

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

20 Jun 2026

### Effect of equilibrium exercise on physiologic, movement and balance variables among Parkinson's patients

#### Protocol summary

##### Study aim

Comparing PD patients' balance following a period of selective balance exercise  
Comparing PD patients' lower body power following a period of selective balance exercise  
Comparing PD patients' walking time following a period of selective balance exercise

##### Design

A pretest-posttest scheme was developed in two groups. This is a quasi-experimental study. A total of PD patients visiting Imam Ali Hospital of Zahedan, Iran were randomly selected. They suffered from moderate PD. The patients were randomly assigned in two 15-member groups. Inclusion Criteria - No history of specific disease - Lack of regular exercise in the past month  
Written consents were taken from the patients. Then the participants are familiarized with the exercise protocol. Control group has no exercise. The experiment group experiences 8 weeks of training (3 sessions per week). In the first 15-minute session, 5 minutes is dedicated to warm up, 8 for the exercise, and 2 minutes for cooling. Two minutes are added to the exercise until the 8th week. The duration of sessions is gradually added to 45 minutes.

##### Settings and conduct

After co-ordination and obtaining the necessary permits, patients are introduced to the clinic and, after filling out the personal profile and conscientious intention of participating in the research by the patient, an initial test is performed and patients are familiar with the practice protocol and after the end of eight weeks again Tests are conducted for the final evaluation of the intervention and control group. The control group is untrained.

##### Participants/Inclusion and exclusion criteria

En Diagnosis of Parkinson's Disease Moderate Severe Parkinson's Disease  
There is no specific disease  
There is no regular physical activity in the last month

##### Intervention groups

Selective equilibrium exercises emphasizing re-learning of natural movements and maintaining balance in

Parkinson's patients and the control group consisting of Parkinson's patients who only follow the drug.

##### Main outcome variables

Strength of the lower muscles of the trunk, walking speed, balance

#### General information

##### Reason for update

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20171030037099N1**

Registration date: **2018-01-21, 1396/11/01**

Registration timing: **retrospective**

Last update: **2018-01-21, 1396/11/01**

Update count: **0**

##### Registration date

2018-01-21, 1396/11/01

##### Registrant information

##### Name

##### Name of organization / entity

##### Country

Iran (Islamic Republic of)

##### Phone

+98 54 3322 3779

##### Email address

alinezhad\_shirin@yahoo.com

##### Recruitment status

**Recruitment complete**

##### Funding source

##### Expected recruitment start date

2017-11-22, 1396/09/01

##### Expected recruitment end date

2017-12-22, 1396/10/01

##### Actual recruitment start date

2017-11-22, 1396/09/01

**Actual recruitment end date**

2018-01-20, 1396/10/30

**Trial completion date**

empty

**Scientific title**

Effect of equilibrium exercise on physiologic, movement and balance variables among Parkinson's patients

**Public title**

Effect of equilibrium exercise on physiologic, movement and balance variables among Parkinson's patients

**Purpose**

Supportive

**Inclusion/Exclusion criteria****Inclusion criteria:**

Moderate Parkinson's Disease lack of Chronic cardiac disease No regular physical activity or physiotherapy intervention during the study time Not having open surgery in the past 6 months to one year

**Exclusion criteria:**

Severe back pain Urinary incontinence, chronic cough, hemorrhoids Surgery in six months to one year

**Age**

No age limit

**Gender**

Both

**Phase**

N/A

**Groups that have been masked**

*No information*

**Sample size**

Target sample size: **30**

Actual sample size reached: **30**

**Randomization (investigator's opinion)**

Randomized

**Randomization description**

30 patients with moderate severity will be divided into two groups

**Blinding (investigator's opinion)**

Not blinded

**Blinding description****Placebo**

Not used

**Assignment**

Parallel

**Other design features****Secondary Ids**

empty

**Ethics committees****1****Ethics committee****Name of ethics committee**

Ethics Committee of Zahedan University of Medical Sciences and Health Services

**Street address**

Dr Hasabie Square, Persian Gulf Blvd - Campus

Administrative Complex, Zahedan University of Medical Sciences and Health Services

**City**

ZAHEDAN

**Province**

Sistan-va-Balouchestan

**Postal code**

98167-43463

**Approval date**

2017-06-18, 1396/03/28

**Ethics committee reference number**

IR.ZAUMS.oth.REC.1396.2

**Health conditions studied****1****Description of health condition studied**

Parkinson disease

**ICD-10 code**

G20

**ICD-10 code description**

Parkinson disease

**Primary outcomes****1****Description**

balance

**Timepoint**

Before the intervention and 8 weeks after the intervention

**Method of measurement**

The Berg equilibrium test is used to measure the static equilibrium.

**2****Description**

Strength of the lower limb muscles

**Timepoint**

Before the intervention and 8 weeks after the intervention

**Method of measurement**

To measure the strength of the lower muscles of the trunk, a digital dynamometer is used.

**3****Description**

Walking time

**Timepoint**

Before the intervention and 8 weeks after the intervention

**Method of measurement**

TIME UP & GO is used for walking time.

**Secondary outcomes**

empty

## Intervention groups

1

### Description

Intervention group: The exercises are selected for 8 weeks, 3 training sessions per week, 15 minutes of exercise, and 45 minutes at the end of the course.

### Category

Rehabilitation

## Recruitment centers

1

### Recruitment center

#### Name of recruitment center

Ali Ibn Abi Talib (AS) Supplemental Hospital

#### Full name of responsible person

Shirin Ali nezhad

#### Street address

Fars-Blvd.Salmah Highway-Supplemental Hospital Ali Ibn Abi Talib (AS)

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9813693515

#### Phone

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#### Email

alinezhad\_shirin@yahoo.com

## Sponsors / Funding sources

1

### Sponsor

#### Name of organization / entity

University of Sistan and Baluchestan

#### Full name of responsible person

Research Deputy of Sistan and Baluchestan University

#### Street address

Zahedan, University Blvd, Central Organization of Sistan and Baluchestan University

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#### Province

Sistan-va-Balouchestan

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98167-40840

#### Phone

+98 54 3344 6251

#### Email

Shahdadi@hamoon.usb.ac.ir

### Grant name

### Grant code / Reference number

### Is the source of funding the same sponsor organization/entity?

Yes

### Title of funding source

University of Sistan and Baluchestan

### Proportion provided by this source

100

### Public or private sector

Public

### Domestic or foreign origin

Domestic

### Category of foreign source of funding

empty

### Country of origin

### Type of organization providing the funding

Academic

## Person responsible for general inquiries

### Contact

#### Name of organization / entity

University of Sistan and Baluchestan

#### Full name of responsible person

Ahmad Shahdadi

#### Position

Assistant Professor

#### Latest degree

Ph.D.

#### Other areas of specialty/work

Physical education Biomechanics

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University of Sistan and Baluchestan Faculty of Educational Sciences, Physical Education Department

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## Person responsible for scientific inquiries

### Contact

#### Name of organization / entity

Zahedan University of Medical Sciences

#### Full name of responsible person

Hamed Amiri Fard

#### Position

Associate professor

#### Latest degree

Specialist

#### Other areas of specialty/work

Neurology

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## Person responsible for updating data

### Contact

**Name of organization / entity**  
University of Sistan and Baluchestan  
**Full name of responsible person**  
Shirin Alinezhad  
**Position**  
Employee  
**Latest degree**  
Bachelor  
**Other areas of specialty/work**  
Physical Education  
**Street address**  
University of Sistan and Baluchestan Faculty of  
Educational Sciences, Physical Education Department  
**City**  
Zahedan  
**Province**  
Sistan-va-Balouchestan

## Sharing plan

### Deidentified Individual Participant Data Set (IPD)

Undecided - It is not yet known if there will be a plan to make this available

### Study Protocol

Undecided - It is not yet known if there will be a plan to make this available

### Statistical Analysis Plan

Undecided - It is not yet known if there will be a plan to make this available

### Informed Consent Form

No - There is not a plan to make this available

### Clinical Study Report

No - There is not a plan to make this available

### Analytic Code

No - There is not a plan to make this available

### Data Dictionary

No - There is not a plan to make this available