

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

23 Jun 2026

### The effect of a learning style based education on metabolic control, quality of life and empowerment of patients with type 2 diabetes

#### Protocol summary

##### Summary

Objective: the effect of a learning style based education on metabolic control, quality of life and empowerment of patients with type 2 diabetes. Design: randomized clinical trial. Method: the study population: Patients with type 2 diabetes attending diabetes clinic of Shiraz Shahid Motahari clinic. Inclusion criteria: type 2 diabetes; tending to participate in research; ability to understand the content based on the researcher's judgment; not participating in similar educational classes in the past 6 months and reading and writing literacy. Exclusion criteria: unwillingness to continue participation in the study and stressful condition or surgery during the study. Sample size: 216. Intervention: after introducing the study and complete the consent form by patients researchers gather their basic information includes: Laboratory tests(FBS, HbA1C, Lipid profile) and questionnaires(demographic data, quality of life, empowerment and preferred learning style) then the patients are divided to 3 groups with block randomization technique(72 patients in each group): intervention 1, intervention 2 and control group. Patients in intervention 1 group will participate in multimodal educational class ( Combined teaching method of styles includes: visual, aural, read-write, and kinesthetic). Patients in intervention 2 group will participate in educational class based on their preferred learning style and patients in control group will participate in routine clinic classes. Three months after intervention laboratory tests, quality of life, and empowerment of all of the patients are re-assessed.

#### General information

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT201302222621N12**

Registration date: **2013-06-06, 1392/03/16**

Registration timing: **retrospective**

Last update:

Update count: **0**

##### Registration date

2013-06-06, 1392/03/16

##### Registrant information

###### Name

Marzieh Moattari

###### Name of organization / entity

Shiraz university of medical sciences

###### Country

Iran (Islamic Republic of)

###### Phone

+98 71 1647 4250

###### Email address

moattarm@sums.ac.ir

##### Recruitment status

**Recruitment complete**

##### Funding source

Shiraz University of Medical Sciences

##### Expected recruitment start date

2013-01-27, 1391/11/08

##### Expected recruitment end date

2013-03-19, 1391/12/29

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

##### Scientific title

The effect of a learning style based education on metabolic control, quality of life and empowerment of patients with type 2 diabetes

##### Public title

The effect of patient education on diabetes control

##### Purpose

Prevention

## Inclusion/Exclusion criteria

Inclusion criteria: type 2 diabetes; tending to participate in research; ability to understand the content based on the researcher's judgment; not participating in similar educational classes in the past 6 months and reading and writing literacy. Exclusion criteria: unwillingness to continue participation in the study and stressful condition or surgery during the study.

## Age

No age limit

## Gender

Both

## Phase

N/A

## Groups that have been masked

No information

## Sample size

Target sample size: **216**

## Randomization (investigator's opinion)

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

Shiraz University of Medical Science

##### Street address

Shiraz University of Medical Science, Zand st

##### City

Shiraz

##### Postal code

##### Approval date

2013-01-26, 1391/11/07

##### Ethics committee reference number

CT-91-6428

## Health conditions studied

### 1

#### Description of health condition studied

Diabetes

#### ICD-10 code

E10,E11

#### ICD-10 code description

Insulin-dependent diabetes mellitus, Non-insulin-

dependent diabetes mellitus

## Primary outcomes

### 1

#### Description

Fasting Blood Sugar

#### Timepoint

Baseline and 3 months after intervention

#### Method of measurement

mg/dl

### 2

#### Description

Haemoglobin A1c

#### Timepoint

Baseline and 3 months after intervention

#### Method of measurement

percent

### 3

#### Description

tryglyceride

#### Timepoint

Baseline and 3 months after intervention

#### Method of measurement

mg/dl

### 4

#### Description

cholesterol

#### Timepoint

Baseline and 3 months after intervention

#### Method of measurement

mg/dl

### 5

#### Description

Low Density Lipoprotein

#### Timepoint

Baseline and 3 months after intervention

#### Method of measurement

mg/dl

### 6

#### Description

High Density Lipoprotein

#### Timepoint

Baseline and 3 months after intervention

#### Method of measurement

mg/dl

### 7

#### Description

empowerment

#### Timepoint

Baseline and 3 months after intervention

**Method of measurement**

michigan diabetes empowerment questionnaire

**8**

**Description**

quality of life

**Timepoint**

Baseline and 3 months after intervention

**Method of measurement**

Quality of Life Instrument for Indian Diabetes Patients (QOLID)

**9**

**Description**

Body Mass Index

**Timepoint**

Baseline and 3 months after intervention

**Method of measurement**

(height)<sup>2</sup>/(weight)

**Secondary outcomes**

empty

**Intervention groups**

**1**

**Description**

Multimoda education Target group: intervention 1 group  
Numbers of participants in each calass: 12 This education program is a integration of styles includes: visual, aural, read-write, and kinesthetic Duration: 1 session

**Category**

Other

**2**

**Description**

Learning style based education Target group: intervention 2 group  
Numbers of participants in each calass: 12 Patients in this group participate in education class based on their preferred learning styles. Duration: 1 session

**Category**

Other

**3**

**Description**

Routine education program Target group: control  
Numbers of participants in each class: 12 The patients in this group participate in the lecturing routine class which is conducted in the clinic. Duration: 1 session

**Category**

Other

**Recruitment centers**

**1**

**Recruitment center**

**Name of recruitment center**

Diabetes clinic of Shahid Motahari Clinic

**Full name of responsible person**

Dr. Marzieh Moattari

**Street address**

Diabetes clinic,Shahid Motahari Clinic, Namazi square

**City**

shiraz

**Sponsors / Funding sources**

**1**

**Sponsor**

**Name of organization / entity**

Shiraz University of Medical Sciences

**Full name of responsible person**

Dr Gholamreza Hatam

**Street address**

Shiraz University of Medical Sciences

**City**

Shiraz

**Grant name**

**Grant code / Reference number**

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

Yes

**Title of funding source**

Shiraz University of Medical Sciences

**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**

Shiraz University of Medical Sciences

**Full name of responsible person**

Dr. Marzieh Moattari

**Position**

PHD in Nursing, Faculty Member, Shiraz University of Medical Sciences

**Other areas of specialty/work**

**Street address**

Nursing College

**City**

Shiraz

**Postal code**

**Phone**  
+98 71 1647 4254

**Fax**

**Email**  
moattarm@sums.ac.ir

**Web page address**

## Person responsible for scientific inquiries

### Contact

**Name of organization / entity**  
Shiraz University of Medical Sciences

**Full name of responsible person**  
Dr. Marzieh Moattari

**Position**  
PhD of Nursing

**Other areas of specialty/work**

**Street address**  
Shiraz Nursing College

**City**  
Shiraz

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+98 71 1647 4254

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## Person responsible for updating data

### Contact

**Name of organization / entity**

Shiraz University of Medical Sciences

**Full name of responsible person**

Dr. Marzieh Moattari

**Position**

PhD of Nursing, Faculty member of Shiraz University of Medical Sciences

**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*