

Clinical Trial Protocol

Iranian Registry of Clinical Trials

25 Jun 2026

The effects of the x box Kinect game on posture and respiratory parameters in hyperkyphosis female students and staff in Shiraz University of Medical Science

Protocol summary

Summary

(1) Objectives: The purpose of this study is to evaluate the effect of the x box-kinect game in hyperkyphosis women on posture and respiratory parameter improvement. (2) Design: Design of this study is randomized single blind clinical trial. (3) Setting and conduct: Participants are collected among students and medical personnel of Shiraz University of Medical Science. The evaluation of the participants will conduct by another examiner who is unclear from the categorization of the study groups and type of treatment. 32 individuals will be assigned by block randomization either to control or intervention groups and are not aware that they will belong to each groups. (4) Participants including major eligibility criteria: Inclusion criteria are women aged between 18 to 35 years old; with hyperkyphosis disorder or at least one of their respiratory parameters are less than normal average. Participant with muscle-skeletal or respiratory disorders or are treated by other ways will be excluded from this study. (5) Intervention: Both groups will receive stretching and strengthening exercises during 4 weeks (12 session and 3 days per week), while the intervention group will receive fitness and dance exercises of the x box kinect game as well. (6) main outcome measures (variables): Kyphosis angle via flexible ruler and respiratory parameters via spirometer will be measured for each individual in the beginning and end of 12th session.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201704112391N37**

Registration date: **2017-07-10, 1396/04/19**

Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2017-07-10, 1396/04/19

Registrant information

Name

Zahra Rojhani Shirazi

Name of organization / entity

Shiraz University of Medical Sciences, School of Rehabilitation Sciences

Country

Iran (Islamic Republic of)

Phone

+98 71 1627 1552

Email address

rojhaniz@sums.ac.ir

Recruitment status

Recruitment complete

Funding source

Shiraz university of medical science

Expected recruitment start date

2017-07-09, 1396/04/18

Expected recruitment end date

2017-08-09, 1396/05/18

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effects of the x box Kinect game on posture and respiratory parameters in hyperkyphosis female students and staff in Shiraz University of Medical Science

Public title

The effects of the x box Kinect game on posture and respiratory parameters

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: Women aged 18 to 35 years old; having hyperkyphosis; at least one of their respiratory parameters of this study will be less than normal average. Exclusion criteria: Neuron, muscle-skeletal and rheumatology disorders; vertebra fractures; scoliosis or spinal disorder; subjects treated with brace, drugs, exercise therapy or other treatment in the last 6 months; pregnancy; asthma and other respiratory disease; balance disorder; using corticosteroids during more than 2 months; contraindication for spirometry test(such as: hypertension above 180 mmhg, history of heart attack or unstable angina, recent eye and ear surgery, abdominal aortic aneurism); subjects who cannot learn to exercise.

Age

From **18 years** old to **35 years** old

Gender

Female

Phase

2-3

Groups that have been masked

No information

Sample size

Target sample size: **32**

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Single blinded

Blinding description

Placebo

Not used

Assignment

Parallel

Other design features

The participants of this study will be assigned by block randomization either to control or intervention groups and they will receive one of the treatment options. They will be assessed and treated by two physical therapist. One of them who is blind to allocated treatment groups will assess the individuals and the other one will treat the individuals in both groups.

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics committee of research in Shiraz University of Medical Science

Street address

Central building of Shiraz University of Medical Science, Zand Blvd.

City

Shiraz

Postal code

Approval date

2016-12-14, 1395/09/24

Ethics committee reference number

ir.sums.rec.1395.153

Health conditions studied

1

Description of health condition studied

Subjects with hyperkyphosis

ICD-10 code

M40.0,M40.

ICD-10 code description

Postural kyphosis,Other secondary kyphosis,Other and unspecified kyphosis,

Primary outcomes

1

Description

Kyphosis angle

Timepoint

Before intervention,Immediately after intervention set

Method of measurement

In terms of degree via flexible ruler

2

Description

Respiratory parameters(FVC, FEV1, FEV1/FVC)

Timepoint

Before intervention,immediately after intervention set

Method of measurement

Using spirometer in terms of liter and percentage

Secondary outcomes

1

Description

Age

Timepoint

Before treatment and immediately after intervention set

Method of measurement

By questioning individuals and on the basis of years

2

Description

Height

Timepoint

Before treatment and immediately after intervention set

Method of measurement

By use of measure tape(cm)

3

Description

Weight

Timepoint

Before treatment and immediately after intervention set

Method of measurement

By use of scale(kg)

Intervention groups

1

Description

In intervention group, individuals playing x box kinect(fitness game and dancing) in addition to regular training of control group,in 3 days of a week for 4 weeks

Category

Other

2

Description

In control group, participants perform stretching and strengthening exercises for 4 weeks and 3 days per week.

Category

Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Rehabilitation Clinic of Shiraz University of Medical Science

Full name of responsible person

Sahba Taslimipour

Street address

School of Rehabilitation, Abiverdi1, Chamran Blvd

City

Shiraz

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Vice chancellor for research, Shiraz University of Medical Sciences

Full name of responsible person

Dr. Gholamreza Hatam

Street address

Central building of Shiraz University of Medical Science, Zand Blvd

City

Shiraz

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, Shiraz 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

School of Rehabilitation Sciences

Full name of responsible person

Sahba Taslimipour

Position

Student in master of science

Other areas of specialty/work

Street address

School of Rehabilitation, Abiverdi1, Chamran Blvd

City

Shiraz

Postal code

33669-71947

Phone

+98 7107136265108

Fax

Email

sahba_taslimipour@yahoo.com

Web page address

Person responsible for scientific inquiries

Contact

Name of organization / entity

School of Rehabilitation

Full name of responsible person

Zahra Rojhani Shirazi

Position

Ph.D of physical therapy

Other areas of specialty/work

Street address

School of Rehabilitation, Abiverdi1, Chamran Blvd

City

Shiraz

Postal code

Phone

+98 71 3627 1552

Fax

Email

rojhaniz@sums.ac.ir

Web page address

Person responsible for updating data

Contact

Name of organization / entity

School of Rehabilitation

Full name of responsible person

Zahra Rojhani Shirazi

Position

Associate professor/Ph.D

Other areas of specialty/work**Street address**

School of Rehabilitation, Abiverdi1, Chamran Blvd

City

Shiraz

Postal code**Phone**

+36 271552

Fax**Email**

rojhaniz@yahoo.com

Web page address

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