# Clinical Trial Protocol
# Iranian Registry of Clinical Trials

07 Nov 2026

## Investigate the effectiveness of ergonomic interventions to reduce the prevalence of musculoskeletal disorders with participatory ergonomics approach to staff a hospital in Iran University of Medical Sciences in 2015.

## Protocol summary


**Summary**

Objectives: The healthcare profession is known to have some of the highest prevalence rates of work-related musculoskeletal disorders (WMSD) among all work professional groups. The aim of this study is to evaluate the effectiveness of ergonomics intervention program as the prevention of musculoskeletal disorders. Design: The program will be conduct among healthcare workers including nurses, operating room technicians, and laboratory staff. Setting and conduct: Before running the program, will investigate the prevalence of musculoskeletal disorders among employees. The multifaceted intervention program consisted of five components, which will design to address all the major ergonomic risk factors identify in the healthcare environment. After the intervention to assess the effectiveness of the program, will investigate the prevalence of musculoskeletal disorders among employees. Participants including major eligibility criteria: All participants will provide writ inform consent. will not pregnant, will no LBP in the last two years, no previous spinal surgery, no current pain medications, will not undertaken previous postural control training. exclusion criteria: The absence of any of the above. Intervention: The five components are: Group training on ergonomic principles and safe practices, Work and equipment modification, Supervis onsite ergonomic training, Regular exercise program and Typing training and computer workstation evaluation and advice. Main outcome measures: Musculoskeletal disorders, After the intervention to assess the effectiveness of the program, will measure the prevalence of musculoskeletal disorders.


## General information

**Acronym**

**IRCT registration information**

IRCT registration number: **IRCT2015092624199N1**
Registration date: **2015-11-16, 1394/08/25**
Registration timing: **registered_while_recruiting**

Last update:
Update count: **0**

**Registration date**

2015-11-16, 1394/08/25

**Registrant information**


**Name**

Mashaallah Aghilinejad

**Name of organization / entity**

Iran University of Medical Sciences

**Country**

Iran (Islamic Republic of)

**Phone**

+98 21 8862 2682

**Email address**

maghilinejad@tums.ac.ir


**Recruitment status**

**Recruitment complete**

**Funding source**

Vice Chancellor for research of Iran University of Medical Sciences

**Expected recruitment start date**

2015-10-23, 1394/08/01

**Expected recruitment end date**

2016-04-19, 1395/01/31

**Actual recruitment start date**

empty

**Actual recruitment end date**

empty

**Trial completion date**

empty

**Scientific title**

Investigate the effectiveness of ergonomic interventions to reduce the prevalence of musculoskeletal disorders with participatory ergonomics approach to staff a hospital in Iran University of Medical Sciences in 2015.

**Public title**

Investigate the effectiveness of ergonomic interventions to reduce the prevalence of musculoskeletal disorders with participatory ergonomics approach to staff a hospital in Iran University of Medical Sciences in 2015.

**Purpose**

Treatment

**Inclusion/Exclusion criteria**

Inclusion criteria: All participants will provide writ inform consent. will not pregnant, will no LBP in the last two years, no previous spinal surgery, no current pain medications, will not undertaken previous postural control training. exclusion criteria: The absence of any of the above.

**Age**

No age limit

**Gender**

Both

**Phase**

N/A

**Groups that have been masked**

*No information*

**Sample size**

Target sample size:

**Randomization (investigator's opinion)**

N/A

**Randomization description**

**Blinding (investigator's opinion)**

Not blinded

**Blinding description**

**Placebo**

Not used

**Assignment**

Single

**Other design features**

## Secondary Ids

empty

## Ethics committees

### 1

**Ethics committee**

**Name of ethics committee**

Iran University of Medical Sciences Ethics Committee

**Street address**

Tehran, Hemmat Highway

**City**

Tehran

**Postal code**

1449614535

**Approval date**

2015-05-19, 1394/02/29

**Ethics committee reference number**

IR.IUMS.REC.1394.112081

## Health conditions studied

### 1

**Description of health condition studied**

Other postprocedural musculoskeletal disorders

**ICD-10 code**

M96.8

**ICD-10 code description**

Instability of joint secondary to removal of joint prosthesis

## Primary outcomes

### 1

**Description**

Rate of musculoskeletal disorders

**Timepoint**

Before intervention, A month after the intervention.

**Method of measurement**

Nordic standard questionnaire

## Secondary outcomes

empty

## Intervention groups

### 1

**Description**

The program will be conduct among healthcare workers including nurses, operating room technicians, and laboratory staff. Before running the program, will investigate the prevalence of musculoskeletal disorders among employees. The multifaceted intervention program consisted of five components, which will design to address all the major ergonomic risk factors identify in the healthcare environment. After the intervention to assess the effectiveness of the program, will investigate the prevalence of musculoskeletal disorders among employees. The five components are: group training on ergonomic principles and safe practices, Work and equipment modification, supervise onsite ergonomic training, regular exercise program and typing training and computer workstation evaluation and advice. Main outcome measures: Prevalence of musculoskeletal disorders. After the intervention to assess the effectiveness of the program, will investigate the prevalence of musculoskeletal disorders among employees. In fact, in this study we have a group for intervention. The program has been implemented to reduce musculoskeletal disorders in this group of employees and the prevalence of musculoskeletal disorders in this group of employees will be compared

before and after the program together.

**Category**

Treatment - Other

## Recruitment centers

### 1

**Recruitment center**

**Name of recruitment center**

Milad Hospital

**Full name of responsible person**

Dr Mashaallah Aghilinejad

**Street address**

Hemmat Highway, Milad Hospital

**City**

Tehran

## Sponsors / Funding sources

### 1

**Sponsor**

**Name of organization / entity**

Vice Chancellor for Research of Iran University of Medical Sciences

**Full name of responsible person**

Seyed Ali Javad Mousavi

**Street address**

Hemmat Highway, Iran University of Medical Sciences

**City**

Tehran

**Grant name**

پایان نامه دکترای تخصصی پژوهشی

**Grant code / Reference number**

25814

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

Yes

**Title of funding source**

Vice Chancellor for Research of 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**

Iran University of Medical Sciences

**Full name of responsible person**

Mashaallah Aghilinejad

**Position**

Associate Professor of Occupational Medicine Department

**Other areas of specialty/work**

**Street address**

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## Person responsible for scientific inquiries

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## Person responsible for updating data

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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*