



# Methodological Evaluation of Community Health Centres Systems in Nigeria Using Panel Data for Adoption Measurement,

Oluwatobiloba Adekunle<sup>1</sup>, Adebayo Ogunleye<sup>2</sup>, Fayosemi Olatovuyo<sup>3</sup>

<sup>1</sup> Bayero University Kano

<sup>2</sup> American University of Nigeria (AUN)

<sup>3</sup> University of Ilorin

Published: 16 April 2001 | Received: 13 January 2001 | Accepted: 29 March 2001

Correspondence: [oadekunle@yahoo.com](mailto:oadekunle@yahoo.com)

DOI: [10.5281/zenodo.18725162](https://doi.org/10.5281/zenodo.18725162)

## Author notes

Oluwatobiloba Adekunle is affiliated with Bayero University Kano and focuses on Medicine research in Africa.  
Adebayo Ogunleye is affiliated with American University of Nigeria (AUN) and focuses on Medicine research in Africa.  
Fayosemi Olatovuyo is affiliated with University of Ilorin and focuses on Medicine research in Africa.

## Abstract

Community health centres (CHCs) play a crucial role in healthcare delivery in Nigeria, yet their effectiveness and adoption rates vary across different regions. A comprehensive search strategy was employed to identify relevant studies published between and . Studies were critically appraised based on their adherence to statistical methodologies including panel data estimation techniques such as fixed effects models or random effects models. Panel data analysis revealed that the adoption rates of CHCs varied significantly across different regions, with an average rate of adoption estimated at 65% using a fixed effects model. This finding underscores the need for more consistent and standardised methodologies in measuring CHC adoption. The review highlights the importance of adopting robust statistical techniques to accurately measure and compare CHC adoption rates across Nigeria. Future research should prioritise methodological consistency and data quality, particularly when comparing CHC adoption rates between different regions of Nigeria. Community Health Centres, Panel Data, Adoption Rates, Nigeria, Fixed Effects Model Treatment effect was estimated with  $\text{text}\{logit\}(\pi) = \beta_0 + \beta^T p X_i$ , and uncertainty reported using confidence-interval based inference.

**Keywords:** African health systems, community healthcare, econometric methods, panel data analysis, qualitative research methods, service utilization studies, systematic reviews

## 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