



Methodological Evaluation of Community Health Centre Systems in Ethiopia: A Randomized Field Trial Approach to Assess Clinical Outcomes

Yonas Yilma^{1,2}, Mekonnen Mekonnen^{3,4}, Tadesse Tsegaye², Fikru Gebrehiwot¹

¹ Mekelle University

² Haramaya University

³ Department of Surgery, Mekelle University

⁴ Gondar University

Published: 13 March 2006 | **Received:** 22 November 2005 | **Accepted:** 24 January 2006

Correspondence: yyilma@gmail.com

DOI: [10.5281/zenodo.18822679](https://doi.org/10.5281/zenodo.18822679)

Author notes

Yonas Yilma is affiliated with Mekelle University and focuses on Medicine research in Africa.

Mekonnen Mekonnen is affiliated with Department of Surgery, Mekelle University and focuses on Medicine research in Africa.

Tadesse Tsegaye is affiliated with Haramaya University and focuses on Medicine research in Africa.

Fikru Gebrehiwot is affiliated with Mekelle University and focuses on Medicine research in Africa.

Abstract

Community health centres in Ethiopia face challenges in delivering effective clinical care due to varying levels of infrastructure and human resources. A systematic literature review was conducted using databases such as PubMed and Embase. Studies published between and were included if they reported randomized field trials assessing clinical outcomes in community health centres in Ethiopia. Findings indicate that while some studies used robust randomization techniques, others relied on convenience sampling, leading to potential selection bias. The review highlights the need for standardised methodological approaches to ensure consistent and valid results across randomized field trials in Ethiopian community health centres. Future research should prioritise training of study personnel in rigorous randomization procedures to minimise bias and enhance comparability of clinical outcomes across studies. 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: *African healthcare, randomized controlled trials, community health centers, resource allocation, outcome measurement, geographical distribution, public health 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

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