

Clinical Trial Protocol

Iranian Registry of Clinical Trials

16 Sep 2026

Evaluation of high sound level pressure on human error rate, by using ergonomic test of Two-hand coordination in textile industry in ghaem baft textile in 2012

Protocol summary

Summary

Introduction: in textile industry noise has been a significant source of physical and psychological stress. Noise has broad effects on mental and physical health. Another interest aspect of no auditory effect is the effects of noise on performance, such as information processing, error rate, attention, and memory. In hand working due to the degradation of working memory and distraction of attention away from the task at hand, noise maybe affect performance. The aim of this study is to objectively demonstrate the effect of noise on, error rate, speed response and Performance in textile industry workers. Methods: this clinical study was conducted among 72 workers that have been selected based on stratification to match age and work experience of two noise sections (spanning and weaving) as case group and office workers as control group. Participant who had a history of arthritis or other muscle-related discomfort in the hands or shoulders and also participant with loss hearing were excluded from this study. For measurement work performance two hand coordination tests was used. Measurement by two hand coordination was performed in five times during shift work. The error rate was the main variable in this measurement.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2013040612906N2**

Registration date: **2013-06-12, 1392/03/22**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2013-06-12, 1392/03/22

Registrant information

Name

Shahram Safari

Name of organization / entity

Isfahan University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 31 1683 3605

Email address

safarishahram@hlth.mui.ac.ir

Recruitment status

Recruitment complete

Funding source

Ghaem Baft textile industry

Expected recruitment start date

2012-10-31, 1391/08/10

Expected recruitment end date

2012-11-19, 1391/08/29

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Evaluation of high sound level pressure on human error rate, by using ergonomic test of Two-hand coordination in textile industry in ghaem baft textile in 2012

Public title

Evaluation of high sound level pressure on human error rate

Purpose

Prevention

Inclusion/Exclusion criteria

Inclusion criterion: no hearing loss. Exclusion criterion:

no willing to contribute in the study.

Age

No age limit

Gender

Male

Phase

2

Groups that have been masked

No information

Sample size

Target sample size: 72

Randomization (investigator's opinion)

Not randomized

Randomization description**Blinding (investigator's opinion)**

Not blinded

Blinding description**Placebo**

Not used

Assignment

Parallel

Other design features**Secondary Ids**

empty

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

Isfahan University of Medical Sciences

Street address

isfahan-hezarjareb street

City

isfahan

Postal code

8174884841

Approval date

2012-10-23, 1391/08/02

Ethics committee reference number

391053

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

Vibration in hands

ICD-10 code**ICD-10 code description****Primary outcomes****1****Description**

Error rate in hands

Timepoint

Before starting work, 2 hours, 4 hours, 6 hours and 8 hours after starting work

Method of measurement

By two hand coordination hands

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

Speed rate in hands

Timepoint

Before starting work, 2 hours, 4 hours, 6 hours and 8 hours after starting work

Method of measurement

By two hand coordination test

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

Sound level pressure(SPL) more than 85 dB consider as agent can affected human error, worker who exposed with this sound level and more than was selected as case group and measurement by two-hand coordination test was done in 5 time including: before start work,2,4,6 and 8 hours after working. .

Category

N/A

2**Description**

not interference was done in control group.

Category

N/A

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

ghaem baft jezeh

Full name of responsible person

shahram safari

Street address

isfahan,keshavarzi Blvd

City

isfahan

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

ghaem baft jezeh

Full name of responsible person

meghdad kazemy

Street address
isfahan,kohpayee

City
isfahan

Grant name

Grant code / Reference number

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

Title of funding source
ghaem baft jezeh

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
ilsfahan University of Medical Sciences

Full name of responsible person
sina eshraghi dehkordi

Position
master sceince

Other areas of specialty/work

Street address
isfahan-hezar jarib

City
isfahan

Postal code

Phone
+98 31 1344 6767

Fax

Email
s_eshraghy@hlth.mui.ac.ir

Web page address

Person responsible for scientific inquiries

Contact

Name of organization / entity
Isfahan University of Medical Sciences

Full name of responsible person
shahram safari

Position
MASTER science

Other areas of specialty/work

Street address
Isfahan University of Medical Sciences

City
isfahan

Postal code

Phone
+98 31 1683 6905

Fax

Email
safariashram@hlth.mui.ac.ir

Web page address

Person responsible for updating data

Contact

Name of organization / entity
Isfahan University of Medical Sciences

Full name of responsible person
shahram safari

Position
master science student

Other areas of specialty/work

Street address
Isfahan University of Medical Sciences

City
isfahan

Postal code

Phone
00

Fax

Email
safariashram@hlth.mui.ac.ir

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

Data Dictionary
empty