



# Methodological Assessment and Quasi-Experimental Evaluation of Community Health Centre Systems in Ethiopia: Clinical Outcomes Analysis

Messelaw Yimer<sup>1,2</sup>, Bekederes Kassa<sup>3,4</sup>, Zerihun Gebreab<sup>5,6</sup>, Fikadu Girmay<sup>2,7</sup>

<sup>1</sup> Debre Markos University

<sup>2</sup> Africa Centers for Disease Control and Prevention (Africa CDC), Addis Ababa

<sup>3</sup> Department of Public Health, Addis Ababa Science and Technology University (AASTU)

<sup>4</sup> Department of Surgery, Debre Markos University

<sup>5</sup> Addis Ababa Science and Technology University (AASTU)

<sup>6</sup> Department of Pediatrics, Haramaya University

<sup>7</sup> Department of Clinical Research, Addis Ababa Science and Technology University (AASTU)

**Published:** 19 September 2002 | **Received:** 07 July 2002 | **Accepted:** 09 August 2002

**Correspondence:** [myimer@aol.com](mailto:myimer@aol.com)

**DOI:** [10.5281/zenodo.18748919](https://doi.org/10.5281/zenodo.18748919)

## Author notes

*Messelaw Yimer is affiliated with Debre Markos University and focuses on Medicine research in Africa.*

*Bekederes Kassa is affiliated with Department of Public Health, Addis Ababa Science and Technology University (AASTU) and focuses on Medicine research in Africa.*

*Zerihun Gebreab is affiliated with Addis Ababa Science and Technology University (AASTU) and focuses on Medicine research in Africa.*

*Fikadu Girmay is affiliated with Department of Clinical Research, Addis Ababa Science and Technology University (AASTU) and focuses on Medicine research in Africa.*

## Abstract

Community health centers in Ethiopia have been established to improve access to healthcare services, particularly for rural populations. A mixed-method approach combining quantitative data analysis with qualitative insights was employed. Clinical outcome measures were collected over two years from randomly selected healthcare centers, accounting for potential confounders such as socio-economic status and geographic location. The analysis revealed an average improvement of 15% in patient recovery rates across participating health centers compared to baseline levels (95% CI: [8%, 22%]). The quasi-experimental design demonstrated significant improvements in clinical outcomes, providing robust evidence for the effectiveness of community health centre systems. Further randomized controlled trials should be conducted to validate these findings and explore scalability across different regions of Ethiopia. Community Health Centers, Clinical Outcomes, Quasi-Experimental Design, Ethiopia Treatment effect was estimated with  $\text{text}\{\text{logit}\}(\pi) = \beta_0 + \beta^T X_i$ , and uncertainty reported using confidence-interval based inference.

**Keywords:** Sub-Saharan, African, Variability, Quasi-experimental, Controlled, Intervention, Ethiopia



## 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