

Clinical Trial Protocol

Iranian Registry of Clinical Trials

17 Jun 2026

Evaluation of the effects of designed exercise program on the fatigue in hemodialysis patients

Protocol summary

Summary

Aim: Fatigue is the most common and bothersome symptom in hemodialysis patients, so that almost half of them experience fatigue during their treatment for renal failure. The aim of this study is to investigate the effect of a designed exercise program on fatigue in hemodialysis patients. Methods: In a quasi-experimental design, 25 hemodialysis patients from three hospitals of the medical university of Tehran in 2010 were chosen. The patients in the experimental group (n=12) followed a designed exercise program 3 days per week, which lasted for 8 weeks. The subjects in the experimental group had to exercise for 20 minutes immediately after dialysis session followed by a 10-minute bed rest and deep slow breaths, with their eyes closed. Control group receive routine care. The Fatigue Severity Scale (FSS) questionnaire was used to measure the participants' fatigue, three times, before the exercise program and four and eight weeks after the exercise program.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201102162226N2**

Registration date: **2012-04-30, 1391/02/11**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2012-04-30, 1391/02/11

Registrant information

Name

Mansooreh Aliasgharpour

Name of organization / entity

Nursing & midwifery faculty, Tehran University of

Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 21 6693 7120

Email address

aliasgha@sina.tums.ac.ir

Recruitment status

Recruitment complete

Funding source

Tehran University of Medical Sciences

Expected recruitment start date

2010-04-14, 1389/01/25

Expected recruitment end date

2010-07-04, 1389/04/13

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Evaluation of the effects of designed exercise program on the fatigue in hemodialysis patients

Public title

Effects of designed exercise program on the fatigue in hemodialysis patients

Purpose

Supportive

Inclusion/Exclusion criteria

Inclusion criteria: age between 18 to 65 years old; performing hemodialysis treatment for at least six months; no history of intensifying of the disease during the last six months; no participation in any regular exercise program during the last six months; no specific orthopedic problems in walking; no cardiovascular disease and severe shortness of breath and heart failure preventing from the performance of the exercise

program. Exclusion criteria: absence in four sessions during the exercise program and not willing to continuing the exercise program.

Age

From **18 years** old to **65 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **25**

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Single blinded

Blinding description

Placebo

Not used

Assignment

Other

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Faculty of Nursing and Midwifery, Tehran University of Medical Sciences

Street address

Tohid square

City

Tehran

Postal code

Approval date

2010-04-07, 1389/01/18

Ethics committee reference number

465/130/s/89

Health conditions studied

1

Description of health condition studied

fatigue in hemodialysis patients

ICD-10 code

Z49

ICD-10 code description

Care involving dialysis

Primary outcomes

1

Description

Fatigue

Timepoint

At the start and at the end of the fourth and eighth weeks of the exercise program

Method of measurement

Fatigue Severity Scale

Secondary outcomes

1

Description

Exercise program

Timepoint

Immediately after the end of hemodialysis session

Method of measurement

Tolerance time check list

Intervention groups

1

Description

The exercise program included four stages: A) starting with warm-up by slow walking for 5min till the body would be ready, B) walking fast based on the patient's tolerance (10 min), C) slow walking and body cooling (5 min) and D) 10 min of rest and relaxation.

Category

Prevention

2

Description

Control group: routine care

Category

Lifestyle

Recruitment centers

1

Recruitment center

Name of recruitment center

Hospitals affiliated to Tehran University of Medical Sciences

Full name of responsible person

Street address

City

Tehran

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

nursing & midwifery faculty, Tehran university of medical sciences

Full name of responsible person

Dr.Negharandeh

Street addressnosrat east-Toohid square-medical sciences of
tehran university-nursing&midwifery faculty**City**

Tehran

Grant name**Grant code / Reference number****Is the source of funding the same sponsor organization/entity?**

Yes

Title of funding sourcenursing & midwifery faculty, Tehran university of medical
sciences**Proportion provided by this source**

100

Public or private sector*empty***Domestic or foreign origin***empty***Category of foreign source of funding***empty***Country of origin****Type of organization providing the funding***empty***Person responsible for general inquiries****Contact****Name of organization / entity**Faculty of Nursing and Midwifery, Tehran university of
mdical sciences**Full name of responsible person**

Mansooreh Aliasgharpour

Position

academic member

Other areas of specialty/work**Street address**Faculty of Nursing & Midwifery, Nosrat st.,Toohid
square**City**

Tehran

Postal code**Phone**

+98 912 360 5329

Fax**Email**

aliasgha@sina.tums.ac.ir

Web page address**Person responsible for scientific inquiries****Contact****Name of organization / entity**Faculty of Nursing and Midwifery, Tehran university of
mdical sciences**Full name of responsible person**

Mansooreh Aliasgharpour

Position

MS

Other areas of specialty/work**Street address**Faculty of Nursing & Midwifery, Nosrat st.,Toohid
square**City**

Tehran

Postal code**Phone**

+98 912 360 5329

Fax**Email**

aliasgha@sina.tums.ac.ir

Web page address**Person responsible for updating data****Contact****Name of organization / entity**

Tehran University of Medical Sciences

Full name of responsible person

Mansooreh Aliasgharpour

Position

Faculty member

Other areas of specialty/work**Street address**Faculty of Nursing & Midwifery, Nosrat st.,Toohid
square**City****Postal code****Phone****Fax****Email**

aliasgha@sina.tums.ac.ir

Web page address**Sharing plan****Deidentified Individual Participant Data Set (IPD)***empty***Study Protocol***empty***Statistical Analysis Plan***empty***Informed Consent Form***empty***Clinical Study Report***empty***Analytic Code***empty***Data Dictionary***empty*