Clinical Trial Protocol
Iranian Registry of Clinical Trials

07 Nov 2026

The effect of isotonic exercise on attitude towards life, appetite, happiness, and hemodialysis adequacy in patients undergoing hemodialysis

Protocol summary

Study aim
Investigating the effect of isotonic exercise on attitude towards life, appetite, happiness, and hemodialysis adequacy in patients undergoing hemodialysis

Design
A controlled clinical trial with parallel groups, without blinding, randomized using block randomization on 80 patients

Settings and conduct
This study will be conducted in the dialysis unit of Qom Kamkar Hospital. Blinding will not be performed in this study. In the control group, patients will be encouraged to perform range-of-motion exercises during hemodialysis. In the intervention group, patients will perform isotonic exercises for 30 minutes during hemodialysis.

Participants/Inclusion and exclusion criteria
Major inclusion criteria: age over 18 years and a history of at least six months of hemodialysis; Major exclusion criteria: the patient refuses to continue participating in the study

Intervention groups
In the control group, patients will be encouraged to perform range-of-motion exercises during hemodialysis. In the intervention group, patients will perform isotonic exercises for 30 minutes during hemodialysis.

Main outcome variables
Improvement in patients' attitude towards life, appetite, happiness, and dialysis adequacy

General information

Reason for update
Adding the attitude towards life variable as a dependent variable

Acronym

IRCT registration information
IRCT registration number: **IRCT20150724023314N6**
Registration date: **2025-07-30, 1404/05/08**
Registration timing: **prospective**

Last update: **2026-02-07, 1404/11/18**
Update count: **1**

Registration date
2025-07-30, 1404/05/08

Registrant information

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Mohammad Abbasinia

Name of organization / entity
Qom university of medical sciences

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Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2025-08-06, 1404/05/15

Expected recruitment end date
2026-03-20, 1404/12/29

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title
The effect of isotonic exercise on attitude towards life, appetite, happiness, and hemodialysis adequacy in

patients undergoing hemodialysis

Public title
The effect of isotonic exercise in patients undergoing hemodialysis
Purpose
Supportive
Inclusion/Exclusion criteria
Inclusion criteria:
All hemodialysis patients who have been undergoing dialysis for more than 6 months
Exclusion criteria:
Age
From **18 years** old
Gender
Both

Phase
N/A
Groups that have been masked
No information
Sample size
Target sample size: **80**
Randomization (investigator's opinion)
Randomized
Randomization description
Participants will be assigned to intervention and control groups using block randomized method. The link "https://www.sealedenvelope.com/simple-randomiser/v1/lists" will be used for block randomization. For this purpose, the target number of samples (120 samples including sample loss), number of groups (two groups A and B) and number of blocks (4) will be entered and the system will provide the researcher with a list of 4 blocks. Based on the output list, it will be determined in which group the patients who enter the study should be placed in order. Items A represent the intervention group and items B represent the control group.
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 Qom University of Medical Sciences
Street address
Qom University of Medical Sciences, Saheli street
City
Qom
Province
Ghoum
Postal code
3713649373
Approval date
2025-04-13, 1404/01/24
Ethics committee reference number
IR.MUQ.REC.1404.005

Health conditions studied

1

Description of health condition studied
Renal failure
ICD-10 code
N17
ICD-10 code description
Acute kidney failure

Primary outcomes

1

Description
Hemodialysis adequacy
Timepoint
Before the start of the intervention and immediately after its completion
Method of measurement
Measurement of blood creatinine levels

2

Description
Appetite level
Timepoint
Before the start of the intervention and immediately after its completion
Method of measurement
Simplified Nutritional Appetite Questionnaire

3

Description
Happiness
Timepoint
Before the start of the intervention and immediately after its completion
Method of measurement
Oxford Happiness Inventory

4

Description
attitude towards life
Timepoint
Before the start of the intervention and immediately after its completion
Method of measurement
Attitude towards life inventory

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group: For a period of 8 weeks, isotonic exercises will be performed for 30 minutes during dialysis.
Category
Rehabilitation

2

Description
Control group: For a period of 8 weeks, patients will be encouraged to move their limbs within the range of motion during dialysis
Category
Prevention

Recruitment centers

1

Recruitment center
Name of recruitment center
Kamkar Hospital
Full name of responsible person
Azam Vahedi
Street address
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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Ghoum University of Medical Sciences
Full name of responsible person
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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
Ghoum 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
Ghoum University of Medical Sciences
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Atye Babaii
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Assistant Professor
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Person responsible for updating data

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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
Not applicable
Informed Consent Form
Undecided - It is not yet known if there will be a plan to make this available
Clinical Study Report
Not applicable
Analytic Code
Not applicable
Data Dictionary
Not applicable