



# Telemedicine Consultations in Reducing Migraine Outpatient Visits Among South African Urban Populations

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## Abstract

Migraine is a prevalent neurological disorder affecting millions of individuals in South Africa's urban areas. Despite its high prevalence and significant impact on daily life, access to specialized care can be challenging. A mixed-methods approach was employed including a survey among patients and an analysis of electronic health records (EHR). Telemedicine consultation frequency showed a 30% reduction in the number of outpatient visits per patient over six months, with a median response time to first teleconsultation within 24 hours. Telemedicine has demonstrated potential as an effective tool for managing migraine patients' care needs remotely and efficiently. Further studies should explore long-term outcomes and cost-effectiveness of telemedicine in this setting. Migraine, Telemedicine, Outpatient Visits, South Africa Treatment effect was estimated with  $\text{text}\{ \text{logit} \}(\pi) = \beta_0 + \beta^T X_i$ , and uncertainty reported using confidence-interval based inference.

**Keywords:** *Sub-Saharan African, Telehealth, Health Economics, Chronic Pain Management, Geographic Information Systems (GIS), E-health, Palliative Care*

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