

Clinical Trial Protocol

Iranian Registry of Clinical Trials

30 May 2026

The Effect of Electronic Intervention on Ergonomic Principles on Electronic Health Literacy and Neck Pain in Health Care Workers

Protocol summary

Study aim

The Effect of Electronic Training on Ergonomic Principles on E-Health and Self-Care Neck Pain among Health Workers in Mashhad in 2019

Design

Clinical trial with control group

Settings and conduct

A random sample of randomly selected cluster randomly selected from health centers of the city of Mashhad randomly and on the basis of a lottery, two comprehensive health services for the test group and the corresponding two comprehensive health services for the control group will be selected and after obtaining Informed consent of the staff, the primary data were collected using a demographic questionnaire, an electronic health literacy questionnaire, and a self-care questionnaire for neck pain and a neck pain scanner. Then the educational intervention will be conducted for the test group for six weeks and the control group will not receive any training. All questionnaires will be measured and compared in both groups after intervention and three months later.

Participants/Inclusion and exclusion criteria

Being employed at health centers

Intervention groups

For the test group, a briefing session will be initiated by providing multimedia CDs and educational pamphlets. Depending on the needs and goals of the training and the target group that is the health worker, the intervention of electronic training will ergonomically work with the computer based on health literacy strategies based on Similar studies will be sent by email for six weeks, and daily feedback will be taken and used to enhance the learning of text messages by three messages per week. The control group does not receive any training.

Main outcome variables

self-care status of employees to prevent neck pain

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20160619028529N11**

Registration date: **2019-08-28, 1398/06/06**

Registration timing: **registered_while_recruiting**

Last update: **2019-08-28, 1398/06/06**

Update count: **0**

Registration date

2019-08-28, 1398/06/06

Registrant information

Name

Hadi Tehrani

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 51 3853 8530

Email address

tehranilh@mums.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2019-08-06, 1398/05/15

Expected recruitment end date

2020-01-21, 1398/11/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The Effect of Electronic Intervention on Ergonomic Principles on Electronic Health Literacy and Neck Pain in Health Care Workers

Public title

The effect of education on e-health and self-care health education among health workers

Purpose

Prevention

Inclusion/Exclusion criteria

Inclusion criteria:

Health workers with at least one year of work experience with computers

Exclusion criteria:

Doing professional exercise Neck pain due to trauma History of surgery in the spine Congenital abnormality in the cervical spine specific diseases associated with neck musculoskeletal disorders (rheumatoid arthritis, spinal tuberculosis, head and neck cancer, tumors, etc.)

Age

No age limit

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: 90

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

Ethics committee of Mashhad University of Medical Sciences

Street address

Vice chancellor for research, Qoreishi Building, Daneshgah 18, Daneshgah Street

City

mashhad

Province

Razavi Khorasan

Postal code

9138813944

Approval date

2019-08-03, 1398/05/12

Ethics committee reference number

IR.MUMS.REC.1398.149

Health conditions studied

1

Description of health condition studied

neck pain

ICD-10 code

M96.89

ICD-10 code description

Other intraoperative and postprocedural complications and disorders of the musculoskeletal system

Primary outcomes

1

Description

Self-care behavior of neck pain

Timepoint

Before the intervention, immediately and, three months after the intervention

Method of measurement

Preventive Behavior Questionnaire for Neck Pain

2

Description

Electronic Health Literacy

Timepoint

Before the intervention, immediately and, three months after the intervention

Method of measurement

Electronic Health Literacy questionnaire

Secondary outcomes

1

Description

neck pain

Timepoint

Before intervention, immediately and, three months after the intervention

Method of measurement

visual Analogue Scale

2

Description

ergonomic risk factors

Timepoint

Before intervention, immediately and, three months after the intervention

Method of measurement

Rapid Office Strain Assessment questionnaire

Intervention groups

1

Description

Intervention group: A six-week training intervention on the principles of computerized ergonomics will be emailed with emphasis on the use of electronic health literacy and self-care strategies for neck pain. Participants will be required to send an email in response to the email that they have received and the activities required. During this time, SMS will be used three times a week to enhance learning and encourage homework.

Category

Behavior

2

Description

control group: No intervention was done for control group.

Category

Behavior

Recruitment centers

1

Recruitment center

Name of recruitment center

Comprehensive Health Service Centers

Full name of responsible person

Monireh Abdollahi

Street address

Daneshgah 18, Daneshgah Street

City

Mashhad

Province

Razavi Khorasan

Postal code

9138813944

Phone

+98 51 3841 5001

Email

abdollahim3@mums.ac.ir

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Mashhad University of Medical Sciences

Full name of responsible person

Dr Mohsen Tafaghodi

Street address

Research Deputy, Qoreishi Building, Daneshgah 18,
Daneshgah Street

City

Mashhad

Province

Razavi Khorasan

Postal code

9138813944

Phone

+98 51 3841 1538

Email

ramresearch@mums.ac.ir

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Mashhad University of Medical Sciences

Proportion provided by this source

100

Public or private sector

Public

Domestic or foreign origin

Domestic

Category of foreign source of funding

empty

Country of origin

Type of organization providing the funding

Academic

Person responsible for general inquiries

Contact

Name of organization / entity

Mashhad University of Medical Sciences

Full name of responsible person

Hadi Tehrani

Position

Assistance Professor of Health Education and Health
Promotion

Latest degree

Ph.D.

Other areas of specialty/work

Health Promotion

Street address

Department of Health Education and Health
Promotion. School of Public Health, Mashhad
University of Medical Sciences, Mashhad, Iran

City

Mashhad

Province

Razavi Khorasan

Postal code

9138813944

Phone

+98 51 3189 2203

Email

tehranilh@mums.ac.ir

Person responsible for scientific inquiries

Contact

Name of organization / entity

Mashhad University of Medical Sciences

Full name of responsible person

Hadi Tehrani

Position

Assistance Professor of Health Education and Health Promotion

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Department of Health Education and Health Promotion. School of Public Health, Mashhad University of Medical Sciences, Mashhad, Iran

City

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Postal code

9138813944

Phone

+98 51 5189 2203

Email

tehranilh@mums.ac.ir

Sharing plan**Deidentified Individual Participant Data Set (IPD)**

Yes - There is a plan to make this available

Study Protocol

No - There is not a plan to make this available

Statistical Analysis Plan

Undecided - It is not yet known if there will be a plan to make this available

Informed Consent Form

Undecided - It is not yet known if there will be a plan to make this available

Clinical Study Report

Undecided - It is not yet known if there will be a plan to make this available

Analytic Code

Undecided - It is not yet known if there will be a plan to make this available

Data Dictionary

Undecided - It is not yet known if there will be a plan to make this available

Title and more details about the data/document

Potential data is sharable after distinguishing people

When the data will become available and for how long

Start the access period one month after the publication of result

To whom data/document is available

Researchers working in academia

Under which criteria data/document could be used

Data is sent through an official request and by email

From where data/document is obtainable

Hadi Tehrani: tehranilh@mums.ac.ir

What processes are involved for a request to access data/document

Data is sent through an official request and by email

Comments