

Clinical Trial Protocol

Iranian Registry of Clinical Trials

19 Jun 2026

Investigate the effectiveness of ergonomic interventions to reduce the prevalence of musculoskeletal disorders with participatory ergonomics approach to dentists and their assistants in Milad hospital at 2015.

Protocol summary

Summary

Objectives: The dentists are 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 conducted among dentists and their assistants. 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. Inclusion criteria: all participants will provide writ inform consent; no pregnancy for female; no LBP in the last two years; no previous spinal surgery; no current pain medications; not undertaken previous postural control training. Intervention: 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: 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: **IRCT2015113024199N2**

Registration date: **2015-12-09, 1394/09/18**

Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2015-12-09, 1394/09/18

Registrant information

Name

Mashaallah Aghilinejad

Name of organization / entity

Iran University of Medical Sciences

Country

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Phone

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Email address

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Recruitment status

Recruitment complete

Funding source

Research Deputy, Iran University of Medical Sciences

Expected recruitment start date

2015-12-01, 1394/09/10

Expected recruitment end date

2016-02-29, 1394/12/10

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 dentists and their assistants in Milad hospital at 2015.

Public title

Participatory ergonomics interventions for dentists

Purpose

Prevention

Inclusion/Exclusion criteria

Inclusion criteria: all participants will provide writ inform consent; no pregnancy for female; no LBP in the last two years; no previous spinal surgery; no current pain medications; not undertaken previous postural control training.

Age

No age limit

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **100**

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

Ethical Committee of Iran University of Medical Sciences

Street address

Iran University of Medical Sciences, Hemat 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

Diseases of the musculoskeletal system and connective tissue

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, one month the intervention.

Method of measurement

Nordic standard questionnaire

Secondary outcomes

empty

Intervention groups

1

Description

The program will be conduct among dentists. 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. Mashalah Aghilinejad

Street address

Hemat Highway, Milad Hospital

City

Tehran

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

Research Deputy, Iran University of Medical Sciences

Full name of responsible person

Dr. Seyed Ali Javad Mousavi

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Iran University of Medical Sciences, Hemat Highway

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Tehran

Grant name**Grant code / Reference number****Is the source of funding the same sponsor organization/entity?**

Yes

Title of funding source

Research Deputy, 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**

Occupational Medicine Research Center, Iran University of Medical Sciences

Full name of responsible person

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Position

Head of research center

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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

