

Physical activity interventions for the management of chronic disease in low-income populations: A systematic review

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Abstract

The objectives of the study were to conduct a systematic literature review examining the specific intervention techniques in an updated taxonomy of behaviour change techniques that were included in successful interventions to change physical activity behaviour in low-income individuals, to assess the relevant behaviour change theories that underpinned the interventions, and to examine the relationship between behaviour change theory and intervention content. The study was a systematic literature review by narrative synthesis examining studies from 1980 to 2014. Data sources for the review included the following electronic databases: Medline, PubMed and Google Scholar. The eligibility criteria for the selected studies included in the review were only randomised controlled trials aimed at increasing physical activity among low-income adults. The outcome measure for the study was physical activity. Eleven studies met the inclusion criteria. 'Provide feedback on performance', 'goal setting (behaviour)', and 'plan social support/social change' were the most frequently used behavioural change techniques. Among the existing theories, the Transtheoretical model of behaviour change and the Social Cognitive theory were the common theoretical frameworks to form the basis of most study interventions. Interventions to increase physical activity in low-income persons had positive effects on changing physical activity behaviour. Policy makers and physical activity practitioners should engage effective and context-sensitive behavioural change techniques and advocate for theoretically grounded interventions in order to increase physical activity behaviour in low-income populations.

Introduction

Chronic diseases of lifestyle are typified by a lengthy incubation period, an extended period of illness, an intricate and poorly understood etiology, and a resilient resistance to remedy (Powell, Carspen, Koplan & Ford, 1989). Low-income populations are at an increased risk of chronic disease (U.S. Department of Health and Human Services, 1996; Centers for Disease Control and Prevention, 2002) and all-cause mortality (Lantz, House, Lepkowski, Williams, Mero & Chen, 1998). This is more likely so, because this population has been reported to be more likely to smoke (Scottish Government, 2008), lead a sedentary lifestyle (Stamatakis, 2006), and consume a poor diet (Drewnowski & Spector, 2004) compared to populations of higher socioeconomic status.

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