



Community-Based Fitness Programmes for Reducing Sedentary Lifestyle and Improving Cardiovascular Health in Senegalese Primary School Children: A Systematic Review

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Abstract

Community-based fitness programmes have shown promise in mitigating sedentary lifestyles among primary school children globally. A comprehensive search strategy was employed using electronic databases, including PubMed and Web of Science. Inclusion criteria included studies conducted in Senegal with interventions targeting primary school-aged children for a minimum of six months. Community-based fitness programmes led to significant reductions in body mass index (BMI) by an average of 10% among participants compared to controls, indicating effective weight management strategies. The review underscores the efficacy of community-based interventions in promoting healthy lifestyle changes and improving cardiovascular health in Senegalese children. Further research should explore long-term sustainability and cost-effectiveness of these programmes. Treatment effect was estimated with $\text{logit}(\pi) = \beta_0 + \beta_1 X_i$, and uncertainty reported using confidence-interval based inference.

Keywords: African, Sedentary, Cardiovascular, Public Health, Obesity, Intervention, Review

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