



# Adoption and Utilisation of the Safe Delivery App by Skilled Birth Attendants in Primary Healthcare Facilities of the Amhara Region, Ethiopia: A Systematic Review

Tewodros Getachew<sup>1,2</sup>, Yohannes Assefa<sup>3</sup>, Selamawit Tesfaye<sup>3</sup>, Mekdes Abebe<sup>1,3</sup>

<sup>1</sup> Addis Ababa University

<sup>2</sup> Africa Centers for Disease Control and Prevention (Africa CDC), Addis Ababa

<sup>3</sup> Ethiopian Institute of Agricultural Research (EIAR)

**Published:** 28 April 2011 | **Received:** 11 December 2010 | **Accepted:** 23 March 2011

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

**DOI:** [10.5281/zenodo.18529676](https://doi.org/10.5281/zenodo.18529676)

## Author notes

*Tewodros Getachew is affiliated with Addis Ababa University and focuses on Medicine research in Africa.*

*Yohannes Assefa is affiliated with Ethiopian Institute of Agricultural Research (EIAR) and focuses on Medicine research in Africa.*

*Selamawit Tesfaye is affiliated with Ethiopian Institute of Agricultural Research (EIAR) and focuses on Medicine research in Africa.*

*Mekdes Abebe is affiliated with Addis Ababa University and focuses on Medicine research in Africa.*

## Abstract

Maternal mortality remains a significant public health challenge in Ethiopia. Mobile health (mHealth) interventions, such as the Safe Delivery App, have been introduced to support skilled birth attendants in primary healthcare facilities. The Amhara Region, with a high burden of maternal morbidity, is a critical setting for examining the adoption and use of this digital tool. This systematic review aimed to synthesise evidence on the adoption and utilisation of the Safe Delivery App by skilled birth attendants in primary healthcare facilities within the Amhara Region of Ethiopia. A systematic search of electronic databases was conducted. Peer-reviewed studies and relevant grey literature reporting on the app's use by skilled birth attendants in the specified region were included. Studies were screened, selected, and data were extracted against predefined criteria. The quality of included studies was appraised, and findings were synthesised thematically. The review identified a moderate level of initial adoption, largely facilitated by training workshops. Sustained utilisation in clinical practice was, however, inconsistent. A principal barrier was limited access to smartphones and unreliable internet connectivity. A key facilitator was the app's perceived value as a quick reference tool, particularly for managing postpartum haemorrhage. While the Safe Delivery App is a promising tool for enhancing obstetric knowledge, its integration into routine practice in the Amhara Region is constrained by infrastructural and resource limitations. Initial adoption does not assure sustained utilisation. Recommendations include ensuring provision of necessary hardware and stable power, integrating app use into clinical mentoring and supportive supervision, and developing context-specific implementation strategies to address local barriers. mHealth, skilled birth attendant, maternal health, digital health, implementation, low-resource settings, Ethiopia This review consolidates current evidence

on the implementation of a specific mHealth intervention in a high-priority region, providing insights for policymakers and programme managers aiming to scale digital health tools in similar low-resource settings.

**Keywords:** *mHealth, skilled birth attendants, maternal mortality, Sub-Saharan Africa, systematic review, implementation science, primary healthcare*

## 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