



POSTER PRESENTATION

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# The international physical activity questionnaire overestimates moderate and vigorous physical activity in Human Immunodeficiency Virus compared with accelerometry

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## Aim

The study aimed to evaluate the validity of the last 7-day, self administered version of the International Physical Activity Questionnaire long form in an human immunodeficiency virus-infected population, using accelerometry as the objective criterion.

## Materials and methods

Thirty male participants (mean age 53.2 years (SD = 10.2)) took part in the study. The ActiGraph GT1M accelerometer was worn during all waking hours for seven days and the questionnaire was completed on day 7. Agreement between measures was assessed using correlations and modified Bland-Altman analysis.

## Results

The total number of MET-minutes per week reported on the questionnaire correlated modestly with the main criterion measure of total weekly activity counts measured by the accelerometer ( $r = 0.41$ ,  $p = 0.023$ ). However, time spent in both moderate and vigorous physical activity was over reported on the questionnaire. The mean difference compared to accelerometer was 546.63 minutes per week (95% CI 217.1 to 871.2 minutes) for moderate and 295.33 minutes per week (95% CI 88.08 to 502.6 minutes) for vigorous activity. The tool's sensitivity to detect individuals with insufficient physical activity to derive a health benefit was low (9.5%), however specificity was high (100%).

## Discussion

We conclude that self-reported physical activity measured by this questionnaire correlates with the objective criterion of accelerometry, but substantial over-reporting occurs. The tool may be useful in screening physical activity levels but should not be used to determine precise amounts of activity.

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