Clinical Trial Protocol
Iranian Registry of Clinical Trials

07 Nov 2026

Comparing the effectiveness of a home-based exercise program via the mobile application (Varzeshyar) and a routine home-based exercise program on pain and disability of knee osteoarthritis in patients at ages older than 55

Protocol summary

Study aim

Mobile application development with animation learning exercise training Effectiveness of a home-based exercise program via the mobile application on pain and disability of knee osteoarthritis

Design

Required application will be developed at first then 100 patients older than 55 years with knee osteoarthritis will be selected and based on computer randomization put in 2 groups: intervention and control. Intervention group will receive application on their phones and control group from pamphlet.

Settings and conduct

The patients with knee osteoarthritis who referred to clinic of rheumatology in Rasoole Akram hospital from 3 March 2018 to 22 October 2018 will be examined. after take demographic information they will be divided in 2 groups: intervention and control. exercise protocol contains 10 movement for lower limb(strengthening and stretching). According to allowed movements for each person a home-based exercise training will be developed and progressively will complete in 4 weeks and will continue for 8 weeks for maintenance therapy.

Participants/Inclusion and exclusion criteria

Entry: The patients who suffer from primary knee osteoarthritis that according to Kellgren and Lawrence classification have grade 2 to 4 severity of disease and have osteoarthritis based on A.C.R criteria No entry: Inability to use of mobile application and smart phone Limitation in strengthening exercise Age less than 50 years

Intervention groups

Home_ based exercise with mobile application: The impact of home based exercise with mobile application on pain, disability and quality of life in patients with knee osteoarthritis. Home_ based exercise with pamphlet: The impact of home based exercise with pamphlet on pain, disability and quality of life in patients with knee osteoarthritis.

Main outcome variables

pain; Quality of life ; Disability

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20190116042386N1**
Registration date: **2019-02-12, 1397/11/23**
Registration timing: **retrospective**

Last update: **2019-02-12, 1397/11/23**
Update count: **0**

Registration date

2019-02-12, 1397/11/23

Registrant information

Name

Zohre Abbaszade

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 21 6657 4251

Email address

kianmehr.n@iums.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2018-03-03, 1396/12/12

Expected recruitment end date
2018-10-04, 1397/07/12
Actual recruitment start date
2018-03-03, 1396/12/12
Actual recruitment end date
2018-10-22, 1397/07/30
Trial completion date
2019-01-20, 1397/10/30

Scientific title
Comparing the effectiveness of a home-based exercise program via the mobile application (Varzeshyar) and a routine home-based exercise program on pain and disability of knee osteoarthritis in patients at ages older than 55

Public title
Effectiveness of a home-based exercise program via the mobile application (Varzeshyar) on pain and disability of knee osteoarthritis
Purpose
Treatment
Inclusion/Exclusion criteria
Inclusion criteria:
The patients who suffer from primary knee osteoarthritis that according to Kellgren and Lawrence classification have grade 2 to 4 severity of disease and have osteoarthritis based on ACR criteria
Exclusion criteria:
Age less than 50 years Limitation in strengthening exercise Inability to use of mobile application and smart phone
Age
From **55 years** old
Gender
Both

Phase
N/A
Groups that have been masked
No information
Sample size
Target sample size: **100**
Actual sample size reached: **135**
Randomization (investigator's opinion)
Randomized
Randomization description
Computer randomization based on file number
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 Iran University of Medical Sciences
Street address
No. 270-3, Golshan Ave., Jomhouri Blvd.
City
Tehran
Province
Tehran
Postal code
1313634519
Approval date
2017-11-28, 1396/09/07
Ethics committee reference number
IR.IUMS.FMD.REC 1396.9411497003/

Health conditions studied

1

Description of health condition studied
Osteoarthritis of knee
ICD-10 code
M17
ICD-10 code description
Osteoarthritis of knee

Primary outcomes

1

Description
Disability score in WOMAC questionnaire
Timepoint
WOMAC questionnaire score at start of study, week 4, week 12
Method of measurement
WOMAC questionnaire

2

Description
Symptoms severity score in Lequesne questionnaire
Timepoint
Lequesne questionnaire score at start of study, week 4, week 12
Method of measurement
Lequesne questionnaire

3

Description
Quality of life score in SF8 questionnaire
Timepoint
SF8 questionnaire score at start of study, week 4, week 12
Method of measurement

SF8 questionnaire

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group: Home_ based exercise training with mobile application
Category
Treatment - Other

2

Description
Control group: Home_ based exercise training with pamphlet
Category
Treatment - Other

Recruitment centers

1

Recruitment center
Name of recruitment center
Rasoole Akram hospital
Full name of responsible person
Dr Nahid Kianmehr
Street address
Rasoole Akram hospital, Maziyare Mansoory Ave, Sattarkhan
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1445613131
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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Iran University of Medical Sciences
Full name of responsible person
Dr Kazem Malakooti
Street address
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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
Iran 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
Iran University of Medical Sciences
Full name of responsible person
Zohre Abbaszade
Position
Medical resident
Latest degree
Specialist
Other areas of specialty/work
Geriatrics
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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 additional 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

Yes - There is a plan to make this available

Analytic Code

No - There is not 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

Study protocol: The entire study protocol is shareable. Statistical Analysis Map: The entire statistical analysis map is shareable. clinical study report: The entire clinical study report is shareable. Data categorization system: The Data categorization system is shareable.

When the data will become available and for how long

Start the access period 2 months after printing results

To whom data/document is available

Researchers working in Academic Institutions

Under which criteria data/document could be used

For any kind of research in the field of medicine is possible.

From where data/document is obtainable

Dr Zohre Abbaszade 09132383725 zanasim88@gmail.com

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

After sending the request by email within 2 weeks, the documentation is sent by email.

Comments