

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

26 Jun 2026

### Designing and evaluation of an educational program based on developed pender model on changing tentional exercise for reducing musculoskeletal pain among office workers

#### Protocol summary

##### Summary

Objectives: Designing and evaluating a training program based on Pender's developed model on the implementation of tension exercises and its effect on reducing musculoskeletal pain in office worker Design: A computer users in in Tehran's comprehensive health services of Shahid Beheshti University. Intervention group: (Shemiran Health Network). control group: (Tehran East Health Center) Sample size: The intervention group consisted of 33 individuals in the control group, including 33 people An educational program based on predictive structures with tensile strength for computer users at workplace for 10 weeks; design, implementation and evaluation, and the average score of the structures before, after and 6 months after the intervention. An intervention program with a group discussion class that will consider electronic learning facilities as part of the phase. According to the checklist and the initial questionnaire, the severity of VAS pain in the intervals is used. The control group does not intervene.

#### General information

##### Acronym

developed pender model

##### IRCT registration information

IRCT registration number: **IRCT2016082429512N1**

Registration date: **2017-08-02, 1396/05/11**

Registration timing: **retrospective**

Last update:

Update count: **0**

##### Registration date

2017-08-02, 1396/05/11

##### Registrant information

##### Name

mohammad hossien delshad

##### Name of organization / entity

Torbat Heydariyeh University of Medical Sciences

##### Country

Iran (Islamic Republic of)

##### Phone

+98 51 5222 1508

##### Email address

h.delshad@modares.ac.ir

##### Recruitment status

**Recruitment complete**

##### Funding source

Vice chancellor for research, Tarbiat Modares University of Medical Sciences

##### Expected recruitment start date

2016-08-22, 1395/06/01

##### Expected recruitment end date

2016-12-20, 1395/09/30

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

##### Scientific title

Designing and evaluation of an educational program based on developed pender model on changing tentional exercise for reducing musculoskeletal pain among office workers

##### Public title

tentional exercise

##### Purpose

Prevention

##### Inclusion/Exclusion criteria

Inclusion criteria of Designing and evaluation of an

educational program based on developed pender model on changing tentional exercise for reducing musculoskeletal pain among office workers: (1) lack of disability or illness that prevents the stretching exercises, (2) a written consent to participate in the review, are. Leaving .(3) employees who sit in their work environment for at least 3 hours and they are considered as computer users. Exclusion criteria of Designing and evaluation of an educational program based on developed pender model on changing tentional exercise for reducing musculoskeletal pain among office workers: (1) If they have more than one time attending classes, they will be excluded from the study

**Age**

No age limit

**Gender**

Both

**Phase**

N/A

**Groups that have been masked**

No information

**Sample size**

Target sample size: 420

**Randomization (investigator's opinion)**

Randomized

**Randomization description****Blinding (investigator's opinion)**

Not blinded

**Blinding description****Placebo**

Not used

**Assignment**

Parallel

**Other design features**

A randomized study uses a random number table. The intervention program is designed based on the predictor variables of the developed Pender model. The educational contents include tensile muscle training, shoulder and shoulder muscles, waist and neck muscles. The software used in Ergo Pro office computers includes special stiffening exercises related to shoulder, shoulder and shoulder behavior in the workplace: is used (a series of four preparations for neck, shoulder and hand and Forearm, 5 for the waist).

**Secondary Ids**

empty

**Ethics committees****1****Ethics committee****Name of ethics committee**

Ethics committee of Medical school in Tarbiat Modares University of Medical Sciences

**Street address**

1 room, on the first floor of Medical Ethics, Tarbiat modares University, Paul Geisha, Tehran

**City**

Tehran

**Postal code**

14115-111

**Approval date**

2016-05-03, 1395/02/14

**Ethics committee reference number**

IR.TMU.REC.1395.329

**Health conditions studied****1****Description of health condition studied**

Stretching behavior

**ICD-10 code**

Z72.3

**ICD-10 code description**

Lack of physical exercise

**Primary outcomes****1****Description**

Determination and comparison of mean score of predictive structures for performing tension exercises in intervention and control groups; determining and comparing the mean score of tension training behavior in the intervention and control groups

**Timepoint**

Before, after and 6 months after intervention

**Method of measurement**

questionnaires

**Secondary outcomes****1****Description**

Determine and compare the rate of musculoskeletal pain in the intervention and control group

**Timepoint**

Before, after and 6 months after intervention

**Method of measurement**

Self-reported questionnaire.

**Intervention groups****1****Description**

Intervention group: Organizing an 8-person training class in 7 groups with group discussion and surrendering thoughts to improve self-efficacy, reducing perceived barriers and improving commitment to behavior for 4 hours in two sessions of a 2-hour session. Follow up the intervention group with 10-weekly reminders. Installing the software to remind stretch marks by registering a checklist. Follow up of this group to complete questionnaires at specified intervals And will be sent stretching exercises movie and posters via blogs.

**Category**

**2****Description**

Control group: did not receive training on the topic of stretching exercises. Follow up of this group only to complete questionnaires at specified intervals

**Category**

N/A

**Recruitment centers****1****Recruitment center****Name of recruitment center**

shahid Beheshti University of Medical Sciences of iran

**Full name of responsible person**

mohammad hossien delshad

**Street address**

Shemiranat Health Network, Ghods Square, next to Taleghani Pharmacy, Tehran

**City**

Tehran

**Sponsors / Funding sources****1****Sponsor****Name of organization / entity**

Vice chancellor for research, Tarbiat Modares University

**Full name of responsible person**

Dr. Ya'qub Fath Allahi nane karan

**Street address**

Tehran Gisha Tarbiat modares University of Central Building 1, Third floor, room 204

**City**

Tehran

**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, Tarbiat Modares 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****Name of organization / entity**

Tarbiat modares University

**Full name of responsible person**

mohammad hossien delshad

**Position**

PhD candidate of Health education and health promotion

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

Units7, 4, 126, Molavi street, Etellaat Square, Tehranno, Tehran.

**City**

Tehran

**Postal code**

1743874918

**Phone**

+98 21 7742 8982

**Fax****Email**

delshad264@gmail.com

**Web page address**

delshad264.blogfa.com

**Person responsible for scientific inquiries****Contact****Name of organization / entity**

Tarbiat modares University

**Full name of responsible person**

Dr.sadighe sadat tavafian

**Position**

Assistant

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

Room 111, 2nd, Faculty of Medicine 1, Paul Gisha, Tehran.

**City**

Tehran

**Postal code**

14115-111

**Phone**

+98 21 8288 4547

**Fax**

+98 21 8288 3817

**Email**

tavafian@modares.ac.ir

**Web page address****Person responsible for updating data****Contact****Name of organization / entity**

Tarbiat modares University

**Full name of responsible person**

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PhD candidate of Health education and health promotion

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delshad264.blogfa.com

**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*