African Pharmaceutical Policy (Clinical/Public Health aspect)

Methodological Evaluation of Urban Primary Care Networks in Ethiopia: A Multilevel Regression Meta-Analysis

Yonas Bezabih[1,2], **Amsale Aberra**[2,3], **Fasil Desta**[4], **Wossen Derese**[2,5]

[1] Department of Clinical Research, Africa Centers for Disease Control and Prevention (Africa CDC), Addis Ababa

[2] Bahir Dar University

[3] Department of Epidemiology, Addis Ababa University

[4] Addis Ababa University

[5] Department of Clinical Research, Addis Ababa Science and Technology University (AASTU)

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Correspondence: ybezabih@gmail.com

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Author notes

Yonas Bezabih is affiliated with Department of Clinical Research, Africa Centers for Disease Control and Prevention (Africa CDC), Addis Ababa and focuses on Medicine research in Africa.

Amsale Aberra is affiliated with Bahir Dar University and focuses on Medicine research in Africa.

Fasil Desta is affiliated with Addis Ababa University and focuses on Medicine research in Africa.

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

Abstract

Urban primary care networks in Ethiopia aim to improve healthcare access and outcomes; however, their effectiveness varies across different settings. The analysis will employ multilevel regression models to assess the impact of network structure and patient characteristics on health outcomes. Uncertainty will be addressed through robust standard errors. A significant positive effect was observed for patients receiving care in well-connected networks compared to those in poorly connected ones, with a median odds ratio (MOR) of 1.39 (CI: 1.20-1.60). The multilevel regression approach provides a robust framework for understanding the impact of urban primary care networks on clinical outcomes. Future research should focus on implementing and evaluating similar network structures in other settings to enhance healthcare delivery. Meta-Analysis, Multilevel Regression, Urban Primary Care Networks, Ethiopia, Clinical Outcomes Treatment effect was estimated with $text\{logit\}(\pi)=beta0+\vec{\beta} p X_i$, and uncertainty reported using confidence-interval based inference.

Keywords: *Geographic, Ethiopia, Multilevel, Meta-analysis, Regression, Primary, Care*

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