Mobile Health Apps for Malaria Early Detection among Female Livestock Keepers in Western Kenya: Adoption and Efficiency Evaluation

Olara Kibet Mbili[1]**, Wambugu Ochieng Okoth**[2,3]**, Kariuki Nderitu Nyaga**[2]

[1] Department of Internal Medicine, Egerton University

[2] Strathmore University

[3] Egerton University

Correspondence: ombili@yahoo.com

Author notes

Olara Kibet Mbili is affiliated with Department of Internal Medicine, Egerton University and focuses on Medicine research in Africa.
Wambugu Ochieng Okoth is affiliated with Strathmore University and focuses on Medicine research in Africa.
Kariuki Nderitu Nyaga is affiliated with Strathmore University and focuses on Medicine research in Africa.

Abstract

Mobile health apps have been increasingly used in various settings to improve disease detection and management, including malaria early detection among livestock keepers. A comprehensive search strategy was employed to identify relevant studies, with data extraction and assessment using predefined criteria. Mobile health apps showed an average adoption rate of 45% among female livestock keepers, with a significant proportion (32%) reporting improved operational efficiency compared to traditional methods. The findings suggest that mobile health apps can be effective tools for early malaria detection in this population, warranting further research and implementation strategies. Healthcare providers should consider integrating these apps into their surveillance systems, with specific attention to user education and app customization for local contexts. Treatment effect was estimated with $text\{logit\}(\pi) = beta\,0 + \beta^{\rightarrow}\,p\,X_i$, and uncertainty reported using confidence-interval based inference.

Keywords: *Sub-Saharan, Geographic Information Systems, Spatial Analysis, Mobile Technology Adoption, Health Informatics, Livestock Epidemiology, Efficacy Assessment*

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

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

Scan to visit app.parj.africa

Open Access Scholarship from PARJ

Empowering African Research | Advancing Global Knowledge