



# Methodological Evaluation of Community Health Centre Systems in Senegal: Quasi-Experimental Design for Efficiency Gains

Amadou Diop<sup>1,2</sup>, Bocari Ndiaye<sup>3,4</sup>, Diaby Sylla<sup>2</sup>

<sup>1</sup> Department of Pediatrics, Institut Sénégalais de Recherches Agricoles (ISRA)

<sup>2</sup> Department of Clinical Research, Université Alioune Diop de Bambey (UADB)

<sup>3</sup> Université Alioune Diop de Bambey (UADB)

<sup>4</sup> Department of Internal Medicine, Institut Sénégalais de Recherches Agricoles (ISRA)

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**Correspondence:** [adiop@gmail.com](mailto:adiop@gmail.com)

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## Author notes

*Amadou Diop is affiliated with Department of Pediatrics, Institut Sénégalais de Recherches Agricoles (ISRA) and focuses on Medicine research in Africa.*

*Bocari Ndiaye is affiliated with Université Alioune Diop de Bambey (UADB) and focuses on Medicine research in Africa.*

*Diaby Sylla is affiliated with Department of Clinical Research, Université Alioune Diop de Bambey (UADB) and focuses on Medicine research in Africa.*

## Abstract

Community health centres in Senegal are crucial for providing healthcare services to rural populations. However, their efficiency and effectiveness need evaluation. A quasi-experimental design was employed to assess the performance metrics of these facilities, including patient wait times and service delivery rates. Data collection involved surveys and direct observations over a six-month period. Patient wait times were reduced by an average of 15% in treatment areas after implementing process improvements, indicating significant efficiency gains. The quasi-experimental design provided robust evidence for enhancing the operational performance of community health centres in Senegal. Further studies should explore scalability and cost-effectiveness of these interventions across different regions in Senegal. 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:** *Sub-Saharan, African, Senegal, cluster-randomization, evaluation, modelling, quantitative, research*

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