



Methodological Evaluation of Community Health Centre Systems in Senegal Using Multilevel Regression Analysis for Yield Improvement Studies

Amadou Diop¹, Ibrahima Ndiaye², Sabrina Sall^{3,4}

¹ Department of Surgery, Institut Pasteur de Dakar

² Department of Public Health, Université Alioune Diop de Bambey (UADB)

³ Department of Internal Medicine, Institut Pasteur de Dakar

⁴ Université Alioune Diop de Bambey (UADB)

Published: 06 March 2005 | **Received:** 06 December 2004 | **Accepted:** 06 February 2005

Correspondence: adiop@yahoo.com

DOI: [10.5281/zenodo.18806990](https://doi.org/10.5281/zenodo.18806990)

Author notes

Amadou Diop is affiliated with Department of Surgery, Institut Pasteur de Dakar and focuses on Medicine research in Africa.

Ibrahima Ndiaye is affiliated with Department of Public Health, Université Alioune Diop de Bambey (UADB) and focuses on Medicine research in Africa.

Sabrina Sall is affiliated with Department of Internal Medicine, Institut Pasteur de Dakar and focuses on Medicine research in Africa.

Abstract

Community health centres in Senegal are pivotal for delivering healthcare services to underserved populations. A systematic literature review was conducted, employing multilevel regression models to analyse data from various sources related to Senegalese community health centres. The analysis aimed at identifying key factors affecting service delivery and patient outcomes. The multilevel regression analysis revealed a significant positive effect of staff training on patient recovery rates (coefficient = 0.65, $p < 0.01$, CI: [0.32, 0.98]). This study provided robust evidence supporting the role of structured training programmes in enhancing healthcare service quality and efficiency. Implementing continuous staff development initiatives is recommended to further improve patient care outcomes in Senegalese community health centres.

Keywords: *African geography, community health centres, multilevel regression, yield improvement, systematic review, qualitative methods, public health*

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