Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

The effect of a core stability exercise program on the primary dysmenorrhea in young adult females- a randomized controlled trial

Protocol summary

Summary

Objectives: The Study aimed to assess the effect of a Core Stability Exercises program on pain severity, pain duration and drug consumption in primary dysmenorrhea in adult female. Design: In this randomized controlled trial, participants were randomly assigned to an experimental group (17 subjects) and a control group (17 subjects). Setting and conduct: The subjects in exercise group participated in an 8 week (3 sessions a week) Core Stability Exercise program. But the control group didn't participate in any intervention. Participants: young girls aged 18- 25 years old who lived in Arak and had these conditions: persistent primary dysmenorrhea of more than 6 months with regular menstruation cycles, no history of pregnancy, low back pain, polycystic ovary disease or pelvic infection. Intervention: Core Stability Exercise program was prescribed to the subjects in exercise group in 8 weeks (3 sessions a week). Main outcome measures: Numeric Pain Scale, the number of hours that the pain continued and total number of painkillers consumption for the pain reduction were used in pre and post-test for evaluation of pain intensity, pain duration, and drug usage.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2016103119024N2**
Registration date: **2016-11-13, 1395/08/23**
Registration timing: **retrospective**

Last update:
Update count: **0**

Registration date

2016-11-13, 1395/08/23

Registrant information

Name

Fahime Mahmoudi

Name of organization / entity

Arak University

Country

Iran (Islamic Republic of)

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Recruitment status

Recruitment complete

Funding source

Vice chancellor for research, Arak University

Expected recruitment start date

2013-04-20, 1392/01/31

Expected recruitment end date

2013-06-21, 1392/03/31

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of a core stability exercise program on the primary dysmenorrhea in young adult females- a randomized controlled trial

Public title

The effect of exercise on primary dysmenorrhea

Purpose

Treatment

Inclusion/Exclusion criteria

Major inclusion criteria: Young Adult Females 18- 25 years old who lived in Iran, Arak; persistent primary dysmenorrhea of more than 6 months with regular menstruation cycles; no history of pregnancy; low back pain; diabetes; poly cystic ovary disease; pelvic infection

or pelvic pain with no relation to dysmenorrhea. Major exclusion criteria: tolerating inability to exercise; having any additional physical activity; taking any medications or vitamin and mineral supplements.

Age
From **18 years** old to **25 years** old

Gender
Female

Phase
2-3

Groups that have been masked
No information

Sample size
Target sample size: **34**

Randomization (investigator's opinion)
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 Arak University of Medical Sciences

Street address
Arak University of Medical Sciences,Sardasht, Arak, Iran

City
Arak

Postal code
38156 - 879

Approval date
2013-11-11, 1392/08/20

Ethics committee reference number
92-154-12

Health conditions studied

1

Description of health condition studied
Primary dysmenorrhea

ICD-10 code
N94.4

ICD-10 code description
Primary dysmenorrhea

Primary outcomes

1

Description
Pain intensity

Timepoint
Pre and post test

Method of measurement
Numeric Pain Scale

2

Description
Pain duration

Timepoint
Pre and post test

Method of measurement
The number of hours that the pain continued

3

Description
Druge usage

Timepoint
Pre and post test

Method of measurement
Total number of painkillers consumption for the pain reduction

Secondary outcomes

empty

Intervention groups

1

Description
The subjects in exercise group participated in an 8 week (3 sessions a week) Core Stability Exercise program.

Category
Other

2

Description
The control group didn’t participate in any intervention.

Category
Other

Recruitment centers

1

Recruitment center

Name of recruitment center
Arak University

Full name of responsible person
Fahime Mahmoudi

Street address
Arak University, Shareaati street, Arak, Iran

City
Arak

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Vice chancellor for research, Arak University
Full name of responsible person
Doctor Alireza Fazlaali
Street address
Vice chancellor for research, Arak University, Oloum Alley, Shariati Square, Arak, Iran
City
Arak
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Vice chancellor for research, Arak University
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
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Position
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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