

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

17 Sep 2026

### The effectiveness of cognitive rehabilitation on executive functions and cravings in patients undergoing addiction treatment

#### Protocol summary

##### Study aim

Investigating the effect of cognitive rehabilitation on executive functions and cravings in patients undergoing addiction treatment

##### Design

The clinical trial has a control group, with a pre-test - post-test design. The trial phase on 30 patients undergoing addiction treatment, spss software is used for data analysis.

##### Settings and conduct

The present study will be conducted on people suffering from addiction who were kept in compulsory addiction treatment centers in Semnan city. 30 people will be randomly selected and will be placed in two groups of 15 people, intervention and control. Cognitive rehabilitation intervention will be done in 14 sessions in the form of exercises on the intervention group, then the data obtained from the pre-test and post-test stages. The test will be analyzed by spss software

##### Participants/Inclusion and exclusion criteria

Entry requirements: people undergoing addiction treatment  
Non-entry conditions: People with mental disorders

##### Intervention groups

Cognitive rehabilitation intervention (in the form of exercises) will be done to strengthen the executive functions of people with substance disorders who have been treated. The control group is the people undergoing addiction treatment who will not receive cognitive rehabilitation

##### Main outcome variables

Executive functions: creates purposeful behavior in humans  
Craving: Strong desire to use drugs

#### General information

##### Reason for update

##### Acronym

AEFS

#### IRCT registration information

IRCT registration number: **IRCT20230808059086N1**

Registration date: **2023-09-27, 1402/07/05**

Registration timing: **retrospective**

Last update: **2023-09-27, 1402/07/05**

Update count: **0**

##### Registration date

2023-09-27, 1402/07/05

#### Registrant information

##### Name

Mahnaz Zargarani

##### Name of organization / entity

##### Country

Iran (Islamic Republic of)

##### Phone

+98 23 3335 1017

##### Email address

mzargarani47@gmail.com

#### Recruitment status

##### Recruitment complete

#### Funding source

#### Expected recruitment start date

2023-09-02, 1402/06/11

#### Expected recruitment end date

2023-09-12, 1402/06/21

#### Actual recruitment start date

empty

#### Actual recruitment end date

empty

#### Trial completion date

empty

#### Scientific title

The effectiveness of cognitive rehabilitation on executive functions and cravings in patients undergoing addiction treatment

**Public title**

Investigating the effect of cognitive rehabilitation on addiction treatment

**Purpose**

Education/Guidance

**Inclusion/Exclusion criteria****Inclusion criteria:**

Having a history of drug use for at least one year or more  
Passing more than a week of people's stay in the addiction treatment center  
Age range of minimum 18 and maximum 55 years

**Exclusion criteria:**

Have mental disorders (psychosis, bipolar, acute depression). Suffer from certain physical diseases

**Age**

From **18 years** old to **55 years** old

**Gender**

Male

**Phase**

N/A

**Groups that have been masked**

*No information*

**Sample size**

Target sample size: **30**

**Randomization (investigator's opinion)**

Randomized

**Randomization description**

Using random number tables (Morgan's table), 30 people were selected from the available population. The unit of randomization was individual. The number of 30 subjects were randomly assigned to two groups, then in the randomization stage of the experimental procedure, the subjects were placed in two control and intervention groups. The control and intervention groups were not known in advance, and after assigning people to two groups randomly, one group was selected as the intervention group and the other group as the control group. At this stage, concealment was done to prevent any predictions from the participants and the researcher.

**Blinding (investigator's opinion)**

Not blinded

**Blinding description****Placebo**

Not used

**Assignment**

Parallel

**Other design features**

This study has two experimental and control groups, which is done only on the experimental rehabilitation intervention group

**Secondary Ids**

empty

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

Islamic Azad University, semnan branch

**Street address**

Eynak negah noo, moalem Square, semnan

**City**

Semnan

**Province**

Semnan

**Postal code**

3514713198

**Approval date**

2023-05-30, 1402/03/09

**Ethics committee reference number**

IR.IAU.SEMNAN.REC.1402.034

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

Drug addiction

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

Executive functions: are a set of cognitive processes that are necessary for the cognitive control of behavior, which include basic processes such as response inhibition, cognitive flexibility, and response inhibition.

**Timepoint**

At the beginning of the study (before the start of the intervention) and at the end of the study (after 14 sessions of cognitive rehabilitation intervention)

**Method of measurement**

Wisconsin card sorting tool, N BACK application, go no go assignment

**2****Description**

Craving: It is called a strong and uncontrollable desire in patients suffering from addiction to get the drug again

**Timepoint**

At the beginning of the study (before the start of the intervention) and at the end of the study (after 14 sessions of cognitive rehabilitation)

**Method of measurement**

Instant consumption craving questionnaire

**Secondary outcomes**

empty

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

Intervention group: NEAT cognitive rehabilitation intervention will take place on this group (15 people).

The NEAT intervention will be presented to the study participants in the form of paper-based assignments. These tasks include finding the differences, finding lost objects, mazes, puzzles, vocabulary tables. The rehabilitation sessions are 14 sessions, which will be held during 7 weeks and 2 sessions each week with the aim of strengthening and improving the executive functions of the brain.

#### Category

Rehabilitation

## 2

#### Description

Control group: There is no intervention on the control group

#### Category

N/A

## Recruitment centers

## 1

#### Recruitment center

##### Name of recruitment center

Compulsory addiction treatment center semnan city

##### Full name of responsible person

Mahnaz Zargarani

##### Street address

Eynak negah noo, moalem Square, semnan

##### City

Semnan

##### Province

Semnan

##### Postal code

3514713198

##### Phone

+98 23 3335 1017

##### Email

Mzargarani47@gmail.com

## Sponsors / Funding sources

## 1

#### Sponsor

##### Name of organization / entity

Islamic Azad University

##### Full name of responsible person

Mohammad Karim Sohrabi

##### Street address

Eynak negah noo, moalem square, semnan

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#### Grant name

-

#### Grant code / Reference number

-

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

Yes

#### Title of funding source

Islamic Azad University

#### Proportion provided by this source

5

#### 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

Islamic Azad University

##### Full name of responsible person

Mahnaz Zargarani

##### Position

Collegian

##### Latest degree

Bachelor

##### Other areas of specialty/work

Psychology

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## Person responsible for scientific inquiries

#### Contact

##### Name of organization / entity

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Mahnaz Zargarani

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## Person responsible for updating data

### Contact

**Name of organization / entity**  
Islamic Azad University  
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Mahnaz Zargarani  
**Position**  
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**Latest degree**  
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## 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

There is no further information

### 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

No - There is not a plan to make this available

### Clinical Study Report

No - There is not a plan to make this available

### Analytic Code

No - There is not a plan to make this available

### Data Dictionary

No - There is not a plan to make this available