

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

Assessment of ergonomics improvements in upper trapezius muscle fatigue in carpet weaver

Protocol summary

Summary

Objective: To assess the effect of ergonomics improvements on carpet weavers's upper trapezius fatigue. Design: The carpet weavers with the following criteria will be included in the study: age of 20-40 years old; not having musculoskeletal disorders, acute disease, surgery records. Intervention: carpet weavers will evaluate into traditional and interventional stages with crossover assignment. That former situation defined as work in common workstation and the later one is working in ergonomics workstation. Main outcome measures: effect of each workstation on upper trapezius fatigue, using BPDR self-reporting and EMG parameters.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2012062510111N1**

Registration date: **2013-01-18, 1391/10/29**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2013-01-18, 1391/10/29

Registrant information

Name

Majid Motamedzade

Name of organization / entity

Hamedan University of Medical Sciences

Country

Iran (Islamic Republic of)

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motamedzadeh@umsha.ac.ir

Recruitment status

Recruitment complete

Funding source

Vice-chancellor of Research and Technology, Hamadan University of Medical Sciences

Expected recruitment start date

2011-12-22, 1390/10/01

Expected recruitment end date

2012-08-22, 1391/06/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Assessment of ergonomics improvements in upper trapezius muscle fatigue in carpet weaver

Public title

Assessment of s muscle fatigue in workplaces

Purpose

Prevention

Inclusion/Exclusion criteria

Inclusion criteria: age 20-40 years old. Exclusion criteria: Musculoskeletal disorders; acute disease; history of surgery.

Age

From **20 years** old to **40 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **12**

Randomization (investigator's opinion)

Not randomized

Randomization description
Blinding (investigator's opinion)

Not blinded

Blinding description**Placebo**

Not used

Assignment

Crossover

Other design features**Secondary ids**

empty

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

Local Human Subject Review board

Street address

Hamadan University of Medical Sciences, Shahid
Fahmideh ave

City

Hamadan

Postal code

6517838695

Approval date

2012-06-16, 1391/03/27

Ethics committee reference number

1028/9/35/16/د/پ

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

muscle fatigue

ICD-10 code

M60-M63

ICD-10 code description

Disorders of muscles

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

EMG Parameters

Timepoint

Every 10 minute

Method of measurement

Electromyography records

2**Description**

BPDR Scale

Timepoint

start and End of carpet weaving

Method of measurement

BPDR - self reporting reports

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

objective fatigue

Timepoint

every 10 minute from start carpet weaving

Method of measurement

Electromyography record

2**Description**

subjective fatigue

Timepoint

start and end of carpet weaving

Method of measurement

BPDR-self reporting scale

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

Intervention group: participant works on vertical bearing fitted to their physical dimensions and sits on the chair that has 10 degree forward slop (for 6 hours).

Category

Prevention

2**Description**

Control group: the same group who work traditionally.

Category

N/A

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

Organization of Industry, Trade and Mines, Hamadan -
Mehraban workshop

Full name of responsible person

Mokhtar Moradi

Street address**City**

Hamadan

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

Vice-Chancellor of Research and Technology,

Hamadan University of Medical university

Full name of responsible person

Dr Heydar Tavilani

Street address

Hamadan University of Medical Sciences, school of public health, Shahid Fahmideh avenue

City

Hamadan

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Vice-Chancellor of Research and Technology, Hamadan University of Medical 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

Ergonomics department, school of public health

Full name of responsible person

Dr Majid Motamedzade Torqabe

Position

PhD

Other areas of specialty/work

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Person responsible for scientific inquiries

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Person responsible for updating data

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Name of organization / entity

ergonomics department, school of Public health

Full name of responsible person

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postgraduate student of Ergonomics

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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