



Patient Engagement and Adherence Rates in Telemedicine Monitoring of Chronic Illnesses Among Urban Slum Populations in Senegal: A One-Year Evaluation

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Abstract

Telemedicine has emerged as a promising approach to manage chronic illnesses in urban slum populations, particularly addressing geographical and socioeconomic barriers. A mixed-methods approach combining quantitative surveys and qualitative interviews was employed to assess the effectiveness of telemedicine services over a one-year period. Patient engagement scores averaged at 85% within the first six months, with significant improvements observed in treatment adherence rates from baseline (60%) to post-intervention (72%). Telemedicine significantly enhanced patient engagement and treatment adherence among urban slum populations suffering from chronic illnesses. Further research should explore cost-effectiveness and scalability of telemedicine interventions, with a focus on ensuring equitable access for marginalized communities. Chronic Illnesses, Telemedicine, Patient Engagement, Treatment Adherence, Urban Slums Treatment effect was estimated with $\text{text}\{ \text{logit} \}(\pi) = \beta_0 + \beta_1 X_i$, and uncertainty reported using confidence-interval based inference.

Keywords: *Sub-Saharan, urbanization, telehealth, patient engagement, adherence, qualitative, evaluation*

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