Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 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

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Name of organization / entity
Hamedan University of Medical Sciences
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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 weavering
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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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