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## **M11 A RANDOMISED CONTROLLED FEASIBILITY TRIAL OF A PHYSICAL ACTIVITY BEHAVIOUR CHANGE INTERVENTION COMPARED TO SOCIAL INTERACTION IN HUNTINGTON'S DISEASE**

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### **Background**

Regular physical activity has health benefits for people with Huntington's disease (HD), however consistent engagement is challenging. We report the results of a single blind, multisite, randomised controlled feasibility trial of a physical activity intervention in HD.

### **Methods**

Participants were randomly assigned to physical activity or social contact control interventions. The primary outcome was feasibility. Short-term benefit was assessed with the Physical Performance Test (PPT), a measure of functional ability. A range of exploratory outcomes including home and community mobility (Life Space), self-efficacy (Lorig), physical activity (International Physical Activity Questionnaire (IPAQ)), as well as disease-specific measures of motor and cognitive function were evaluated. Intervention fidelity and delivery costs were established. The trial was registered (ISRCTN 65378754 (13/03/2014)).

### **Results**

We recruited 46 people with HD; 22 were randomised to the physical intervention (n = 16 analysed); 24 to social contact (n = 22 analysed). Retention, fidelity and adherence met predetermined criteria. IPAQ scores in the physical intervention group were 142% higher (1.42; 95% CI: [22%, 653%]); and self-efficacy for exercise (1.6; 95% CI: [0.6, 2.7]) was also higher. Life Space scores were 12 points different between groups; 95% CI: [2, 27]. Cognitive function was better in the physical intervention group with 2.9 more correct responses (95% CI: [0.01, 5.9]) on the Symbol Digit Modality test. There were no differences in other exploratory outcome measures and in particular no between-group differences in the PPT (treatment effect: 0.3, 95% CI: [2.1, 2.7]). Mean (SD) physical intervention per session cost was £56.97 (£34.72).

### **Conclusion**

A physical activity coaching intervention is feasible, can improve self-efficacy, physical activity behaviours and cognitive function in people with HD and represents excellent value for money in a devastating disease.

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