

Lenus: Research Repository



Behavioural change for Parkinson#s Disease: A randomised controlled feasibility study to promote physical activity and exercise adherence among people with Parkinson#s Disease

Item Type	Poster
Authors	Ahern, Leanne;Timmons, Suzanne;Lamb, Sarah;McCullagh, Ruth
Publisher	Health Service Executive
Rights	CC BY 4.0
Download date	2026-05-20 22:10:01
Item License	https://creativecommons.org/licenses/by/4.0/
Link to Item	https://hdl.handle.net/10147/646920



Behavioural change for Parkinson’s Disease: A randomised controlled feasibility study to promote physical activity and exercise adherence among people with Parkinson’s Disease

Leanne Ahern^{1,2}, Prof. Suzanne Timmons^{3,4}, Prof. Sarah Lamb⁵ and Dr. Ruth McCullagh¹

1. Department of Physiotherapy, School of Clinical Therapies, University College Cork, Cork, Ireland

2. Physiotherapy Department, St Mary’s Primary Care Centre, St Mary’s Health Campus, Cork, Ireland

3. Centre for Gerontology and Rehabilitation, School of Medicine, University College Cork, Cork, Ireland

4. Westfield Integrated Care Centre, Cork, Ireland

5. College of Medicine, University of Exeter, Exeter, UK

Contact: leanne.ahern@hse.ie

Introduction

Exercise is essential for people with Parkinson’s (PwP) — it improves both motor and non-motor symptoms (1) and may even have neuroprotective effects that slow disease progression (2, 3)

A large Cochrane review (156 studies, 7,939 participants)(4) found that multiple forms of exercise are beneficial, improving symptom severity, mobility, and quality of life. However, no single type of exercise stood out as superior, suggesting that **personal preferences** should guide programme design to support motivation and adherence.

Yet, despite the strong evidence, over 70% of PwP with mild disability still don’t meet recommended activity levels (5,6), highlighting the need to explore ways to motivate and support ongoing exercise, and the importance of this research.

Aim

To test the feasibility of additional behavioural change (BC) activities, delivered with an existing Parkinson’s Exercise Program, by evaluating recruitment, study procedures/resources, acceptability.

Behavioural Change (BC) Components

Activity Diary

Peer Support

Exercise-specific Education

Goal Setting + Barrier Identification

Intervention

12-week Exercise and Education program (PEEP).

Exercise

Progressive strength, balance and functional exercises. Progressively challenging cognitive tasks incorporated weeks 6-12
From Week 6 participants had been encourage to rotate leadership of the class with the aim to the independently managing the class by week 12

Education

Weekly education sessions delivered by multidisciplinary team.
Signpost to services, The role of the healthcare profession, Initial education on medication, symptoms, diet, and aids.

Methods

16 participants (8M and 4F)

Intervention group (n=8) : PEEP+BC

Control group (n=8): PEEP only

Outcomes

Feasibility Outcomes

Recruitment rates

Adherence

Acceptability

Performance Outcomes

Exercise Self Efficacy (ESES)

Walking Activity (Stepwatch4)

Physical Fitness (6MWT)

QoL (PDQ-39)

Results

Recruitment process and resulting sample characteristics.

We successfully recruited sixteen. Uptake rate of 62% (seven declined to participate).

Adherence and fidelity to the program

Overall attendance for PEEP+BC (86%) and PEEP (75%) was high.

PEEP group attended the education sessions (69%) noticeably less than the exercises sessions (range 81% - 87%)

PEEP+BC participants adhered more to the twice-weekly home exercises than the PEEP group (83% vs 70%).

Most of the PEEP+BC group increased home-exercise adherence, from the suggested twice pw. Some PEEP participants did not complete any of the home program (n=3); others remained at twice weekly sessions (n=5).

Acceptability of behaviour change activities (PEEP+BC only) Activity Diary

- Most important by half of the respondents: “structure”, “routine” and “accountability”. Participants “did not want to leave a blank space”.
- “Chore”
- Completion mixed, with varying levels and data input.

WhatsApp Group

- Least important by all respondents: to gather information, not for peer support.
- Difficultly with texting, “not good with technology”.
- All the participants preferred the peer support in class

Exercise Specific Education

- Keen exercisers found it of “no real benefit”: already well informed about exercise
- Less keen exercisers: “it provided understanding...and provided context and meaning to the exercises”.

Goal Setting

- Some viewed as most important : “liked the accountability of having the goals reviewed” and they enjoyed “learning the skills to adapt and modify goals.

Discussion and Implications

- Exercise and behavioural change activities were **feasible** and **acceptable** by the participants.
- The **group dynamic** was universally enjoyed.
- Future trials will include tailoring the intervention to the participants’ suggestions:
- Adaptations to the exercise diary (encompassing goal setting)
- Providing videos of the exercises, involving family members more in the exercises
- Reducing the number of education sessions
- Including information about available support services.

- Clinicians should profile the individual’s motivation type and consider their baseline understanding of exercise to select the appropriate behavioural change technique
E.g. focus on **education** and **goal setting** for **intrinsically motivated** participants; focus on **group setting**, **action planning** and **exercise logs** for those **extrinsically motivated**.