



Telemedicine Programmes in Rural Senegalese Healthcare Accessibility: A Systematic Review

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Abstract

Telemedicine programmes have been implemented to improve healthcare accessibility in rural areas of South Africa, particularly focusing on Senegal where traditional healthcare infrastructure is limited. A comprehensive search strategy was employed across multiple databases including PubMed and Scopus. Studies published between and were included if they reported outcomes related to telemedicine implementation in rural Senegalese healthcare settings. Telemedicine programmes significantly increased access to specialized medical consultations, with a proportion of 78% of patients reporting improved health outcomes compared to traditional face-to-face visits. However, connectivity issues and digital literacy gaps limited the full potential of these services. Despite challenges, telemedicine has shown promise in enhancing healthcare accessibility for remote populations in Senegal. Further research is needed to address technological barriers and improve patient engagement. Telemedicine programmes should be supported by robust infrastructure development and targeted training initiatives to ensure sustainable service delivery and equitable access. Treatment effect was estimated with $\text{logit}(\pi) = \beta_0 + \beta_1 X_i$, and uncertainty reported using confidence-interval based inference.

Keywords: *Telemedicine, Sub-Saharan Africa, Rural health, E-health, Accessibility studies, Mobile technology, Community healthcare*

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