Reliability Assessment of Community Health Centre Systems in Rwanda: A Quasi-Experimental Study

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Abstract

The reliability of community health centre systems in Rwanda has been a subject of interest due to their role in providing essential healthcare services across diverse geographical regions. A mixed-method approach was employed, combining data from pre- and post-intervention surveys with in-depth interviews. The reliability assessment utilised a logistic regression model to predict CHC service delivery outcomes based on baseline characteristics. CHCs showed an increase of 15% in patient attendance rates post-intervention, though variability across different regions was noted. The quasi-experimental design revealed significant improvements in CHC reliability but highlighted the need for tailored interventions to address regional disparities. Further research should focus on implementing targeted strategies to enhance service delivery and reduce variability. Community Health Centres, Reliability Assessment, Quasi-Experimental Design, Rwanda Treatment effect was estimated with $text\{logit\}(\pi) = beta\,0 + \beta^{-}\,p\,X_i$, and uncertainty reported using confidence-interval based inference.

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