



# Social Media Influencers and HIV/AIDS Awareness in Northern Nigerian Communities: A Comparative Study

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## Abstract

Social media influencers (SMIs) have become influential in shaping public health perceptions globally. In Nigeria, particularly in northern communities where HIV/AIDS is prevalent, SMIs are increasingly being utilised to promote awareness and education about the disease. A comparative analysis was conducted using survey data collected from two randomly selected northern Nigerian communities with varying numbers of active SMIs. Quantitative content analysis evaluated the frequency and tone of posts promoting HIV/AIDS awareness. Audience surveys measured knowledge levels before and after exposure to SMI campaigns. The study found that SMIs in both communities predominantly focused on prevention methods, stigma reduction, and support resources. However, there was a notable difference in engagement rates between the two areas: Community A had an average post engagement rate of 35% compared to Community B's 20%. Audience knowledge levels increased by 14 percentage points after exposure. This study provides insights into how SMIs can be leveraged for public health initiatives in northern Nigerian communities, with potential implications for resource allocation and policy development. Public health officials should consider partnerships with local SMIs to enhance HIV/AIDS awareness campaigns. Future research could explore the long-term impact of these interventions on community health outcomes. Model estimation used  $\hat{\theta} = \underset{\theta}{\operatorname{argmin}} \{ \sum_i \ell(y_i, f_{\theta}(\xi)) + \lambda \|\theta\|_2^2 \}$ , with performance evaluated using out-of-sample error.

**Keywords:** Nigerian, Influencers, Communication, SocialMedia, HealthCommunication, QualitativeResearch, CommunityEngagement

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