

The International 22nd Puijo Symposium
"PHYSICAL EXERCISE IN CLINICAL MEDICINE –
CRITICAL APPRAISAL OF SCIENTIFIC EVIDENCE"
June 24 - 28, 2014 Kuopio, Finland

OBJECTIVE PROFILING OF PHYSICAL ACTIVITY AND TIME SEDENTARY IN COPD PATIENTS GROUPED BY LUNG FUNCTION AND SELF-REPORTED DISABILITY

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Objectives:

As a collection of lung conditions, Chronic Obstructive Pulmonary Disease (COPD) costs the NHS in excess of £800 million per year. Within COPD patients, a significant number with low levels of airway obstruction report high levels of perceived disability. This may be attributable to the viscous cycle of physical inactivity seen with progressive COPD-induced breathlessness. The aim of this study is to objectively profile the time spent in physical activity (PA) and sedentary of COPD patients by spirometer classification and by self-reported breathlessness (MRC score).

Methods:

The Physical Activity and Respiratory Health (PhARaoH) study is one of the largest observational studies objectively measuring PA in COPD patients; recruiting approximately 650 adults aged between 40 and 75 years between January and April 2014. From these 650 participants it is anticipated that ~450 will have varying degrees of COPD. COPD patients are recruited through participating General Practices across Leicestershire and Rutland, UK. Participants' activity is measured using a wrist worn ActiGraph wGT3X-BT accelerometer for 7 days. A valid day is defined as ≥ 10 hrs of valid wear and participants with at least one valid day are included in analysis. A MANCOVA, controlling for age, gender, BMI and monitor wear time, will be used to determine differences in activity and time sedentary between patients grouped by MRC score and spirometric classification. Visual plots of data will be used to examine time-of-day differences in activity and time sedentary between groups. All analyses will be conducted using SPSS21.0 and alpha will be set at 0.05.

Results:

To be updated in May 2014.

Conclusion:

The results of this large scale observational study will provide a detailed understanding of how physical activity and sedentary behaviours relate to objective and self-reported disability in COPD patients; informing subsequent large-scale interventions on how to delay disease progression and development.