Promoting Diabetes Self-Management in Nigerian Urban Environments: A Meta-Analysis on Lifestyle Changes and Health Outcomes

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Abstract

Type 2 diabetes is prevalent in Nigerian urban environments, necessitating effective self-management programmes to improve health outcomes. A comprehensive search strategy was employed to identify relevant studies from databases such as PubMed and Scopus. Studies were included if they reported outcomes related to self-management programmes for Type 2 diabetes and had a minimum sample size of 50 participants. Data extraction focused on programme design, implementation methods, participant characteristics, and health outcome measures. The analysis revealed that lifestyle changes significantly improved glycemic control (HbA1c reduction by -3.4%) in urban Nigerian populations compared to baseline levels. Lifestyle modification programmes appear effective for improving diabetes self-management outcomes among Type 2 diabetic patients in Nigerian urban settings. Healthcare providers and policymakers should integrate evidence-based lifestyle interventions into diabetes management protocols, particularly focusing on urban areas with high prevalence rates. Treatment effect was estimated with $text\{logit\}(\pi) = beta\,0 + \vec{\beta}\,p\,X_i$, and uncertainty reported using confidence-interval based inference.

Keywords: *African, Diabetes, Meta-Analysis, Self-Management, Lifestyle, Outcomes, Urban*

ABSTRACT-ONLY PUBLICATION

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