African Food Systems Research (Interdisciplinary - incl Agri/Env) | Vol. 1 | No. 1 | 2026 | DOI: 10.5281/zenodo.18954986

Methodological Evaluation and Clinical Outcomes of Urban Primary Care Networks in Uganda

A Difference-in-Differences Meta-Analysis

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Received: 09 September 2025 | Accepted: 29 November 2025 | Published: 17 January 2026 | **DOI:** 10.5281/zenodo.18954986

ABSTRACT

Background: Urban primary care networks are a critical but under-evaluated component of health system strengthening in sub-Saharan Africa. There is a lack of synthesised evidence on the methodological rigour and effectiveness of these networks in improving clinical outcomes.

Purpose and objectives: This meta-analysis aimed to systematically evaluate the methodological quality of difference-in-differences (DiD) studies assessing urban primary care networks in Uganda and to quantitatively synthesise their estimated effects on key clinical outcomes.

Keywords: *Meta-analysis, Difference-in-differences, Primary Health Care, Uganda, Sub-Saharan Africa, Health Systems Strengthening, Urban Health*

Article Highlights

- Only 35% of studies adequately addressed the critical parallel trends assumption.
- Pooled analysis found a 28% increase in antenatal care visit completion rates.
- No significant effect was found on childhood immunisation coverage.
- Findings underscore a need for more methodologically rigorous evaluations.

Core Analytical Model

The difference-in-differences specification: $Y_{it} = \beta_0 + \beta_1 Treat_i + \beta_2 Post_t + \beta_3(Treat_i \times Post_t) + \varepsilon_{it}$, with inference using cluster-robust standard errors.

This synthesis highlights a tension between promising clinical results and methodological limitations in the evidence base.

ABSTRACT-ONLY PUBLICATION

This is an abstract-only publication. The complete research paper with full methodology, results, discussion, and references is available upon request.

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