



# Methodological Evaluation of Maternal Care Facilities Systems in Nigeria: A Randomized Field Trial Approach

Olalekan Olayiwola<sup>1,2</sup>, Chidera Chikodili<sup>3,4</sup>, Adebayo Alabi<sup>2,5</sup>, Okechukwu Okoye<sup>4,6</sup>

<sup>1</sup> Obafemi Awolowo University, Ile-Ife

<sup>2</sup> Covenant University, Ota

<sup>3</sup> Department of Public Health, Obafemi Awolowo University, Ile-Ife

<sup>4</sup> University of Abuja

<sup>5</sup> Babcock University

<sup>6</sup> Department of Epidemiology, Obafemi Awolowo University, Ile-Ife

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**Correspondence:** [oolayiwola@yahoo.com](mailto:oolayiwola@yahoo.com)

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## Author notes

*Olalekan Olayiwola is affiliated with Obafemi Awolowo University, Ile-Ife and focuses on Medicine research in Africa.*

*Chidera Chikodili is affiliated with Department of Public Health, Obafemi Awolowo University, Ile-Ife and focuses on Medicine research in Africa.*

*Adebayo Alabi is affiliated with Babcock University and focuses on Medicine research in Africa.*

*Okechukwu Okoye is affiliated with University of Abuja and focuses on Medicine research in Africa.*

## Abstract

Maternal care facilities in Nigeria play a crucial role in improving maternal health outcomes. However, there is limited empirical evidence on their effectiveness and potential biases. A randomized field trial design was employed to assess the impact of improved maternal care facilities. Participants were randomly assigned to either an intervention group (enhanced care facilities) or a control group (standard care). The study found that the intervention significantly reduced maternal mortality rates by 20%, with a 95% confidence interval indicating a robust effect. This randomized field trial approach provides strong evidence for the efficacy of improved maternal care facilities in Nigeria, offering a clear pathway to reducing maternal mortality. Policy makers should prioritise funding and infrastructure development for enhanced maternal care facilities based on these findings. 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:** *African geography, maternal health outcomes, randomized controlled trials, facility-based delivery, bias assessment, clinical efficacy, data quality assurance*

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