

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

17 Jun 2026

### Development and evaluation of education intervention based on Extended Parallel Process Model in adopting preventive behaviors of Metabolic syndrome among employees

#### Protocol summary

##### Study aim

Determining the effect of the education intervention based on Extended Parallel Process Model in adopting preventive behaviors of Metabolic syndrome among employees in Rafsanjan University of Medical Sciences

##### Design

From the list of staff of Rafsanjan University of Medical Sciences, 144 employees will be selected and randomly assigned to the control and the intervention group. Will be use block size 4 to randomization.

##### Settings and conduct

Setting: Rafsanjan University of Medical Sciences.  
Conduct: One hundred fourteen employees will be selected and randomly assigned to the control and the intervention group. The two groups completed the questionnaires. Educational sessions will be developed based on the pretest results and will be conducted for the participants in the intervention group. Six months after the intervention, the two groups will be followed and completed the questionnaires again. Finally, the data will be analyzed.

##### Participants/Inclusion and exclusion criteria

Inclusion criteria: Employment in administrative departments of Rafsanjan University of Medical Sciences and not having academic degree in health, paramedical and medical fields Exclusion criteria: Pregnancy, breastfeeding, history of diagnosed metabolic syndrome, history of endocrine disorders and immunodeficiency, substance abuse, consumption of weight reduction medications, history of diagnosed atherosclerosis and having a specific diet or exercise to control a specific illness

##### Intervention groups

Intervention group: Instruction sessions in terms of metabolic syndrome will be developed and delivered to the study participants. Control group: No intervention.

##### Main outcome variables

Primary outcomes: Increasing behaviors of study participants to prevention of metabolic syndrome

Secondary outcomes: Modifying the attitude and beliefs of participants about metabolic syndrome

#### General information

##### Reason for update

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20110727007132N21**

Registration date: **2022-02-02, 1400/11/13**

Registration timing: **prospective**

Last update: **2022-02-02, 1400/11/13**

Update count: **0**

##### Registration date

2022-02-02, 1400/11/13

##### Registrant information

##### Name

Tahereh Dehdari

##### Name of organization / entity

Iran University of Medical Sciences and Health Services

##### Country

Iran (Islamic Republic of)

##### Phone

+98 2188779118263

##### Email address

t-dehdari@tums.ac.ir

##### Recruitment status

**Recruitment complete**

##### Funding source

##### Expected recruitment start date

2022-08-23, 1401/06/01

##### Expected recruitment end date

2024-03-19, 1402/12/29

**Actual recruitment start date**

empty

**Actual recruitment end date**

empty

**Trial completion date**

empty

**Scientific title**

Development and evaluation of education intervention based on Extended Parallel Process Model in adopting preventive behaviors of Metabolic syndrome among employees

**Public title**

Development and evaluation of education intervention based on Extended Parallel Process Model in adopting preventive behaviors of Metabolic syndrome among employees

**Purpose**

Prevention

**Inclusion/Exclusion criteria**

**Inclusion criteria:**

Employing in the administrative departments of Rafsanjani University of Medical Sciences Not having academic degree in health, paramedical and medical fields

**Exclusion criteria:**

pregnancy Breastfeeding History of diagnosed metabolic syndrome History of endocrine disorders and immunodeficiency Substance abuse Consumption of weight reduction medications History of diagnosed atherosclerosis

**Age**

From **18 years** old

**Gender**

Both

**Phase**

N/A

**Groups that have been masked**

*No information*

**Sample size**

Target sample size: **144**

**Randomization (investigator's opinion)**

Randomized

**Randomization description**

The administrative employee list of Rafsanjan University of Medical Sciences (with the exception of the faculty members) is available to researchers. We will select 144 people from this list at random and then randomly assign these individuals to the experimental and control groups. For randomization we will use block size 4. With a sample size of 144, 36 blocks of size 4 will be produced based on this online software: [www.sealedenvelope.com](http://www.sealedenvelope.com).

**Blinding (investigator's opinion)**

Not blinded

**Blinding description**

**Placebo**

Not used

**Assignment**

Parallel

**Other design features**

There is no special characteristic in this study.

**Secondary Ids**

empty

**Ethics committees**

1

**Ethics committee**

**Name of ethics committee**

Ethics Committee of Iran University of Medical Sciences and Health Services

**Street address**

Iran University of Medical Sciences, Shahid Hemmat Highway

**City**

Tehran

**Province**

Tehran

**Postal code**

1449614535

**Approval date**

2022-01-01, 1400/10/11

**Ethics committee reference number**

IR.IUMS.REC.1400.851

**Health conditions studied**

1

**Description of health condition studied**

Metabolic syndrome

**ICD-10 code**

E88.81

**ICD-10 code description**

Metabolic syndrome

**Primary outcomes**

1

**Description**

Increasing the behavior of study participants in terms of prevention of metabolic syndrome

**Timepoint**

Before and six months after the intervention

**Method of measurement**

Questionnaire

**Secondary outcomes**

1

**Description**

Modifying the attitude of study participants in terms of metabolic syndrome

**Timepoint**

Before and six months after the intervention

**Method of measurement**

questionnaire

## 2

### **Description**

Increasing the perceived susceptibility of study participants in terms of metabolic syndrome

### **Timepoint**

Before and six months after the intervention

### **Method of measurement**

questionnaire

## 3

### **Description**

Increasing the perceived severity of study participants in terms of metabolic syndrome

### **Timepoint**

Before and six months after the intervention

### **Method of measurement**

questionnaire

## 4

### **Description**

Increasing the fear of study participants in terms of metabolic syndrome

### **Timepoint**

Before and six months after the intervention

### **Method of measurement**

questionnaire

## 5

### **Description**

Decreasing the defensive mechanisms of study participants in terms of metabolic syndrome

### **Timepoint**

Before and six months after the intervention

### **Method of measurement**

questionnaire

## 6

### **Description**

Increasing the perceived self-efficacy of study participants in terms of metabolic syndrome

### **Timepoint**

Before and six months after the intervention

### **Method of measurement**

questionnaire

## 7

### **Description**

Increasing the response efficacy of study participants in terms of metabolic syndrome

### **Timepoint**

Before and six months after the intervention

### **Method of measurement**

questionnaire

## 8

### **Description**

Increasing the intention of study participants in terms of prevention of metabolic syndrome

### **Timepoint**

Before and six months after the intervention

### **Method of measurement**

questionnaire

## **Intervention groups**

### 1

#### **Description**

Intervention group: According to pre-test results, educational intervention in terms of metabolic syndrome will be developed and conducted for the study participants in the intervention group. Educational intervention based on the structures of the Extended Parallel Process Model in the form of a 4-hour online workshop in 8 sessions (general content of the sessions: Familiarity and study of risk factors of metabolic syndrome, identification of sensitivities and perception of conditions, education based on perception, familiarity with complications and sensitivities, assessing the individual's awareness to provide training, familiarity with changing behavior and healthy lifestyle, evaluating the knowledge and training given in these sessions, familiarizing the individual with the effects of metabolic syndrome, determining the effectiveness of training) and presenting a pamphlet (definition of the metabolic syndrome and its criteria and consequences - Lifestyle Modification Behaviors) will be designed to address lifestyle modification measures to prevent metabolic syndrome. This training will be done for people in the intervention group.

#### **Category**

Behavior

### 2

#### **Description**

Control group: Control group: No intervention.

#### **Category**

N/A

## **Recruitment centers**

### 1

#### **Recruitment center**

##### **Name of recruitment center**

Rafsanjan University of Medical Sciences

##### **Full name of responsible person**

Dr. Vahid Mohammadi Shahrokhi

##### **Street address**

Rafsanjan University of Medical Sciences, Hazrat Ali Ibn Abi Talib (AS) Blv

##### **City**

Rafsanjan

##### **Province**

Kerman  
**Postal code**  
7717933777  
**Phone**  
+98 34 3428 0090  
**Email**  
office@rums.ac.ir

## Sponsors / Funding sources

### 1

#### Sponsor

**Name of organization / entity**  
Iran University of Medical Sciences  
**Full name of responsible person**  
Dr. Hossein Kaivani  
**Street address**  
Iran university of medical sciences, Shahid Hemmat  
highway  
**City**  
Tehran  
**Province**  
Tehran  
**Postal code**  
1449614535  
**Phone**  
+98 21 8670 2504  
**Email**  
research@iums.ac.ir  
**Web page address**  
<https://iums.ac.ir>

#### Grant name

**Grant code / Reference number**

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

No

#### Title of funding source

Iran 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**  
Iran University of Medical Sciences  
**Full name of responsible person**  
Dr. Tahereh Dehdari  
**Position**  
Associate professor  
**Latest degree**  
Ph.D.

#### Other areas of specialty/work

Health Promotion

#### Street address

Iran university of Medical Sciences, Shahid Hemmat  
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#### Province

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1449614535

#### Phone

+98 21 8670 4756

#### Email

dehdarit@yahoo.com

## Person responsible for scientific inquiries

#### Contact

#### Name of organization / entity

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#### Full name of responsible person

Dr. Tahereh Dehdari

#### Position

Associate Professor

#### Latest degree

Ph.D.

#### Other areas of specialty/work

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## Person responsible for updating data

#### Contact

#### Name of organization / entity

Iran University of Medical Sciences

#### Full name of responsible person

Dr. Tahereh Dehdari

#### Position

Associate Professor

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**Province**

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**Postal code**

1449614535

**Phone**

009886704756

**Email**

dehdarit@yahoo.com

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

No - There is not a plan to make this available

**Justification/reason for indecision/not sharing IPD**

The results only will be published in the article.

**Study Protocol**

No - There is not a plan to make this available

**Statistical Analysis Plan**

No - There is not 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**

Not applicable

**Analytic Code**

Not applicable

**Data Dictionary**

Not applicable