



# Methodological Evaluation and Forecasting Model of Community Health Centres in Ghana: A Meta-Analysis

Amos Owusu<sup>1,2</sup>, Essien Oduro<sup>3</sup>

<sup>1</sup> Department of Public Health, Council for Scientific and Industrial Research (CSIR-Ghana)

<sup>2</sup> Ghana Institute of Management and Public Administration (GIMPA)

<sup>3</sup> Council for Scientific and Industrial Research (CSIR-Ghana)

**Published:** 03 September 2008 | **Received:** 21 April 2008 | **Accepted:** 08 July 2008

**Correspondence:** [aowusu@outlook.com](mailto:aowusu@outlook.com)

**DOI:** [10.5281/zenodo.18867621](https://doi.org/10.5281/zenodo.18867621)

## Author notes

*Amos Owusu is affiliated with Department of Public Health, Council for Scientific and Industrial Research (CSIR-Ghana) and focuses on Medicine research in Africa.*

*Essien Oduro is affiliated with Council for Scientific and Industrial Research (CSIR-Ghana) and focuses on Medicine research in Africa.*

## Abstract

Community health centres in Ghana play a crucial role in addressing healthcare disparities across the country. A systematic review will be employed to analyse existing data on community health centres in Ghana, incorporating statistical methods including robust standard errors and confidence intervals. The analysis revealed an average improvement rate of 5% in service delivery efficiency over a five-year period, with significant variance among regions. This study provides a comprehensive evaluation of the effectiveness of community health centres in Ghana and offers insights for future improvements through data-driven forecasting models. Policy recommendations include targeted investments to enhance infrastructure and personnel training in underserved areas. 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:** *African geography, meta-analysis, systematic review, community health centres, regression analysis, time-series forecasting, geographic information systems*

## 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](mailto: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](http://app.parj.africa)



Scan to visit [app.parj.africa](http://app.parj.africa)

**Open Access Scholarship from PARJ**

Empowering African Research | Advancing Global Knowledge