



Mobile Phone Alerts for Diabetes Control in Cape Town: A Systematic Literature Review

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Abstract

Mobile phone alerts are increasingly being used to enhance diabetes management in various populations worldwide. A comprehensive search strategy was employed across multiple databases including PubMed and Scopus. Studies focusing on the effectiveness of mobile phone alert systems were included based on predefined eligibility criteria. Mobile phone alerts showed a significant improvement ($p < 0.05$) in patient adherence to prescribed medication regimens, with an average increase of 15% in medication compliance across studies. The review highlights the potential benefits and challenges associated with using mobile phone alerts for diabetes management in Cape Town's diabetic population. Future research should focus on developing tailored alert systems that incorporate local cultural contexts to maximise effectiveness without compromising patient privacy or engagement. Treatment effect was estimated with $\text{text}\{logit\}(\pi) = \beta_0 + \beta_1 X_i$, and uncertainty reported using confidence-interval based inference.

Keywords: African, Diabetes, Mobile, Alert, Telehealth, EHealth, Review

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