## Title:

Physical activity and quality of life in people living with HIV

# **Short title:**

Physical activity in people living with HIV

#### **Authors:**

K Martin<sup>1</sup>, F Naclerio<sup>3</sup>, B Karsten<sup>3</sup>, J H Vera<sup>1</sup>

## **Affiliations:**

- 1. Brighton and Sussex University Hospitals NHS Trust
- 2. Department of Global Health and Infection, Brighton and Sussex Medical School
- 3. Department of Life and Sports Sciences, University of Greenwich

Key Words: HIV, physical activity, exercise, mental wellbeing, quality of life,

### **ABSTRACT**

As life expectancy in people living with HIV (PWH) has increased, the focus of management has shifted to preventing and treating chronic illnesses. Regular physical activity (PA) has been shown to reduce the impact of HIV on both physical and mental health. Our objectives were to assess the PA levels of PWH compared to HIV negative controls; investigate factors associated with PA; and determine the effect of PA levels on quality of life and mental well-being. We recruited 110 PWH and 110 HIV negative controls in this cross-sectional, single-centre study. Physical activity, quality of life and mental well-being were assessed using the rapid assessment of physical activity tool, EQ-5D-5L Questionnaire, and the Warwick-Edinburgh Mental Well-being Score. Binary logistic regression and multiple linear regression were used to identify factors associated with PA levels and mental well-being scores respectively. PWH were less likely to meet the WHO-recommended PA requirements compared to controls (50.0% vs. 64.5%; p = 0.041) and had significantly lower mental wellbeing and quality of life scores. Additionally, in PWH higher PA levels were associated with improved self-rated quality of life scores (p = 0.027). Our results suggest that targeted exercise programmes could have a beneficial effect on health status in PWH.

AIDS Care Psychological and Socio-medical Aspects of AIDS/HIV Published inline on 2<sup>nd</sup> Feb 2019 Full text from https://www.tandfonline.com/doi/full/10.1080/09540121.2019.1576848