Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

Investigating the Effect of Combined Exercise Training on Low Back Pain Severity in Pregnant Housewives

Protocol summary

Study aim
Determining the effect of combined exercises on the severity of low back pain in pregnant housewives

Design
A parallel-group, controlled, open-label, non-randomized clinical trial involving 40 patients

Settings and conduct
Pregnant housewives suffering from back pain who visit Farhikhtegan Hospital in Tehran during the study period will be enrolled if they meet the eligibility criteria and will be assigned to the intervention and control groups using a non-random method.

Participants/Inclusion and exclusion criteria
Inclusion Criteria: Pregnant women with a gestational age of 16 to 38 weeks, Presence of back pain, housewives; Exclusion Criteria: Presence of high-risk pregnancy symptoms such as vaginal bleeding, abdominal pain, amniotic fluid leakage, or painful contractions

Intervention groups
Intervention group: featuring 30 minutes of aerobic exercise (such as brisk walking) on even days (Sat/Mon/Wed) to boost cardiovascular health using the talk test, and 20 to 30 minutes of light strength training on odd days (Sun/Tue) at a moderate intensity to maintain muscle mass. Thursday is dedicated to prenatal yoga and Kegel exercises for pelvic floor strengthening, while Friday is for active rest; each session must include 5 minutes of warm-up and 5 minutes of cool-down, and safety principles—such as avoiding lying on your back after the first trimester, staying well-hydrated, and immediately stopping the workout if symptoms like dizziness, contractions, or bleeding occur—must be strictly followed. control group: does not perform the exercises.

Main outcome variables
severity of low back pain

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20260912071027N1**
Registration date: **2026-09-29, 1405/07/07**
Registration timing: **prospective**

Last update: **2026-09-29, 1405/07/07**
Update count: **0**

Registration date
2026-09-29, 1405/07/07

Registrant information

Name
Hasti Hasti

Name of organization / entity

Country
Iran (Islamic Republic of)

Phone
+98 21 3316 3929

Email address
1376hastirostami@gmail.com

Recruitment status
recruiting

Funding source

Expected recruitment start date
2026-10-02, 1405/07/10

Expected recruitment end date
2027-03-21, 1406/01/01

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title

Investigating the Effect of Combined Exercise Training on Low Back Pain Severity in Pregnant Housewives

Public title
Investigating the Effect of Combined Exercise Training on Low Back Pain Severity in Pregnant Housewives
Purpose
Supportive
Inclusion/Exclusion criteria
Inclusion criteria:
Pregnant women with a gestational age of 16 to 38 weeks Suffering from back pain Housewives
Exclusion criteria:
Presence of high-risk pregnancy symptoms, such as vaginal bleeding, abdominal pain, amniotic fluid leakage, or painful contractions
Age
From **18 years** old to **45 years** old
Gender
Female

Phase
N/A
Groups that have been masked
No information
Sample size
Target sample size: **40**
Randomization (investigator's opinion)
Not randomized
Randomization description
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 the School of Medicine, Islamic Azad University of Medical Sciences, Tehran
Street address
Islamic Azad University Tehran Medical Sciences, Danesh St, Attari Moghaddam St, Khaghani St, Shariati Ave, Tehran, Iran
City
Tehran
Province
Tehran
Postal code
1916893813
Approval date
2026-06-01, 1405/03/11
Ethics committee reference number
IR.IAU.TMU.REC.1405.071

Health conditions studied

1

Description of health condition studied
Low back pain
ICD-10 code
M54.5
ICD-10 code description
Low back pain

Primary outcomes

1

Description
severity of low back pain
Timepoint
Before the intervention and 8 weeks after the completion of the intervention
Method of measurement
Using the McGill questionnaire

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group:30 minutes of aerobic exercise (such as brisk walking) on even days (Sat/Mon/Wed) to boost cardiovascular health using the talk test, and 20 to 30 minutes of light strength training on odd days (Sun/Tue) at a moderate intensity to maintain muscle mass. Thursday is dedicated to prenatal yoga and Kegel exercises for pelvic floor strengthening, while Friday is for active rest; each session should include a 5-minute warm-up and 5-minute cool-down, and safety principles such as not lying on your back after the first trimester, staying hydrated, and stopping exercise immediately if symptoms such as dizziness, cramping, or bleeding occur must be strictly observed.
Category
Rehabilitation

2

Description
Control group: They do not perform any exercises.
Category
Other

Recruitment centers

1

Recruitment center

Name of recruitment center
Farhikhtegan Hospital, Tehran

Full name of responsible person
Zahra Rostami

Street address
Shohadaye Hesarak Blvd, Hesarak, Tehran

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Islamic Azad University

Full name of responsible person
Masoud Parsania

Street address
Headquarters Building of Tehran Islamic Azad University of Medical Sciences, Corner of Gol Yakh St, Ayane Blvd, Amir Pabarja St, Golhak Road, Dr. Shariati St, Tehran

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parsania@iautmu.ac.ir

Grant name

Grant code / Reference number

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

Title of funding source
Islamic Azad University

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
Islamic Azad University

Full name of responsible person
Zahra Rostami

Position
Student

Latest degree
A Level or less

Other areas of specialty/work
General Practitioner

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Person responsible for updating data

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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
No - There is not a plan to make this available
Statistical Analysis Plan
No - There is not 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
No - There is not a plan to make this available