Clinical Trial Protocol
Iranian Registry of Clinical Trials

07 Nov 2026

Effect of Pilates and Aerobic Exercise on Quality of Sleep and Fatigue of Girl Students of Dormitory

Protocol summary

Summary

Objectives: The aim of this study is to investigate the effect of Pilates and aerobic exercise on sleep quality and fatigue of female students in residence Method: This study is a semi -experimental and interventional study. Sample includes 120 female students aged 18 to 26 years selected from three residences (Pilates, aerobic exercise and control group). Inclusion criteria include single, Iranian and healthy girls whose their general health were validated before coming to study, aged 18 to 26 years, no history of any regularly physical activities for last 6 months, Body mass index 19/8 to 26, lack of misuse the drug, lack of stressful experiences during the last 3 months. Exclusion criteria include lack of training for three continuous or five non-continuous sessions, lack of tendency to continue cooperation, use of effective foods for sleeping and fatigue such as coffee, espresso and energetic drinks, the occurrence of stressful experiences during the study. Interventions: Pilates exercise will be done for 8 weeks. Sample will exercise in the presence of an instructor and researcher 60 minutes per time, 3 times per week for 8 weeks and aerobic exercise will be done for 8 weeks too. Sample will exercise in the presence of an instructor and researcher 60 minutes per time, 3 times per week for 8 weeks. The control group continued their daily activities. The main outcome variables: Petersburg Quality of Sleep and Fatigue questionnaires will be completed 4 and 8 weeks after beginning intervention.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201412282324N15**
Registration date: **2015-06-02, 1394/03/12**
Registration timing: **prospective**
Last update:
Update count: **0**

Registration date

2015-06-02, 1394/03/12

Registrant information

Name
Maryam Keshavarz
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Recruitment status

Recruitment complete

Funding source

Vice Chancellor for Research, Iran University of Medical Sciences

Expected recruitment start date

2015-10-07, 1394/07/15

Expected recruitment end date

2015-12-06, 1394/09/15

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effect of Pilates and Aerobic Exercise on Quality of Sleep and Fatigue of Girl Students of Dormitory

Public title

Pilates and Aerobic Exercise and Quality of Sleep and Fatigue

Purpose

Prevention

Inclusion/Exclusion criteria

Inclusion criteria include single, Iranian and healthy girls whose their general health are validated before coming to study, aged 18 to 26 years, no history of any regularly physical activities for last 6 months, Body mass index 19/8 to 26, lack of misuse the drug, lack of stressful experiences during the last 3 months. Exclusion criteria include Lack of training for three continuous or five non-continuous sessions, lack of tendency to continue cooperation, use of effective foods for sleeping and fatigue such as coffee, espresso and energetic drinks, use of effective non-medical methods for fatigue and quality of sleep such as acupressure, use of effective psychiatric drugs for fatigue and quality of sleep during the study such as Floxetine and Citalopram, the occurrence of stressful experiences during the study, marriage during the study.

Age

From **18 years** old to **26 years** old

Gender

Female

Phase

2

Groups that have been masked

No information

Sample size

Target sample size: **120**

Randomization (investigator's opinion)

N/A

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

Ethical Commitment of Iran University of Medical Sciences

Street address

Hemat Highway

City

Tehran

Postal code

Approval date

2015-04-06, 1394/01/17

Ethics committee reference number

110427

Health conditions studied

1

Description of health condition studied

Quality of Sleep

ICD-10 code

F51.9

ICD-10 code description

Nonorganic sleep disorder, unspecified

2

Description of health condition studied

Fatigue

ICD-10 code

F48.0

ICD-10 code description

Fatigue Psychogenic (general)

Primary outcomes

1

Description

Quality of Sleep

Timepoint

Before the Intervention, 4 and 8 weeks after Intervention

Method of measurement

Pittsburg Quality of Sleep Inventory

Secondary outcomes

1

Description

Fatigue

Timepoint

Before the Intervention,4 and, 8 weeks after Intervention

Method of measurement

MFI Fatigue Inventory

Intervention groups

1

Description

The control group continued their daily activities.

Category

Prevention

2

Description

The intervention group 1: Pilates exercise will be done for 8 weeks. After completing initial Quality of Sleep Questionnaires,Fatigue Questionnaires, demographic questionnaires and having inclusion criteria, samples will be trained by instructor and researcher for 8 weeks,3 times per week, 60 minutes per time. Quality of Sleep questionnaires and fatigue questionnaires will be completed 4 and 8 weeks after starting the intervention.

Category
Prevention

3

Description
The intervention group 2: Aerobic Exercise will be done for 8 weeks. After completing initial Quality of Sleep Questionnaires,Fatigue Questionnaires, demographic questionnaires and having inclusion criteria, samples will be trained by instructor and researcher for 8 weeks,3 times per week, 60 minutes per time. Quality of Sleep questionnaires and fatigue questionnaires will be completed 4 and 8 weeks after starting the intervention.
Category
Prevention

Recruitment centers

1

Recruitment center
Name of recruitment center
Shaghayegh Femal Dorm
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2

Recruitment center
Name of recruitment center
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3

Recruitment center
Name of recruitment center
Golestan Femal dorm
Full name of responsible person
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School of Rehabilitationl, Shahnazari St, Madar Sq.
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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Vice Chancellor for Research, Iran University of Medical Sciences
Full name of responsible person
Dr.Seyed Ali Javad Moosavi
Street address
Hemat Highway
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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
Vice Chancellor for Research, Iran 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
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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