# Clinical Trial Protocol
# Iranian Registry of Clinical Trials

07 Nov 2026

## The effect of training and reminding of ergonomic posture on the observance of behaviors based on the prevention of musculoskeletal disorders among nursing students

## Protocol summary

**Study aim**
Determining the effect of training and reminding of the ergonomic situation on the observance of behaviors based on the prevention of skeletal-muscular disorders of nursing students.

**Design**
A randomized controlled clinical trial on 60 nursing students

**Settings and conduct**
Ayatollah Taleghani Hospital in Chalus and Imam Sajjad Ramsar and Shahid Rajaei Hospital in Tankabon

**Participants/Inclusion and exclusion criteria**
Inclusion criteria : 1. Desire to participate in research 2. 7th and 8th semester nursing students 3. Having no history of musculoskeletal disorders based on self-report 4. Not having musculoskeletal surgery in the last 6 months 5. Carrying a smartphone and internet connection 6. Not having the experience of participating in workshops or classes related to ergonomics Exit criteria: 1. Unwillingness to continue participating in research 2. Not seeing a daily warning for more than three days during a month

**Intervention groups**
At the beginning of the study, all the questionnaires of the present study will be completed by the intervention group. Then, two sessions of the training workshop are held in connection with the ergonomic situation and a booklet containing the information of the workshop is given to them. In the next stage, which is the stage of remembering the ergonomic position, twice a day for a month (once before the start of work study and once during the work study break) a short text about how to correctly implement the ergonomic position in one area along with the person's own photo of the same position It will be posted on the social network available to students. After a month, the research questionnaires will be completed again by the intervention group.

**Main outcome variables**
Training and reminding of the ergonomic situation

## General information

**Reason for update**

**Acronym**

**IRCT registration information**
IRCT registration number: **IRCT20230701058627N1**
Registration date: **2023-07-21, 1402/04/30**
Registration timing: **retrospective**

Last update: **2023-07-21, 1402/04/30**
Update count: **0**

**Registration date**
2023-07-21, 1402/04/30

**Registrant information**

**Name**
mozhdeh Taheryafshar
**Name of organization / entity**
**Country**
Iran (Islamic Republic of)
**Phone**
+98 911 578 3014
**Email address**
mojdehafshar94@gmail.com

**Recruitment status**
**Recruitment complete**

**Funding source**

**Expected recruitment start date**
2023-05-18, 1402/02/28

**Expected recruitment end date**
2023-06-20, 1402/03/30

**Actual recruitment start date**
2023-05-18, 1402/02/28

**Actual recruitment end date**

2023-06-20, 1402/03/30

**Trial completion date**

2023-06-20, 1402/03/30

**Scientific title**

The effect of training and reminding of ergonomic posture on the observance of behaviors based on the prevention of musculoskeletal disorders among nursing students

**Public title**

The effect of teaching and recalling ergonomic posture in nursing students

**Purpose**

Education/Guidance

**Inclusion/Exclusion criteria**

**Inclusion criteria:**

Willingness to participate in research 7th and 8th semester nursing students Having no history of musculoskeletal disorders based on self-report Not having musculoskeletal surgery in the last 6 months Carrying a smartphone and internet connection Not having the experience of participating in workshops or classes related to ergonomic posture

**Exclusion criteria:**

Unwillingness to continue participating in research Not seeing a daily warning for more than three days during a month

**Age**

No age limit

**Gender**

Both

**Phase**

N/A

**Groups that have been masked**

*No information*

**Sample size**

Target sample size: **60**

Actual sample size reached: **53**

**Randomization (investigator's opinion)**

Randomized

**Randomization description**

At first, the list of the training group of nursing students of the 7th and 8th semesters (who are subject to training on all days of the week) in the aforementioned hospitals is received by the researcher, and then the first group of the training list is assigned to the control or intervention group by throwing a coin, and the second group of training The opposite of what was obtained in the coin toss is selected. This is because the number of students in the control and intervention groups is almost equal in terms of academic semester (for example, if 15 students from the control group were from the 7th semester, almost the same number of students from the 8th semester are in the control group). Separation of study groups on the basis of control and intervention will prevent leakage of information within the group. Then the eligible people will be included in the study.

**Blinding (investigator's opinion)**

Not blinded

**Blinding description**

**Placebo**

Not used

**Assignment**

Other

**Other design features**

## Secondary Ids

empty

## Ethics committees

### 1

**Ethics committee**

**Name of ethics committee**

Ethics Committee of Babol University of Medical Sciences

**Street address**

Babol University of Medical Sciences,Ganj Afrooz Ave

**City**

Babol

**Province**

Mazandaran

**Postal code**

47176-47745

**Approval date**

2023-02-19, 1401/11/30

**Ethics committee reference number**

IR.MUBABOL.HRI.REC.1401.234

## Health conditions studied

### 1

**Description of health condition studied**

Musculoskeletal Disorders

**ICD-10 code**

M79.9

**ICD-10 code description**

Soft tissue disorder, unspecified

## Primary outcomes

### 1

**Description**

behaviors based on the prevention of musculoskeletal disorders

**Timepoint**

1month

**Method of measurement**

Questionnaire of behaviors based on the prevention of musculoskeletal disorders

## Secondary outcomes

empty

## Intervention groups

**1**

**Description**

Intervention group: The study process for the intervention group was such that at the beginning of the study, all study questionnaires were completed by the intervention group. Then, according to the free time of the students, at the appropriate time, two training sessions related to the ergonomic situation were held in one of the classes of the nursing faculty, and a booklet containing the workshop information was given to them. The workshop was conducted by the researcher and in the presence of a senior expert in ergonomics so that the researcher's training was under his supervision. At the beginning of the workshop, research objectives and educational materials were introduced, then educational materials were taught. At the end of the workshop of the second session, all the correct positions taught by each student were performed individually and a photo of each student with the correct ergonomic position (head and neck, shoulder, back, legs, standing, sitting, bending, etc.) was taken. In the next stage, which is the ergonomic posture reminder stage, a short text about how to correctly implement the ergonomic posture in an area, along with the person's photo of the same posture, was sent to the student on the social network twice a day for a month (once before the start of homework and once during homework breaks). Each day was dedicated to remembering only one position, for example: Saturday the correct position of the head and neck, Sunday the shoulders, Monday the back, etc. No messages were sent on holidays such as Fridays. After a month, the research questionnaires were completed again by the intervention group.

**Category**

Other

**2**

**Description**

Control group: The study process in the control group is as follows: at the beginning of the study and one month after the start of the study, they completed the study questionnaires and during one month no intervention was done for this group and they completed their studies as usual.

**Category**

Other

## Recruitment centers

**1**

**Recruitment center**

**Name of recruitment center**

Imam Sajjad Ramsar Hospital, Shahid Rajaei Tankabon Hospital, Ayatollah Taleghani Chalos Hospital

**Full name of responsible person**

mozhdeh Tahery afshar

**Street address**

Imam Sajjad (AS) Hospital, Shahid Motahari St, Revolution Square, Ramsar

**City**

Ramsar

**Province**

Mazandaran

**Postal code**

4691714141

**Phone**

+98 11 5522 5151

**Email**

mojdehafshar94@gmail.com

## Sponsors / Funding sources

**1**

**Sponsor**

**Name of organization / entity**

Babol University of Medical Sciences

**Full name of responsible person**

Mahdi Rajabnia

**Street address**

Ganj Afrooz St., Babol University of Medical Sciences

**City**

Babol

**Province**

Mazandaran

**Postal code**

4717647754

**Phone**

+98 911 321 0558

**Email**

research@mubabol.ac.ir

**Grant name**

**Grant code / Reference number**

دانشگاه علوم پزشکی بابل

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

Yes

**Title of funding source**

Babol University of Medical Sciences

**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**

Babol University of Medical Sciences

**Full name of responsible person**

Mozhdeh Tahery Afshar

**Position**

Student

**Latest degree**

Bachelor

**Other areas of specialty/work**
Nursery

**Street address**
Babol University of Medical Sciences, Ganj Afrooz St, Babol, Iran

**City**
Babol

**Province**
Mazandaran

**Postal code**
4754131045

**Phone**
+98 911 578 3014

**Email**
mojdehafshar94@gmail.com

## Person responsible for scientific inquiries

**Contact**

**Name of organization / entity**
Babol University of Medical Sciences

**Full name of responsible person**
Sepideh mohammadi

**Position**
Assistant Professor

**Latest degree**
Ph.D.

**Other areas of specialty/work**
Nursery

**Street address**
Ramsar College of Nursing, Motahari Street, Ramsar, Iran

**City**
Ramsar

**Province**
Mazandaran

**Postal code**
4691714141

**Phone**
+98 11 5522 5151

**Email**
sepidmohamadi@yahoo.com

## Person responsible for updating data

**Contact**

**Name of organization / entity**
Babol University of Medical Sciences

**Full name of responsible person**
Mozhdeh Tahery afshar

**Position**
Student

**Latest degree**
Bachelor

**Other areas of specialty/work**
Nursery

**Street address**
Babol University of Medical Sciences, Ganj Afrooz St, Babol, Iran

**City**
Babol

**Province**
Mazandaran

**Postal code**
4754131045

**Phone**
+98 992 319 4667

**Email**
mojdehafshar94@gmail.com

## Sharing plan

**Deidentified Individual Participant Data Set (IPD)**
Undecided - It is not yet known if there will be a plan to make this available

**Study Protocol**
Undecided - It is not yet known if there will be a plan to make this available

**Statistical Analysis Plan**
Undecided - It is not yet known if there will be a plan to make this available

**Informed Consent Form**
Undecided - It is not yet known if there will be a plan to make this available

**Clinical Study Report**
Undecided - It is not yet known if there will be a plan to make this available

**Analytic Code**
Undecided - It is not yet known if there will be a plan to make this available

**Data Dictionary**
Undecided - It is not yet known if there will be a plan to make this available