Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

The Effectiveness of Matrix Treatment on Craving and Psychological Capital in cannabis users

Protocol summary

Study aim
The aim of this study is to evaluate the impact of Matrix treatment on marijuana craving and psychological capacity among cannabis users.

Design
Parallel groups randomized trial with control group, unblinded, will be used to randomize Stat Trek computer software.

Settings and conduct
In eight sessions, the first group of 20 mild-intensity cannabis users will receive matrix therapy individually, as well as with their families. The second group, which consists of 20 moderate and severe cannabis users, will receive matrix therapy in 12 group sessions, while a control group of 20 cannabis users will receive no intervention. We will conduct meetings online and in person face-to-face in the psychology clinic of the Azad University-West Tehran branch.

Participants/Inclusion and exclusion criteria
Inclusion criteria: Participants must have at least twelve months of experience with marijuana use. They must also avoid stimulant drugs other than cigarettes and marijuana, be between 18 and 50 years of age, and have signed an ethical form indicating their consent. Exclusion criteria: Participants who require more advanced care than what an outpatient group can provide, are concurrently receiving another medical or psychological intervention, are unavailable during study sessions, have missed more than four sessions, or have any psychiatric or physical disability.

Intervention groups
The first experimental group receives a matrix intervention based on family counseling, cognitive-behavioral therapy (CBT), motivational enhancement therapy (MET), and contingency management (CM). The second experimental group receives CBT plus MET, and the third group is non-intervention control.

Main outcome variables
Psychological capital, marijuana intensity and cravings (primary consequences), mental health, generalized anxiety, checklists, and self-efficacy in marijuana withdrawal (secondary consequences)

General information

Reason for update
Announcement of the ending date of the trial

Acronym
CUD

IRCT registration information
IRCT registration number: **IRCT20240723062524N1**
Registration date: **2024-07-27, 1403/05/06**
Registration timing: **prospective**

Last update: **2024-12-06, 1403/09/16**
Update count: **2**

Registration date
2024-07-27, 1403/05/06

Registrant information

Name
Mahmood Amirinia

Name of organization / entity

Country
Iran (Islamic Republic of)

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Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2024-08-01, 1403/05/11

Expected recruitment end date
2024-09-01, 1403/06/11

Actual recruitment start date

2024-08-01, 1403/05/11

Actual recruitment end date

2024-08-22, 1403/06/01

Trial completion date

2024-12-03, 1403/09/13

Scientific title

The Effectiveness of Matrix Treatment on Craving and Psychological Capital in cannabis users

Public title

The Effectiveness of Psychological Treatment in adults with cannabis use disorder

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

According to the fifth edition of the Diagnostic and Statistical Mental Health Analysis, Text Revision Criteria (DSM-5-TR), participants must have at least twelve months of experience with marijuana use. They must also avoid stimulant drugs other than cigarettes and marijuana. The participants must be between 18 and 50 years of age and have signed an ethical form indicating their consent.

Exclusion criteria:

Participants who require more advanced care than what an outpatient group can provide, such as those experiencing active mania or psychosis. Any psychiatric or physical condition may find it challenging to communicate effectively. The participant is concurrently receiving another medical or psychological intervention that is based on cognitive behavior therapy. Participants who are unavailable during study sessions and have missed more than four sessions.

Age

From **18 years** old to **50 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **60**

Actual sample size reached: **60**

Randomization (investigator's opinion)

Randomized

Randomization description

Randomization will be performed with a simple method and random numbers generated by computer software (Stat Trek software), which chooses the random numbers.

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

Islamic Azad University- Najafabad branch

Street address

University Sq., Najafabad, Isfahan, Iran

City

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Province

Isfehan

Postal code

8514143131

Approval date

2024-06-27, 1403/04/07

Ethics committee reference number

IR.IAU.NAJAFABAD.REC.1403.097

Health conditions studied

1

Description of health condition studied

Cannabis Use Disorder (CUD)

ICD-10 code

F12.1

ICD-10 code description

Cannabis abuse

2

Description of health condition studied

Cannabis Withdrawal Disorder (CWD)

ICD-10 code

F12.2

ICD-10 code description

Cannabis dependence

Primary outcomes

1

Description

Marijuana Craving Score

Timepoint

Before and after the intervention

Method of measurement

Marijuana Craving Questionnaire (MCQ)

2

Description

Diagnosis of cannabis use and severity

Timepoint

At the onset of both the study and the intervention

Method of measurement

The Structured Clinical Interview for Clinical Trials version (SCID-5-CT).

3

Description
Psychological Capital Score
Timepoint
Before and after the intervention
Method of measurement
Psychological Capital Questionnaire (PCQ)

4

Description
Diagnosis of cannabis use and severity
Timepoint
At the onset of the study and one month after the completion of the intervention,
Method of measurement
The Cannabis Use Disorders Identification Test (CUDIT-R-Pr) has been revised in Persian.

5

Description
Negative urine test for cannabis
Timepoint
Before intervention and 3, 6, 9, 12 and 16 weeks after intervention
Method of measurement
Cannabis urine test

Secondary outcomes

1

Description
Patient Health Score
Timepoint
Before and after the intervention
Method of measurement
Patient Health Questionnaire (PHQ-9)

2

Description
General Anxiety Disorder Score
Timepoint
Before and after the intervention
Method of measurement
General Anxiety Disorder Questionnaire (GAD-7)

3

Description
The Marijuana Withdrawal Checklist to assess the incidence and severity of perceived withdrawal symptoms
Timepoint
Before and after the intervention
Method of measurement
The Marijuana Withdrawal Checklist (MWC)

4

Description
Self-Efficacy Score to abstinence from marijuana
Timepoint
Before and after the intervention
Method of measurement
The Self-Efficacy Questionnaire (SEQ) for abstinence from marijuana

Intervention groups

1

Description
The first intervention group consists of mild cannabis users who receive matrix intervention in 8 to 12 sessions based on family counseling, cognitive-behavioral therapy (CBT), motivational enhancement therapy (MET), and contingency management (CM) individually and with their families in two sessions per week.
Category
Treatment - Other

2

Description
The second intervention group includes moderate and severe cannabis users who receive matrix intervention in 12 to 16 sessions based on individual and weekly cognitive-behavioral therapy (CBT) and motivational enhancement therapy (MET).
Category
Treatment - Other

3

Description
The control group is non-intervention.
Category
N/A

Recruitment centers

1

Recruitment center
Name of recruitment center
The morning of freedom addiction treatment center
Full name of responsible person
Ruhollah Haddadi
Street address
The southeast side of Nabot Square, at the end of Fatima Zahra Street, above the central Narmak pharmacy
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2

Recruitment center
Name of recruitment center
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Full name of responsible person
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3

Recruitment center
Name of recruitment center
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4

Recruitment center
Name of recruitment center
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Sponsors / Funding sources

1

Sponsor
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Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
No
Title of funding source
West Tehran Branch of Islamic Azad University
Proportion provided by this source
10
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
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Latest degree
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Person responsible for updating data

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Latest degree
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Sharing plan

Deidentified Individual Participant Data Set (IPD)
Yes - There is a plan to make this available

Study Protocol
Yes - There is a plan to make this available

Statistical Analysis Plan
Yes - There is a plan to make this available

Informed Consent Form
Yes - There is a plan to make this available

Clinical Study Report
Yes - There is a plan to make this available

Analytic Code
Yes - There is a plan to make this available

Data Dictionary
Yes - There is a plan to make this available

Title and more details about the data/document
The main variables and demographic data, including age, gender, marital status, and education

When the data will become available and for how long
One year following the publication of the results

To whom data/document is available
It will only be available to researchers in academic and scientific institutions.

Under which criteria data/document could be used
To train and treat substance use and cannabis disorders

From where data/document is obtainable
Correspondence with the west Tehran branch of Islamic Azad University, Tehran, Iran info@wtiau.ac.ir

What processes are involved for a request to access data/document
Correspondence with the Faculty of Medicine Sciences at the west Tehran branch of Islamic Azad University, Tehran, Iran info@wtiau.ac.ir

Comments