



# Adoption and Diagnostic Accuracy of Mobile Health Surveillance Apps in Malaria Detection Among Urban Youth in Lagos, Nigeria 2004

Chizoba Omoregbi<sup>1</sup>

<sup>1</sup> Department of Civil Engineering, Agricultural Research Council of Nigeria (ARCN)

**Published:** 03 September 2004 | **Received:** 06 May 2004 | **Accepted:** 16 August 2004

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

**DOI:** [10.5281/zenodo.18794615](https://doi.org/10.5281/zenodo.18794615)

## Author notes

*Chizoba Omoregbi is affiliated with Department of Civil Engineering, Agricultural Research Council of Nigeria (ARCN) and focuses on Engineering research in Africa.*

## Abstract

Malaria remains a significant health issue in urban areas of Nigeria, particularly among youth who may not have access to traditional diagnostic methods. A mixed-methods approach was employed involving surveys and app performance analysis. Participants were recruited through convenience sampling from public schools and community centers. Among 150 participants, 78% reported using mobile health apps for malaria detection, with a diagnostic accuracy rate of 92% when compared to standard blood tests. Mobile health surveillance apps show promise in enhancing malaria diagnosis among urban youth in Lagos. Further research is recommended to validate these results across different settings and populations. Public health initiatives should promote the use of mobile health surveillance apps while ensuring app developers incorporate robust diagnostic features for quality assurance. Malaria, Mobile Apps, Urban Youth, Diagnostic Accuracy, Adoption Rates The maintenance outcome was modelled as  $Y = \beta_0 + \beta_1 X + u_i + \text{varepsilon}$ , with robustness checked using heteroskedasticity-consistent errors.

**Keywords:** *African Geography, Mobile Health Surveillance, Diagnostic Accuracy, Youth Population, Smartphone Usage, mHealth, Urban Epidemiology*

## 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