



# Mobile Health Clinics for HIV/AIDS Patients in Rural Tanzanian Villages: Viral Load Reduction Rates Six Months Post Intervention

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### Abstract

HIV/AIDS continues to be a significant public health challenge in rural Tanzania, where access to antiretroviral therapy (ART) is limited. A total of 150 participants were randomly selected from three rural villages. Viral loads were measured using a PCR-based assay, and data on adherence to ART and clinic attendance was collected via self-report surveys. Initial viral load reduction rates averaged at 32% within six months post-intervention, with significant individual variations noted. Mobile health clinics significantly improved access to care and ART adherence, leading to measurable reductions in viral loads among patients. Continued support for mobile clinic programmes is recommended to sustain the observed improvements in viral load reduction rates. HIV/AIDS, Viral Load Reduction, Mobile Clinics, Rural Tanzania Treatment effect was estimated with  $\text{text}\{ \text{logit} \}(\pi) = \beta_0 + \beta^T p X_i$ , and uncertainty reported using confidence-interval based inference.

**Keywords:** African Geography, Mobile Health Clinics, Antiretroviral Therapy, HIV Viral Load, Clinical Interventions, Epidemiology, Public Health Strategies

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