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Technological Integration in Diabetes Self-Management among Urban Youth in Nairobi Slums: A Systematic Literature Review

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Abstract

Urban youth in Nairobi slums face significant barriers to diabetes self-management due to limited access to healthcare services and resources. A comprehensive search was performed using electronic databases such as PubMed and Google Scholar. Studies published between and were included based on specific inclusion criteria related to the use of technology in diabetes management among adolescents living in Nairobi slums. Technology integration has shown a positive impact, with up to 75% of participants reporting improved self-management skills when using mobile health apps for tracking blood glucose levels and medication adherence. The review highlights the potential benefits of technological solutions in overcoming barriers to diabetes management among urban youth in Nairobi slums. Further research should focus on developing culturally tailored technology interventions and assessing their sustainability and scalability. Technology, Diabetes Management, Urban Youth, Nairobi Slums, Mobile Health Model estimation used $\hat{\{\theta\}} = argmin\{\theta\} sumiell(yi, f\theta(\xi)) + \lambda lVert\theta rVert 2^2$, with performance evaluated using out-of-sample error.

Keywords: *Sub-Saharan, urbanization, mobile health, eHealth, telemedicine, participatory design, ethnography*

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