to improve service quality, and further research is recommended to explore long-term sustainability impacts. Community Health Centers, Quasi-Experimental Design, Clinical Outcomes, Rwanda 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: Rwandan, Quasi-experimental, Evaluation, Community, Health, System, Measurement

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