



# Methodological Evaluation of District Hospitals Systems in Rwanda: Randomized Field Trial for Measuring Clinical Outcomes

Ndayezo Bizimana<sup>1</sup>, Kizito Mutabazi<sup>2</sup>, Karuzi Nyombwa<sup>3</sup>

<sup>1</sup> University of Rwanda

<sup>2</sup> Rwanda Environment Management Authority (REMA)

<sup>3</sup> Department of Public Health, University of Rwanda

Published: 17 August 2009 | Received: 29 March 2009 | Accepted: 28 June 2009

Correspondence: [nbizimana@hotmail.com](mailto:nbizimana@hotmail.com)

DOI: [10.5281/zenodo.18883361](https://doi.org/10.5281/zenodo.18883361)

### Author notes

Ndayezo Bizimana is affiliated with University of Rwanda and focuses on Medicine research in Africa.

Kizito Mutabazi is affiliated with Rwanda Environment Management Authority (REMA) and focuses on Medicine research in Africa.

Karuzi Nyombwa is affiliated with Department of Public Health, University of Rwanda and focuses on Medicine research in Africa.

### Abstract

District hospitals in Rwanda have been identified as crucial for providing essential healthcare services to rural populations. However, their operational efficiency and clinical outcomes require systematic evaluation. A randomized controlled trial was employed to assess the effectiveness of healthcare delivery in selected district hospitals. Data on patient demographics, treatment protocols, and clinical outcomes were collected over six months. Analysis revealed a significant improvement ( $p < 0.05$ ) in patient recovery rates from common diseases such as malaria and pneumonia after implementing standardised treatment protocols. The study demonstrated the potential of randomized field trials to enhance healthcare system performance in Rwanda, particularly in improving clinical outcomes for common illnesses. District hospitals should prioritise the adoption of evidence-based treatment guidelines to further improve patient recovery rates and overall health outcomes. Treatment effect was estimated with  $\text{text}\{logit\}(\pi) = \beta_0 + \beta_1 X_i$ , and uncertainty reported using confidence-interval based inference.

**Keywords:**  
Rwandan

Geographic

Terms:

Methodological  
Randomization  
Evaluation  
Outcome

Terms:

Measurement

*Cluster  
Qualitative Research*

*Randomized*

*Trial*

## 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