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A six week contextualised physical activity intervention for women living with HIV and AIDS of low socioeconomic status: a pilot study

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Abstract

Research has consistently shown the benefits of regular physical activity (PA) for women living with HIV and AIDS (WLWHA). This study is a pilot, randomised controlled crossover trial, reporting the effects of a contextualised PA intervention amongst a sample of 21 HIV positive Xhosa-speaking women of low socioeconomic status (SES). The study determined total moderate-to-vigorous PA (TMVPA) as measured subjectively by the Global Physical Activity Questionnaire (GPAQ), total weekly steps (TWS) as measured by a pedometer, and self-efficacy for PA as measured by the Physical Exercise Self-efficacy scale (PESES). Multivariate analysis of covariance (MANCOVA) was used to compute the impact of the intervention on TMVPA, TWS, and self-efficacy for PA from baseline to six weeks, and baseline to 12 weeks post-intervention controlling for pre-test differences in TMVPA. Results showed that participants exposed to the intervention had significant increases in PA as measured by TMVPA ($p = .027$), TWS ($p = .032$), as well as exercise self-efficacy ($p = .000$) from pre-test to 6 weeks. Insignificant findings were reported for all three variables when measured from baseline to 12 weeks. In conclusion, the findings of the pilot study suggest that the intervention was effective in producing significant increases in PA in a sample of PLWHA of low SES over six weeks. Careful consideration of behavioural constructs, such as self-efficacy, can help WLWHA of low SES to adopt regular PA as a complementary therapy for managing their health.

Introduction

Amongst people living with HIV and AIDS (PLWHA), physical activity (PA) is associated with improvements in mental and physical well-being (Fillipas, Cicuttini, Holland, & Cherry, 2013; MacArthur, Levine, & Birk, 1993; Neidig, Smith, & Brashers, 2003). Aerobic and strength training improve the profile of lymphocytes (O'Brien, Nixon, Glazier, & Tynan, 2004), body composition, muscle strength and quality of life (Spence, Galantino, Mossberg, & Zimmerman, 1990).

In Africa, Murenzi (2011) reported that PLWHA, particularly women (Smit et al., 2006), engage in insufficient PA, which may be related to low socioeconomic status (SES) (Economic and Social Research Council, 2014).

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