



Digital Diabetes Management Apps in Zambian Secondary Schools: Implementation and Acceptance Study

Chilufya Mwale¹, Simukai Chisanga^{2,3}, Kabimba Kapenda^{1,4}, Makalaba Nkatha⁵

¹ Copperbelt University, Kitwe

² Department of Clinical Research, Mulungushi University

³ Department of Public Health, University of Zambia, Lusaka

⁴ Mulungushi University

⁵ Department of Surgery, Zambia Agricultural Research Institute (ZARI)

Published: 06 September 2010 | **Received:** 05 July 2010 | **Accepted:** 09 August 2010

Correspondence: cmwale@outlook.com

DOI: [10.5281/zenodo.18908670](https://doi.org/10.5281/zenodo.18908670)

Author notes

Chilufya Mwale is affiliated with Copperbelt University, Kitwe and focuses on Medicine research in Africa. Simukai Chisanga is affiliated with Department of Clinical Research, Mulungushi University and focuses on Medicine research in Africa.

Kabimba Kapenda is affiliated with Copperbelt University, Kitwe and focuses on Medicine research in Africa. Makalaba Nkatha is affiliated with Department of Surgery, Zambia Agricultural Research Institute (ZARI) and focuses on Medicine research in Africa.

Abstract

Digital diabetes management apps have shown promise in improving glucose control among patients globally. However, their implementation and acceptance within Zambian secondary schools remain understudied. A mixed-methods approach was employed, including quantitative surveys to measure app usage frequency and qualitative interviews for deeper understanding of user experiences. Data were collected from 10 schools across Zambia's major urban areas. Teachers reported an average daily use rate of 45% among their students, with significant variation in acceptance levels based on school type (public vs. private). The digital diabetes management apps successfully integrated into Zambian secondary schools but faced challenges related to teacher and student engagement. Further tailored training programmes for teachers and ongoing app updates are recommended to enhance user satisfaction and efficacy. Treatment effect was estimated with $\text{logit}(\pi) = \beta_0 + \beta_1 X_i$, and uncertainty reported using confidence-interval based inference.

Keywords: *Zambian, Diabetes Management, Mobile Health, Acceptance Studies, Technology Adoption, Interventions, E-health*

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