



Mobile Phone-Based Health Education Programmes for Maternal Care in Nairobi Slums: Performance Outcomes Over Two Years

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Abstract

Maternal care in Nairobi slums is characterized by high rates of morbidity and mortality due to preventable conditions such as anaemia and malnutrition. A quasi-experimental design was employed, with baseline data collected from 500 participants. A cluster-randomized trial approach was used to allocate participants into intervention and control groups. An average of 82% adherence rate to programme activities was observed across both genders in the intervention group compared to 63% in the control group, indicating a significant improvement ($p < 0.05$). The mobile phone-based health education programme significantly improved maternal care knowledge and practices among mothers living in Nairobi slums. Further research is recommended to explore long-term sustainability of these programmes and their scalability across different settings. Treatment effect was estimated with $\text{text} \{ \logit \} (\pi) = \beta_0 + \beta_1 p X_i$, and uncertainty reported using confidence-interval based inference.

Keywords: *African Geography, Maternal Health, Mobile Apps, Randomised Controlled Trials, Evaluation Studies, Quasi-Experimental Design, Public Health Education*

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