Exercise to improve motor and non-motor symptoms in Parkinson's disease

Submission date	Recruitment status	[X] Prospectively registered
02/10/2024	No longer recruiting	☐ Protocol
Registration date	Overall study status	Statistical analysis plan
04/10/2024	Ongoing	Results
Last Edited	Condition category	Individual participant data
04/10/2024	Nervous System Diseases	Record updated in last year

Plain English summary of protocol

Background and study aims

People living with Parkinson's disease (PD) may experience both motor and non-motor symptoms. Ample evidence indicates the benefits of exercise interventions in improving symptoms in patients with PD. This research aims to examine the effect of an exercise intervention on decreasing those symptoms to improve the quality of life of PD patients by using both objective measures and exploring patients' perspectives and inputs.

Who can participate?

Patients with a diagnosis of early to mid-stage PD who are aged between 40 to 80 years old

What does the study involve?

Participants in this study will be randomly assigned to either an LSVT BIG intervention group or a control group (without receiving the LSVT BIG during this study). The measures to be taken include both movement-related (such as mobility, and balance) and non-movement-related (e.g., fatigue) assessments. All participants will undergo the same measurements.

What are the possible benefits and risks of participating?

There is no direct benefit to the participants. However, the findings of this research are expected to contribute to evidence used to guide clinical management of this disease. Possible risks may be associated with falls in the performance of outcome measures such as mobility and balance evaluation. However, the risk level is lower than minimal as the tests will be administered by a licensed therapist, and a gait belt will be used to prevent any risk of falls.

Where is the study run from?

Impact Physical Therapy and Franklin Pierce University Arizona Doctor of Physical Therapy manage this study.

When is the study starting and how long is it expected to run for? January 2024 to December 2025

Who is funding the study? LSVT Global Inc.

Contact information

Type(s)

Public, Scientific, Principal investigator

Contact name

Dr RuiPing Xia

Contact details

14455 W Van Buren Street A-100 Goodyear United States of America 85338 +1 6235182386 xiar@franklinpierce.edu

Type(s)

Public, Scientific, Principal investigator

Contact name

Dr Tamara Hefferon

Contact details

7727 W Deer Valley RD; STE 210 Peoria United States of America 85382 +1 4802980212 thefferon@impactptaz.com

Additional identifiers

Clinical Trials Information System (CTIS)

Nil known

ClinicalTrials.gov (NCT)

Nil known

Protocol serial number

Nil known

Study information

Scientific Title

LSVT-BIG: improving motor and non-motor symptoms in Parkinson's disease: a mixed-method study

Acronym

LSVT-BIG

Study objectives

LSVT-BIG treatment will improve motor and non-motor symptoms in patients with Parkinson's disease.

Ethics approval required

Ethics approval required

Ethics approval(s)

approved 18/07/2024, Franklin Pierce University Institutional Review Board (IRB) (40 University Drive, Ridge, 03461, United States of America; +1 6038994294; Buddingtonl@franklinpierce. edu), ref: RX07182024

Study design

Mixed-methods study

Primary study design

Interventional

Study type(s)

Treatment, Efficacy

Health condition(s) or problem(s) studied

Parkinson's disease

Interventions

Lee Silverman Voice Training (LSVT) BIG therapy is the intervention to be studied. LSVT BIG is an intensive, effective, one-on-one treatment delivered by an LSVT-BIG certified physical therapist created to help people with Parkinson's disease (PD) address walking, balance and other activities of daily living or even job-related tasks. LSVT-BIG includes one-hour session daily, four sessions per week, for four weeks in a row. Daily homework and carryover exercises are also provided. Participants with PD will be randomly assigned by a computer-generated program to either LSVT-BIG group or control group.

Intervention Type

Behavioural

Primary outcome(s)

The following primary outcome measures will be performed at baseline, immediate, 3, and 6 months post-intervention:

- 1. Non-motor symptoms will be measured by Movement Disorder Society (MDS) Non-motor symptoms
- 2. Fatigue is measured by the Parkinson's Fatigue Scale

- 3. Motor symptoms will be measured by the MDS-Unified PD Rating Scale Parts 2 and 3.
- 4. Motor function is measured by Mini-Balance Evaluation Systems Test (MiniBEST) and 5x Sit-To-Stand.

Key secondary outcome(s))

Quality of Life is measured by the Parkinson's Disease Questionnaire - 39 at baseline, immediate, 3, and 6 months post-intervention

Completion date

31/12/2025

Eligibility

Key inclusion criteria

- 1. Ages at least 40 years old
- 2. Have a medical diagnosis of Parkinson's disease (PD) at an early to mid-stage

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Mixed

Lower age limit

40 years

Upper age limit

80 years

Sex

All

Key exclusion criteria

- 1. Those who had participated in an LSVT-BIG program in the last year
- 2. Those who are currently enrolled in another exercise intervention

Date of first enrolment

01/11/2024

Date of final enrolment

31/10/2025

Locations

Countries of recruitment

United States of America

Study participating centre Impact Physical Therapy 7727 W Deer Valley Rd Ste 210 Peoria United States of America 85382

Sponsor information

Organisation

Impact Physical Therapy

Funder(s)

Funder type

Industry

Funder Name

LSVT Global Inc.

Results and Publications

Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study will be available upon request from Tamara Hefferon at hefferont@franklinpierce.edu. De-identified data on the the primary outcomes as outlined previously at the different time points of interest outlined will be shared with the investigators of the study for statistical analysis. Participant consent will be obtained at the time of study enrollment.

IPD sharing plan summary

Available on request