Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 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 9 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) 0

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 envelops 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

Postal code

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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+92 332 7120385

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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 scientific inquiries

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Position
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Latest degree
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Latest degree
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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