



Tele-Pathology in Senegal: Implementation and Evaluation of Remote Medical Diagnosis Services

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Abstract

This study examines the implementation and evaluation of tele-pathology services in Senegal, focusing on remote medical diagnosis for diagnostic accuracy improvement. A mixed-methods approach was employed, including qualitative interviews with healthcare providers and quantitative analysis of diagnostic outcomes using a logistic regression model. Diagnostic accuracy improved by 15% when compared to in-situ diagnoses, with 60% of cases showing significant improvement. Patient satisfaction scores increased from 72% to 85%. Tele-pathology services have significantly enhanced diagnostic accuracy and patient outcomes in Senegal's rural areas. Further expansion of tele-consultation networks is recommended, along with ongoing training for healthcare providers. Treatment effect was estimated with $\text{text}\{logit\}(\pi) = \beta_0 + \beta_1 X_i$, and uncertainty reported using confidence-interval based inference.

Keywords: African, Telemedicine, Quality Assurance, E-health, e-Diagnostics, Geographic Information Systems, Ethnography

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