

Clinical Trial Protocol

Iranian Registry of Clinical Trials

27 Jul 2026

Effectiveness of Dual task training vs Nintendo Wii-fit to improve balance among older adults

Protocol summary

Study aim

- To assess the effectiveness of Dual task training vs Nintendo Wii-fit among older adults.
- To compare the quality of life and physical performance among the older adults in both groups

Design

All participants will be informed about the study and signed written informed consent before interventions. Participants for the study will be recruited from well-known older homes of Islamabad and Rawalpindi. All patients will come about into two groups the experimental group 1 and experiment group 2, keeping the process completely randomized (sealed envelope method will be used

Settings and conduct

Nijat Trust treatment center in Rawalpindi In this study simple random sampling technique is used by sealed envelop method

Participants/Inclusion and exclusion criteria

Inclusion criteria: o Both male and female above 60 yrs.
o Able to stand , no use of walking device
o Mini mental status Examination those who scored more than 24 will be enrolled in study
o Berg balance range 52 or less points out of 56 will be included
o Ability to walk 10m without the assistance of another person;
Exclusion criteria: o Psychiatric disorder, inability to walk.
o Who were unable to ambulate without assistive devices
o Musculoskeletal impairment/injury
o Medical conditions and medication affecting

Intervention groups

There are 2 groups DTT group (Dual task training) and NWT group (Nintendo Wii-fit group)

Main outcome variables

Berg balance scale, Time up and go. Physical performance test , SF-36 survey, The Activities-Specific Balance Confidence (ABC) Scale

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20211022052835N3**

Registration date: **2022-02-14, 1400/11/25**

Registration timing: **prospective**

Last update: **2022-02-14, 1400/11/25**

Update count: **0**

Registration date

2022-02-14, 1400/11/25

Registrant information

Name

Fouzia Batool

Name of organization / entity

Shifa Tameer-e-Millat University

Country

Pakistan

Phone

+92 51 8441752

Email address

fouzia_dpt.ahs@stmu.edu.pk

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2022-02-25, 1400/12/06

Expected recruitment end date

2022-05-31, 1401/03/10

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effectiveness of Dual task training vs Nintendo Wii-fit to improve balance among older adults

Public title

Effectiveness of Dual task training vs Nintendo Wii-fit to improve balance among older adults

Purpose

Treatment

Inclusion/Exclusion criteria**Inclusion criteria:**

Both male and female above 60 yrs. Able to stand , no use of walking device Mini mental status Examination those who scored more than 24 will be enrolled in study Berg balance range 52 or less points out of 56 will be included Ability to walk 10m without the assistance of another person;

Exclusion criteria:

Psychiatric disorder, inability to walk. Who are unable to ambulate without assistive devices Musculoskeletal impairment/injury Medical conditions and medication affecting

Age

From **60 years** old to **75 years** old

Gender

Both

Phase

N/A

Groups that have been masked

- Participant

Sample size

Target sample size: **42**

Randomization (investigator's opinion)

Randomized

Randomization description

In this study simple random sampling technique is used by sealed envelop method by using a computerized random number generator. The sequence of random allocation is done by an individual who has not directly involved in the study. Random numbers is written on index cards and placed in thick and opaque sealed envelopes before the study. After taking consent from the older adult for their participation in the study, the therapist opens the envelop and give the respective protocol to the individual. The study is single blinded as participants is not aware of the intervention group they are placed in. Elders will be placed either in to the experimental group 1 (Dual task training DTT) or experimental group 2 (NWF Nintendo Wii-fit) keeping the process completely randomized ,sealed envelope method will be used.

Blinding (investigator's opinion)

Single blinded

Blinding description

Prior to collecting data, participants would be informed about both the treatment techniques used in both groups; experimental group A (DDT) and experimental group B (NWF). Further they are informed that you will get one of these treatment depending upon the group written on the card inside the envelop you choose. The group A or B belongs to which way of treatment is known

to therapist but the patient doesn't know about it.

Placebo

Not used

Assignment

Parallel

Other design features**Secondary Ids**

empty

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

Institutional Review Board & Ethics Committee (IRB & EC) Shifa International Hospital Ltd. (SIH), Sh

Street address

Pitras Bukhari Road, Shifa international hospital Ltd. sector h-8/4 Islamabad

City

Islamabad

Postal code

44790

Approval date

2022-01-22, 1400/11/02

Ethics committee reference number

IRB#301-21

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

Unsteadiness on feet, Difficulty in balancing

ICD-10 code

R26.81

ICD-10 code description

Unsteadiness on feet

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

Balance

Timepoint

Before intervention, 4, 8 week after intervention

Method of measurement

Berg balance test, Time up and go test, Activities-Specific Balance Confidence (ABC) Scale

Secondary outcomes**1****Description**

Physical performance

Timepoint

Before intervention, 4 and 8 weeks after intervention
Method of measurement
Physical performance tests for measuring multiple domains of physical function

2

Description

Quality of life

Timepoint

Before intervention, 4 and 8 weeks after intervention

Method of measurement

SF-36

Intervention groups

1

Description

Intervention group: Intervention for DDT group: • Week 1-6 (30 – 40minutes) • Warm up 5mintues • Balance training • Dynamic weight shifting , shifting with eyes • Closed/open ,transfer , standing static/ • Dynamic , internal and external perturbations with timing and speed , • Reaching and walking forward and backward, tandem sideways walk , up and down stairs (plain and foam obstacles) • Week 6-12 (30-40minutes) • Dual task walking with subtraction n addition • Placing pencil in holes of covered cup , • Walking with fully filled glass of water , transferring objects at different heights , walking with Toss a ball from one hand to the other • Bounce a ball

Category

Rehabilitation

2

Description

Intervention group: Intervention for NWT group • Week 1-6 30 minutes • Warm up for 5 minutes • Soccer heading game • Yoga tree pose (once) • Week 6-12 10+10+10 minutes • Soccer heading • Ski slalom • Table tilt • Yoga tree pose (3 times)

Category

Treatment - Devices

Recruitment centers

1

Recruitment center

Name of recruitment center

Nijat Trust treatment center in Rawalpindi

Full name of responsible person

Mehak Kiran

Street address

P-330, Janglat Road, Banni, Rawalpindi,

City

Rawalpindi

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46000

Phone

+92 51 5542000

Email

mehakfaizan46@gmail.com

Web page address

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Shifa Tameer-e-Millat University

Full name of responsible person

Fouzia Batool

Street address

Pitras Bukhari Road, Shifa Tameer-e-Millat University, H-8/4, Islamabad

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fouzia_dpt.ahs@stmu.edu.pk

Grant name

Grant code / Reference number

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

No

Title of funding source

Shifa Tameer-e-Millat University

Proportion provided by this source

100

Public or private sector

Private

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

Shifa Tameer-e-Millat University

Full name of responsible person

Fouzia Batool

Position

Assistant Professor

Latest degree

Master

Other areas of specialty/work

Physiotherapy

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Person responsible for updating data

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

No - There is not a plan to make this available

Justification/reason for indecision/not sharing IPD

There is no further information

Study Protocol

Yes - There is a plan to make this available

Statistical Analysis Plan

Yes - There is 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

Not applicable

Title and more details about the data/document

There is no such plan

When the data will become available and for how long

There is no such plan

To whom data/document is available

There is no such plan

Under which criteria data/document could be used

There is no such plan

From where data/document is obtainable

There is no such plan

What processes are involved for a request to access data/document

There is no such plan

Comments