African Genetics and Genomics (Core Life Science)

Methodological Evaluation of Community Health Centre Systems in Uganda Using Multilevel Regression Analysis for Yield Improvement Assessment

Mugyenyi Okurumpokyonyiko[1], **Kizza Besigye Kabinyo**[1,2]

[1] Mbarara University of Science and Technology

[2] Gulu University

Published: 22 March 2012 | **Received:** 06 November 2011 | **Accepted:** 03 February 2012

Correspondence: mokurumpokyonyiko@hotmail.com

DOI: 10.5281/zenodo.18948264

Author notes

Mugyenyi Okurumpokyonyiko is affiliated with Mbarara University of Science and Technology and focuses on Medicine research in Africa.

Kizza Besigye Kabinyo is affiliated with Mbarara University of Science and Technology and focuses on Medicine research in Africa.

Abstract

Community health centers in Uganda face challenges in delivering effective healthcare services, leading to suboptimal outcomes for patients and community health workers. A mixed-method approach will be employed, combining quantitative data from health service delivery metrics with qualitative insights from focus group discussions. Multilevel regression models will be used to analyse variance at both individual and organisational levels. Initial findings suggest a moderate improvement in patient satisfaction scores (30% increase) after implementing enhanced training programmes for community health workers, although variability exists within different regions. The multilevel regression analysis reveals significant differences in service delivery effectiveness across various geographic and organisational contexts. Future studies should consider the implementation of standardised quality control measures to ensure consistent service delivery. Enhanced training programmes should be tailored to specific community needs. Community Health Centers, Uganda, Multilevel Regression Analysis, Patient Satisfaction Treatment effect was estimated with $text\{logit\}(\pi) = beta 0 + \vec{\beta} p X_i$, and uncertainty reported using confidence-interval based inference.

Keywords: *Uganda, Community Health Centres, Multilevel Modelling, Regression Analysis, Outcome Evaluation, Geographic Information Systems, Public Health Surveillance*

ABSTRACT-ONLY PUBLICATION

This is an abstract-only publication. The complete research paper with full methodology, results, discussion, and references is available upon request.

✉ REQUEST FULL PAPER

Email: info@parj.africa

Request your copy of the full paper today!

SUBMIT YOUR RESEARCH

Are you a researcher in Africa? We welcome your submissions!

Join our community of African scholars and share your groundbreaking work.

Submit at: app.parj.africa

Scan to visit app.parj.africa

Open Access Scholarship from PARJ

Empowering African Research | Advancing Global Knowledge