

Power-PD: Empowering people with Parkinson's Disease (PD) through flexible exercise

Submission date 22/06/2026	Recruitment status Recruiting	☒ Prospectively registered ☐ Protocol
Registration date 23/06/2026	Overall study status Ongoing	☐ Statistical analysis plan ☐ Results
Last Edited 23/06/2026	Condition category Nervous System Diseases	☐ Individual participant data ☒ Record updated in last year

Plain English summary of protocol

Background and study aims

Parkinson's affects the body's nervous system. It causes people to feel stiff, shake and have difficulty walking and keeping their balance. Exercise is helpful, but people with Parkinson's exercise less. They say they need support to exercise regularly, especially if they have trouble walking or don't live near to an exercise group. An online exercise group could support people to be physically active, which can become a habit to manage their Parkinson's. But exercising online makes it difficult to talk to and see each other. People with Parkinson's want flexible and hybrid options for exercise. This is supported by other research. A flexible exercise group could allow people choice to attend in-person with other people or online from home. This might help empower people with Parkinson's to exercise regularly. To understand this, we will design and deliver a study which tests whether a combined (hybrid) exercise intervention (Power-PD) is possible, and importantly if it is an intervention people want and need. Power-PD is an exercise group for people with Parkinson's designed to offer flexible access through either attending in-person or remotely from home and develop long-term exercise habits.

Who can participate?

Participants may be able to take part in this study if they have Parkinson's disease, are not having any changes to their Parkinson's medication and are fit and able to join in an intensive exercise class. To take part in this study, they need to understand and speak English well enough to follow instructions and take part in group discussions.

What does the study involve?

Power-PD is for people with less severe Parkinson's who do not have great difficulty with their walking and balance. Power-PD is an exercise and self-management group. It consists of: 1. An exercise circuit (45-60 minutes) which uses exercises specifically designed for people with Parkinson's disease. 2. A peer-supported group conversation to discuss how to manage your Parkinson's through being physically active. 3. Weekly activities to support you to be active in-between the classes and build skills to stay active in the future. The hybrid delivery means participants can take part in the class in-person or online through Zoom. They have the choice to decide for each class whether they would like to attend in-person or online. Participants will attend the group 1x per week for 12 weeks.

What are the possible benefits and risks of participating?

Benefits from taking part include being in an exercise class for people with Parkinson's. Although we don't know yet if Power-PD is helpful, other research says exercise has many health benefits for people with Parkinson's. You will get to meet other people with Parkinson's from your local area and together learn skills to help you manage your Parkinson's symptoms. This study will help us learn how the NHS could support people with Parkinson's to look after their health through exercise and being active. You can help us to do this.

There are no major risks for taking part. The study will require your time and effort. Doing exercise can cause some aches and make you feel tired. This should only be for a short while. Some of the group chats will cover topics on the challenges of PD. These chats will be with people who may have similar experiences as you. They will be in a supportive group with expert clinicians who can offer support and advice.

Where is the study run from?

The study is being conducted by University College London (UCL) (UK)

When is the study starting and how long is it expected to run for?

August 2026 until December 2027

Who is funding the study?

The study is funded by the National Institute of Health and Care Research (NIHR) (UK)

Who is the main contact?

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Contact information

Type(s)

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Additional identifiers**Integrated Research Application System (IRAS)**

329635

Central Portfolio Management System (CPMS)

56568

National Institute for Health and Care Research (NIHR)

305254

Study information**Scientific Title**

A hybrid delivery of exercise for physical self-management in people with Parkinson's Disease – a single-arm feasibility study with pre and post-test design

Acronym

Power-PD

Study objectives

Aims:

1. To develop a novel intervention (Power-PD) designed to support people with Parkinson's disease to develop sustained physical activity habits
2. To explore the acceptability, feasibility and fidelity of Power-PD, a novel exercise and self-management intervention designed for people with Parkinson's disease
3. To explore the potential benefit (signal of effect) of Power-PD for people with Parkinson's disease in relation to their physical activity habits and health and well-being
4. To determine if a future definitive trial of Power-PD is warranted

Objectives:

1. Use co-design to develop Power-PD. This will include identifying an appropriate exercise intervention and strategies for facilitating self-management and behaviour change to support sustained physical activity habits
2. Develop a training programme for healthcare professionals to deliver Power-PD
3. Undertake a feasibility study to determine the acceptability, feasibility and fidelity of the Power-PD trial components. This will be achieved by:

- 3.1. Assessing feasibility of recruitment to and acceptability of being randomised within the Power-PD trial
- 3.2. Evaluating the representativeness of the study population to the wider Parkinson's population and informing future recruitment strategies
- 3.3. Evaluating engagement with and adherence to the Power-PD intervention
- 3.4. Clarifying the time needed to collect, clean and analyse data
- 3.5. Evaluating the practicality of delivering the intervention in the proposed setting as intended
- 3.6. Confirming the choice of clinical outcome measures
4. Explore the signal of effect of the Power-PD intervention in relation to physical activity habits and health and well-being
5. Determine the feasibility of collecting health economic data to assess cost effectiveness in a future definitive trial
6. Undertake a comprehensive process evaluation of the Power-PD intervention to guide understanding of the feasibility of the intervention, support optimising its design and evaluation, and determine the factors promoting or inhibiting the implementation of Power-PD in the NHS. This includes exploring:
 - 6.1. Contextual factors that shape theories of the potential mechanisms of impact
 - 6.2. Contextual factors that affect intervention mechanisms, outcomes and implementation
 - 6.3. Causal mechanisms within the study context that contribute to the effects, or lack of effects, of Power-PD
 - 6.4. Implementation processes, including how the intervention is delivered and training is provided
 - 6.5. Intervention delivery, including fidelity, adaptations and the optimum dosage of the Power-PD intervention required to elicit a change in behaviour
 - 6.6. Power-PD mechanisms of impact as perceived by participants and those delivering the intervention

Ethics approval required

Ethics approval required

Ethics approval(s)

Approved 07/05/2026, Queen Square Research Ethics Committee (2 Redman Place, Stratford, London, E20 1JQ, United Kingdom; no telephone number provided; queensquare.rec@hra.nhs.uk), ref: 26/LO/0321

Primary study design

Interventional

Allocation

N/A: single arm study

Masking

Open (masking not used)

Control

Uncontrolled

Assignment

Single

Purpose

Treatment

Study type(s)

Health condition(s) or problem(s) studied

Parkinson's Disease

Interventions

Power-PD, Power-PD is a 12-week physical self-management intervention designed specifically for people with Parkinson's. It consists of Parkinson's-specific exercise and peer-supported discussions to support physical activity habits. It is delivered in a hybrid format allowing participants to flexibly attend either online or in-person.

A physiotherapist and rehabilitation assistant will run the class. They will have experience working with people with Parkinson's. They'll give feedback, adjust exercises as needed, and help everyone feel supported.

Each weekly session lasts 90 minutes. People can join in person or online (hybrid approach). Each group will have up to 10 participants to help manage safety during the class. A safety check for participants will be completed prior to participating in the group to make sure they are safe to do the exercise class at home.

Each weekly class will involve a 45-60-minute exercise circuit that includes:

1. Warm-up and cool-down.
2. Exercises that are specific to people with Parkinson's disease and focus on strength, balance, aerobic fitness, flexibility and coordination. These exercises are designed to challenge both the body and the brain but will be tailored to each person's ability.

Following the exercise circuit there will be a 20-30-minute peer support session where participants will share discussions with each other. Each week will have a focus and address topics embedded in behaviour changes and self-management principles such as:

Reflection, sharing experiences, goal setting, learning from previous experiences, identifying what makes it easier and harder to be physically active, learn strategies to stay active and motivated, and identifying future physical activity opportunities

Participants will be provided with a Power-PD booklet. This includes helpful tools designed to support a change in behaviour to be more physically active including: a physical activity diary, weekly reflection guides, exercise information and guidance, goal-setting worksheets. The booklet will be used to facilitate the peer-support sessions. It will also contain activities participants can choose to complete in-between the weekly classes that will support being physically active.

Intervention Type

Other

Primary outcome(s)

1. Acceptability measured using study specifically designed questionnaire, interviews, Participant demographic data at baseline, 12 weeks, 24 weeks

2. Feasibility measured using data on recruitment, adherence, engagement, completion rates, adverse events, and collection of health economic data at baseline, 12 weeks, 24 weeks

3. Fidelity measured using interviews, session observation, fidelity checklist at baseline, 12 weeks, 24 weeks

Key secondary outcome(s)

1. Physical activity measured using International Physical Activity Questionnaire (IPAQ) – short form at baseline, 12 weeks, 24 weeks
2. Physical activity measured using Physical activity diary at baseline, 12 weeks, 24 weeks
3. Physical activity measured using GeneActiv Body worn Accelerometer at baseline, 12 weeks, 24 weeks
4. Parkinson's symptoms measured using Movement Disorders Society Universal Parkinson's Disease Rating Scale (MDS-UPDRS) with Schwab & England Scale at baseline, 12 weeks, 24 weeks
5. Physical function measured using Timed Up and Go (TUG) at baseline, 12 weeks, 24 weeks
6. Self-efficacy measured using Self-efficacy for exercise (SEE) questionnaire at baseline, 12 weeks, 24 weeks
7. Participant importance and confidence measured using Importance/Confidence visual analogue scale at baseline, 12 weeks, 24 weeks
8. Anxiety and depression measured using Hospital Anxiety and Depression Scale (HADS) at baseline, 12 weeks, 24 weeks
9. Quality of life measured using Patient-Reported Outcomes Measurement Information System (PROMIS) at baseline, 12 weeks, 24 weeks
10. Quality of life measured using EuroQol 5 domain 5 level (EQ-5D-5L) at baseline, 12 weeks, 24 weeks
11. Function and well-being measured using Parkinson's Disease Questionnaire-8 (PDQ-8) at baseline, 12 weeks, 24 weeks
12. Service utilisation measured using Client Service Receipt Inventory (CSRI) at baseline, 12 weeks, 24 weeks
13. Capability measured using ICEpop CAPability measure for Older people (ICECAP-O) at baseline, 12 weeks, 24 weeks

Completion date

31/12/2027

Eligibility

Key inclusion criteria

1. Community-dwelling adults with a clinical diagnosis of idiopathic Parkinson's disease
2. Stable medication (if taking any) for >3/52
3. Able to mobilise independently with/without walking aid outdoors and independently without walking aid indoors (equivalent to Hoehn & Yahr (PD rating scale) I-III)

Healthy volunteers allowed

No

Age group

Mixed

Lower age limit

18 Years

Upper age limit

120 Years

Sex

All

Total final enrolment

0

Key exclusion criteria

1. Inability to participate in exercise e.g., due to physical, mental or cognitive co-morbidities e.g., heart or lung conditions, uncontrolled diabetes ,other neurological disorders, cancer or musculoskeletal conditions e.g., back pain or severe arthritis
2. Inability to consent or complete outcome measures
3. Severe, unpredictable motor fluctuations
4. Participated in an exercise and/or self-management intervention specifically for Parkinson's disease within the last 12 months

Date of first enrolment

01/08/2026

Date of final enrolment

31/03/2027

Locations**Countries of recruitment**

United Kingdom

England

Study participating centre

Central and North West London NHS Foundation Trust

Trust Headquarters

350 Euston Road

Regents PLACE

London

England

NW1 3AX

Study participating centre

Royal Free London NHS Foundation Trust

Royal Free Hospital

Pond Street

London

England

NW3 2QG

Study participating centre
University College London Hospitals NHS Foundation Trust
250 Euston Road
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Sponsor information

Organisation
University College London

ROR
<https://ror.org/02jx3x895>

Funder(s)

Funder type
Government

Funder Name
National Institute for Health and Care Research

Alternative Name(s)
National Institute for Health Research, NIHR Research, NIHRresearch, NIHR - National Institute for Health Research, NIHR (The National Institute for Health and Care Research), NIHR

Funding Body Type
Government organisation

Funding Body Subtype
National government

Location
United Kingdom

Results and Publications

Individual participant data (IPD) sharing plan
The datasets generated during and/or analysed during the current study will be stored in a non-publicly available repository. The datasets generated during and/or analysed during the current

study will be stored in a non-publicly available repository. Data will be stored within University College London (UCL) secure data environments, including the UCL Data Safe Haven and UCL research data repository. The data that will be shared will include de-identified participant-level quantitative data (e.g., outcome measures such as physical activity, quality of life, and clinical assessments) and pseudonymised qualitative data (e.g., interview transcripts). Data will become available following publication of the main study results and completion of the study, with retention in line with UCL policy (minimum of 10 years for research data and 5 years for study records). Access to data will be granted on reasonable request to the Chief Investigator (Prof Anette Schrag; contact via UCL) to qualified researchers for scientifically valid research purposes. Requests will be subject to review by the study team and sponsor, and may require a data sharing agreement to ensure compliance with GDPR and UK data protection regulations. All shared data will be anonymised or pseudonymised prior to sharing. Identifiable data will not be shared. Participant consent for use of data in future research and sharing of anonymised data will be obtained during the informed consent process. Ethical and legal restrictions apply due to the sensitive nature of health data and GDPR requirements; therefore, open public release of participant-level data is not appropriate.

IPD sharing plan summary

Stored in non-publicly available repository