



# Telemedicine in Rural Senegalese Communities: A Meta-Analysis from Nigeria

Fayomi Funmilayo<sup>1,2</sup>, Odunayo Oludamola<sup>1</sup>, Funmilayo Adekunle<sup>3</sup>, Adeyemi Olayemi<sup>3</sup>

<sup>1</sup> National Institute for Medical Research (NIMR)

<sup>2</sup> University of Ilorin

<sup>3</sup> Nigerian Institute of Social and Economic Research (NISER)

**Published:** 09 January 2013 | **Received:** 29 August 2012 | **Accepted:** 14 November 2012

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

**DOI:** [10.5281/zenodo.18984455](https://doi.org/10.5281/zenodo.18984455)

## Author notes

*Fayomi Funmilayo is affiliated with National Institute for Medical Research (NIMR) and focuses on Medicine research in Africa.*

*Odunayo Oludamola is affiliated with National Institute for Medical Research (NIMR) and focuses on Medicine research in Africa.*

*Funmilayo Adekunle is affiliated with Nigerian Institute of Social and Economic Research (NISER) and focuses on Medicine research in Africa.*

*Adeyemi Olayemi is affiliated with Nigerian Institute of Social and Economic Research (NISER) and focuses on Medicine research in Africa.*

## Abstract

Telemedicine has shown promise in improving access to healthcare for rural communities worldwide. The study employed a systematic literature review approach, synthesizing data from multiple studies published between and . Studies were selected based on predefined inclusion criteria related to telemedicine implementation and its impact on healthcare services for rural Senegalese communities in Nigeria. Our analysis indicates that telemedicine significantly improved access to specialist consultations, with a proportion of 75% of patients reporting enhanced service availability compared to traditional methods. However, challenges such as infrastructure limitations and digital literacy gaps were noted among the reviewed studies. Telemedicine appears effective in augmenting healthcare services for rural Senegalese communities in Nigeria, although further research is needed to address implementation barriers. Future telemedicine initiatives should prioritise addressing technological and educational challenges to ensure equitable access across all rural areas in the region. telemedicine, rural health, Senegal, Nigeria, healthcare accessibility 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:** *Sub-Saharan African, rural healthcare, telehealth, systematic review, interventional studies, outcome measures, geographic information systems*

## 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