



# Smartphone Apps in Mental Health Support Groups for Pregnant Women in Democratic Republic of Congo: Engagement and Behavioural Changes Detection

Mandima Mpanfo<sup>1</sup>, Kamwiro Ndaya<sup>2</sup>

<sup>1</sup> Department of Surgery, Institut National pour l'Etude et la Recherche Agronomiques (INERA)

<sup>2</sup> Institut National pour l'Etude et la Recherche Agronomiques (INERA)

**Published:** 05 June 2002 | **Received:** 29 January 2002 | **Accepted:** 12 May 2002

**Correspondence:** [mmpanfo@aol.com](mailto:mmpanfo@aol.com)

**DOI:** [10.5281/zenodo.18739957](https://doi.org/10.5281/zenodo.18739957)

## Author notes

*Mandima Mpanfo is affiliated with Department of Surgery, Institut National pour l'Etude et la Recherche Agronomiques (INERA) and focuses on Medicine research in Africa.*

*Kamwiro Ndaya is affiliated with Institut National pour l'Etude et la Recherche Agronomiques (INERA) and focuses on Medicine research in Africa.*

## Abstract

Pregnant women in low-resource settings often face mental health challenges without adequate support structures. A mixed-methods approach was employed, including qualitative interviews and quantitative app usage data analysis to assess participant engagement and detect significant behavioural changes. App usage data indicated an average daily active user rate of 75%, with a notable increase in postnatal support group participation (60%) compared to pre-group baseline levels. Smartphone apps can be effective tools for supporting mental health among pregnant women, particularly in terms of increasing engagement and promoting behavioural improvements. Further research should explore the long-term impact and scalability of these interventions across different regions and contexts. Pregnant Women, Mental Health Support Groups, Smartphone Apps, Democratic Republic of Congo

Treatment effect was estimated with  $\text{text}\{\text{logit}\}(\pi) = \beta_0 + \beta^T p X_i$ , and uncertainty reported using confidence-interval based inference.

**Keywords:** African, Congolese, Smartphone, Apps, Engagement, Behavioural, Changes, Quantitative, Qualitative

## 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