

Clinical Trial Protocol

Iranian Registry of Clinical Trials

22 Jul 2026

Effectiveness of online wheelchair mobility and transfer training methods on performance level and satisfaction in people with spinal cord injuries

Protocol summary

Study aim

Determining and comparing the level of occupational performance and level of satisfaction in occupational performance of spinal cord injury patients before, after and one month after the intervention in the intervention and control groups

Design

A clinical trial single-blind, randomized

Settings and conduct

Online via Skyroom through the country's spinal cord injury associations

Participants/Inclusion and exclusion criteria

Inclusion criteria: Ability to verbally communicate and speak in Persian, read and write Age between 18-60 years Have used one of the types of wheelchairs (electric or simple) for activity daily living at home or outdoors in the last 3 months No more than 3-5 years have passed since his injury or has never used rehabilitation training services. Patients with paraplegic spinal cord injury Functional ability to perform 8-10 push up exercises based on the video presented on the bed in a sitting position Ability to access and use the intelligent system and the Internet Ability and adequate time to participate in the intervention program independently Get a score higher than 22 on the MMSE cognitive test Exclusion criteria Reluctance to cooperate at any stage of the research Absence of more than one session in the training program.

Intervention groups

Participants were randomly divided into two groups of intervention and control. People in the intervention group had 4 2 hours sessions over 5 weeks through the Skyroom program: Transfer techniques, upper limb strengthening exercises, principles of adjustment and operation of all types of wheelchairs are taught. Participants in the intervention group will be trained and intervened in 4 small groups of 5-6 people.

Main outcome variables

Improve occupational performance, improve patient

satisfaction with occupational performance

General information

Reason for update

Acronym

SCI

IRCT registration information

IRCT registration number: **IRCT20211220053459N1**

Registration date: **2022-02-01, 1400/11/12**

Registration timing: **prospective**

Last update: **2022-02-01, 1400/11/12**

Update count: **0**

Registration date

2022-02-01, 1400/11/12

Registrant information

Name

Fatemeh Motaharinezhad

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 23 3365 4180

Email address

fatemeh.motahari64@yahoo.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2022-02-14, 1400/11/25

Expected recruitment end date

2022-04-19, 1401/01/30

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effectiveness of online wheelchair mobility and transfer training methods on performance level and satisfaction in people with spinal cord injuries

Public title

Effectiveness of online wheelchair mobility and transfer methods on performance level and satisfaction in spinal cord injuries

Purpose

Education/Guidance

Inclusion/Exclusion criteria**Inclusion criteria:**

Ability to verbally communicate and speak in Persian, read and write Age between 16-60 old Use one of the types of wheelchairs (electric or simple) for daily activities at home or outdoors in the last 3 months No more than 3-5 years have passed since their injury or have never used rehabilitation training services Patients with spinal cord injury of paraplegic type Functional ability to perform 8-10 push-up exercises in accordance with the video presented on the bed in a sitting position Ability to access and use the intelligent system and the Internet Ability and sufficient time to participate in the intervention program independently Get a score above 22 on the MMSE cognitive test

Exclusion criteria:

Having serious psychological disturbances Absent in more of a sessions

Age

From **18 years** old to **60 years** old

Gender

Both

Phase

3

Groups that have been masked

- Outcome assessor

Sample size

Target sample size: **50**

Randomization (investigator's opinion)

Randomized

Randomization description

50 participants will be divided into two groups of intervention and control by Stratified Balanced Block Randomization with equal block method. Out of a maximum of 20 modes for the six blocks, three will be in the intervention group or A and three in the control group will be created using the RANDBETWEEN (1,20) command in Excel software. Participants will be divided equally into two groups according to the random sequence created.

Blinding (investigator's opinion)

Single blinded

Blinding description

Outcome evaluator: The person or people who evaluate the outcome or non-outcome of the outcome in the participants or collect data on the outcome variables.

Placebo

Not used

Assignment

Parallel

Other design features**Secondary Ids**

empty

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

Ethics committee of Semnan University of Medical Sciences

Street address

Headquarter of Semnan University of Medical Sciences and Health Services, Bassij Blvd, Semnan, Iran.

City

Semnan

Province

Semnan

Postal code

3514799442

Approval date

2022-01-28, 1400/11/08

Ethics committee reference number

IR.SEMUMS.REC.1400.270

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

spinal cord injury

ICD-10 code

G82.2

ICD-10 code description

Paraplegia

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

level of occupational performance and satisfaction of occupational performance

Timepoint

Before the intervention, after the intervention and one month after the intervention

Method of measurement

Canadian Occupational Performance Measurement

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: After filling out the written consent form and performing the evaluations, the interventions are performed in 4 sessions of 2 hours during 5 weeks as a group and online. Treatment and training include training in various techniques of transfer and transfer from wheelchair to bed, chair, toilet or bathroom chair, car, floor and vice versa, training in upper extremity strengthening exercises to perform transfers and principles of adjusting wheelchairs, braking lock And there will be a change in the position of the wheelchair and etc.

Category

Rehabilitation

2

Description

Control group: the control group will receive routine related to transfer and mobility principals and essential counseling, in a format of pamphlet or a booklet

Category

Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center

Spinal Cord Injury Associations

Full name of responsible person

Fatemeh Motaharinezhad

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Famili Rehabilitation Clinic, Ayatollah Madani Blvd,
Famili St., Semnan, Iran

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Semnan University of Medical Sciences

Full name of responsible person

Dr Majid Mirmohammadkhani

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Grant name

Grant code / Reference number

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

Yes

Title of funding source

Semnan University of Medical Sciences

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

Semnan University of Medical Sciences

Full name of responsible person

Fatemeh Motaharinezhad

Position

Faculty member

Latest degree

Ph.D.

Other areas of specialty/work

Occupational Therapy

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

Yes - There is a plan to make this available

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

Yes - There is a plan to make this available

Clinical Study Report

Yes - There is a plan to make this available

Analytic Code

Yes - There is a plan to make this available

Data Dictionary

Yes - There is a plan to make this available

Title and more details about the data/document

-

When the data will become available and for how long

-

To whom data/document is available

-

Under which criteria data/document could be used

-

From where data/document is obtainable

-

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

-

Comments