

Correlates of physical activity among people living with and without HIV in rural Uganda

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Introduction

- Antiretroviral therapy (ART) has increased survival for people with HIV (PWH) in sub-Saharan Africa
- Cardiovascular disease (CVD) is now a leading cause of death
- Exercise has been shown to reduce CVD mortality
- However, there are few data on physical activity (PA) levels among PWH in region

Objectives

- To describe the distribution of PA in PWH on ART and age matched people without HIV (PWOH)
- To identify correlates of PA
- To explore how PA differs by demographic and cardiometabolic factors, and whether these factors confound relationships with HIV serostatus.

Methods

- Enrolled PWH and age- and gender-matched people without HIV
- Captured data on socio-demographics and history of cardiovascular diseases
- PA was assessed using an adapted International Physical Activity Questionnaire
- Linear regression to compare PA between groups

Results

- The cohort (n=309) was evenly divided by sex (158/309 [51%] male) and HIV serostatus (155/309 [50%] PWH)
- Participants generally engaged in high levels of PA, with 81% (251/309) meeting criteria for high PA (**Fig 1**).
- PA was higher in PWOH than PWH (9128 vs 7152, $p < 0.001$), and a greater proportion of PWOH (88.3%; 136/154) met the criteria for high PA category compared to PWH (74.2%; 115/155, **Figure 2A**).
- Those with the most assets have significantly lower PA (OR=0.12, 95%CI 0.04, 0.34, $p < 0.001$)

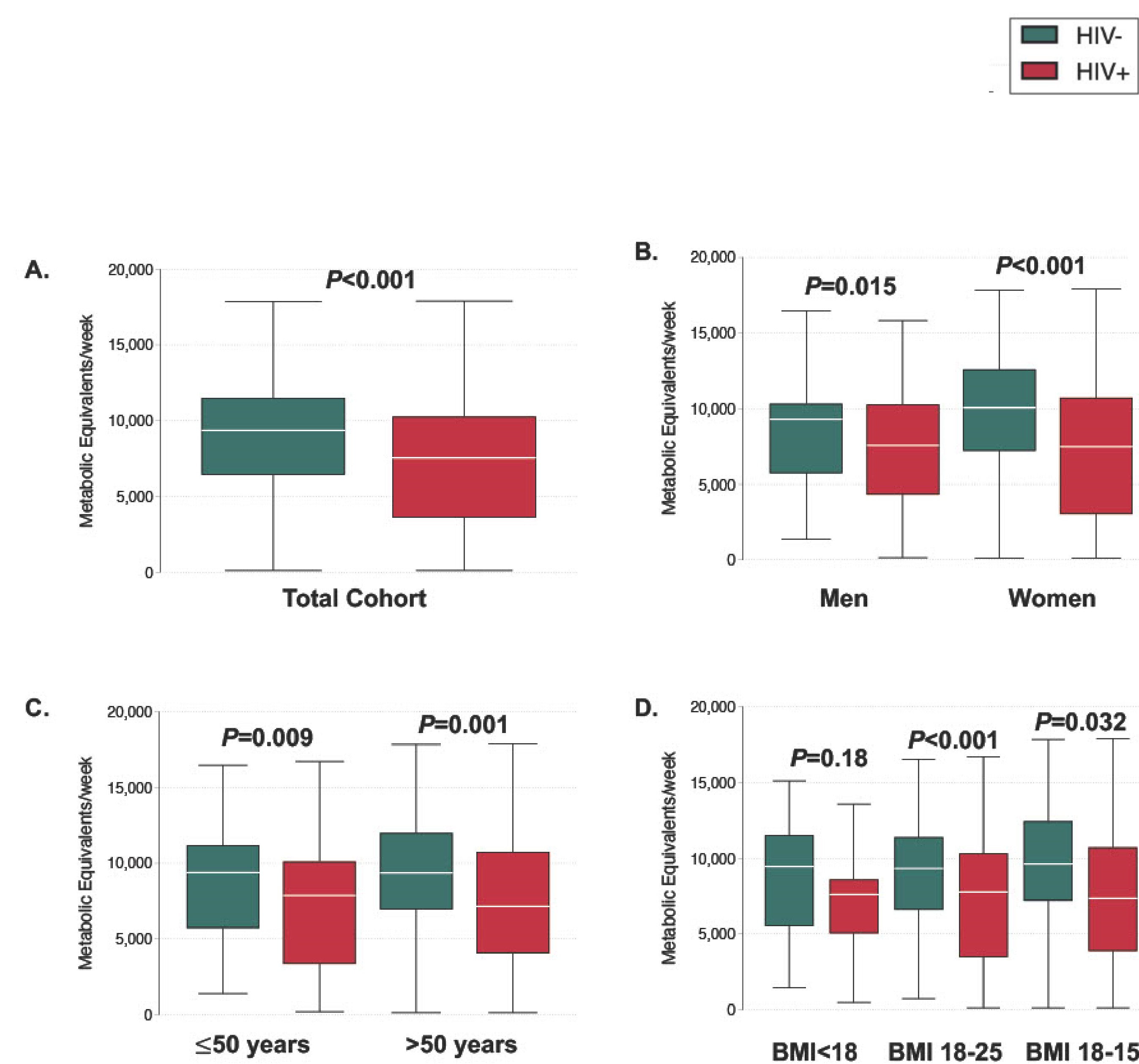


Fig 1. Distributions of physical activity by serostatus

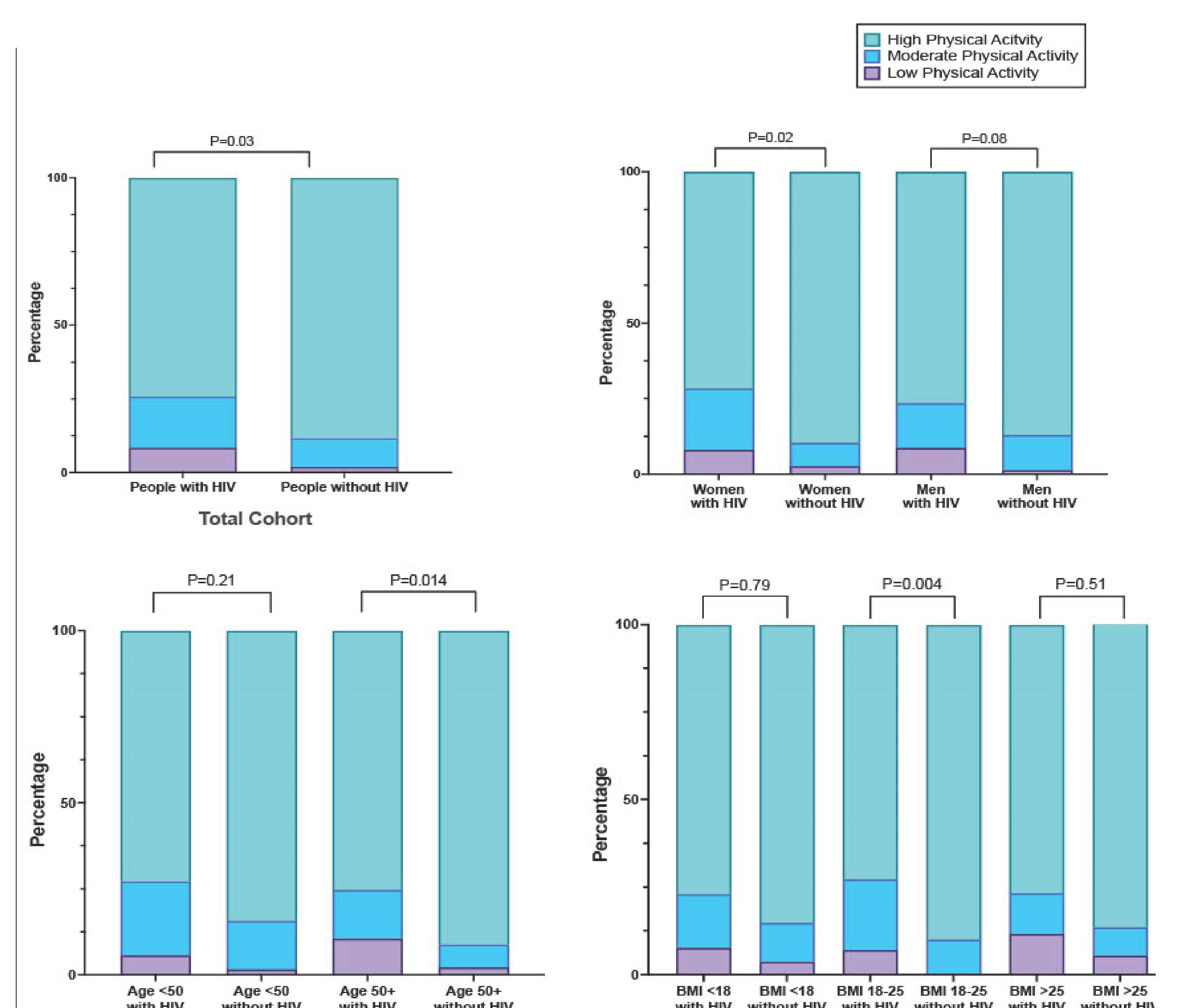


Fig 2. Categorical physical activity level stratified by serostatus, gender, age, and BMI

Discussion and Conclusion

- PWH in Uganda have lower levels of physical activity than PWOH
- If confirmed in other settings, these findings signal a need for consideration of PA counselling and behaviour change interventions for PWH in the region to help realize the multifaceted beneficial impacts of PA on health for this population.

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