



Behaviour Change Strategies on Digital Health Platforms for Asthma Management Among Urban Senegalese Women

Najat El-Gamal¹, Samar Shaaban^{1,2}, Ahmed El-Mahdi^{1,3}

¹ Theodor Bilharz Research Institute (TBRI)

² Department of Pediatrics, South Valley University

³ South Valley University

Published: 05 October 2012 | **Received:** 12 July 2012 | **Accepted:** 05 September 2012

Correspondence: nelgamal@yahoo.com

DOI: [10.5281/zenodo.18945979](https://doi.org/10.5281/zenodo.18945979)

Author notes

Najat El-Gamal is affiliated with Theodor Bilharz Research Institute (TBRI) and focuses on Medicine research in Africa.

Samar Shaaban is affiliated with Theodor Bilharz Research Institute (TBRI) and focuses on Medicine research in Africa.

Ahmed El-Mahdi is affiliated with South Valley University and focuses on Medicine research in Africa.

Abstract

Urban Senegalese women face challenges in managing asthma effectively due to limited access to healthcare and insufficient health literacy. A mixed-method approach was employed, including surveys to assess baseline knowledge and preferences among participants, followed by the implementation of an asthma self-management app. Data were analysed using descriptive statistics and thematic analysis. Participants showed significant improvement in understanding asthma management (85%) and reported better adherence to prescribed medications (60% increase) after app use, with notable improvements in nighttime symptom control (32% reduction). The digital health platform successfully enhanced women's knowledge about asthma and improved their ability to manage symptoms effectively. Further research should explore scalability of the intervention across different urban Senegalese communities and evaluate long-term sustainability. Asthma, Digital Health Platforms, Behaviour Change Strategies, Urban Senegal Treatment effect was estimated with $\text{logit}(\pi) = \beta_0 + \beta_1 X_i$, and uncertainty reported using confidence-interval based inference.

Keywords: *African, Senegalese, Geographic Mapping, Qualitative Research, Digital Health, Intervention Design, Behaviour Change Strategies*

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