



Multilevel Regression Analysis of Community Health Centre Systems in Nigeria: Methodological Evaluation and Risk Reduction Studies

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Abstract

Community health centres in Nigeria face challenges in service delivery that affect patient outcomes. A mixed-method approach was employed, including quantitative data from a national survey and qualitative insights from healthcare providers. Multilevel logistic regression models were used to analyse the impact of various factors on service delivery effectiveness. The multilevel analysis revealed that investment in infrastructure ($p = 0.02$) significantly improved patient flow and service efficiency, while training programmes for staff reduced errors by about 15% compared to baseline levels. This study provides robust evidence on the effectiveness of targeted interventions in improving community health centre operations. Further investment should be directed towards infrastructure development and continuous staff training to sustain improvements observed.

Keywords: Nigerian, Multilevel, Regression, Evaluation, Community, Health, Centres

ABSTRACT-ONLY PUBLICATION

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