



Mobile Apps in Diabetes Self-Care Among Urban Youth in Cape Town: A Two-Year Acceptance Study

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Abstract

Mobile apps have gained popularity in diabetes self-care among urban youth globally. A longitudinal study design with repeated measures was employed to assess user engagement and satisfaction using app-based interventions tailored to urban youth with type 2 diabetes. Mobile app usage among participants increased from 60% at baseline to 85% by the end of two years, with a significant improvement in self-reported glycemic control ($p < 0.01$). The study confirmed sustained user acceptance and positive health outcomes for diabetes self-care. Further research should explore long-term effects and potential barriers to maintaining app use over extended periods. Treatment effect was estimated with $\text{text}\{\text{logit}\}(\pi) = \beta_0 + \beta_1 X_p$, and uncertainty reported using confidence-interval based inference.

Keywords: African, longitudinal, qualitative, intervention, acceptability, youth, health disparities

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