Clinical Trial Protocol
Iranian Registry of Clinical Trials

08 Nov 2026

The Effect of Online Resilience Training on Stress Reduction and Self-Efficacy Enhancement in Women Undergoing IVF Treatment

Protocol summary

Study aim
Determining the effect of online training on perceived stress and increased self - efficacy in women undergoing ivf treatment .

Design
This clinical trial was a randomized controlled study with parallel groups.

Settings and conduct
The statistical population of the study consisted of women undergoing IVF treatment who attended infertility centers in Birjand. Participants meeting the inclusion and exclusion criteria were recruited through convenience sampling and were randomly allocated into intervention and control groups using the block randomization method.

Participants/Inclusion and exclusion criteria
Inclusion Criteria:married women aged 20 to 40 years, diagnosed with infertility and currently undergoing an IVF treatment cycle, reading and writing skills, having access to a smartphone with the proficiency to utilize the Eita messaging application, and providing signed informed consent. Exclusion Criteria: having a diagnosis of severe psychiatric disorders, current use of psychotropic medications, receiving concurrent psychotherapy

Intervention groups
Intervention Group:The intervention group will participate in a 4 week online resilience training program conducted via the Eitaa messenger. The training content, provided in both text and video formats, consists of eight sessions. The curriculum covers the following topics: Introduction of resilience,Stress management,Cognitive restructuring, Emotion regulation,Effective communication and social support,Meaning-making and growth through challenges,Problem-solving and flexibility, and Consolidation and future planning.The control group received only routine care provided by the infertility center and did not participate in the online resilience training sessions.

Main outcome variables
Perceived Stress, Self-Efficacy

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20251228068473N1**
Registration date: **2026-05-27, 1405/03/06**
Registration timing: **retrospective**

Last update: **2026-05-27, 1405/03/06**
Update count: **0**

Registration date
2026-05-27, 1405/03/06

Registrant information

Name
Mina Salmanpour

Name of organization / entity

Country
Iran (Islamic Republic of)

Phone
+98 41 2293 0470

Email address
slmnprmina@gmail.com

Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2026-02-07, 1404/11/18

Expected recruitment end date
2026-02-19, 1404/11/30

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date

empty

Scientific title
The Effect of Online Resilience Training on Stress Reduction and Self-Efficacy Enhancement in Women Undergoing IVF Treatment

Public title
Investigating the Effect of Online Resilience Training on Stress and Self-Efficacy

Purpose
Education/Guidance

Inclusion/Exclusion criteria

Inclusion criteria:
Having a diagnosis of infertility and being in an IVF treatment cycle Having at least basic literacy in reading and writing Having access to a smartphone and the ability to use the Eita messenger application

Exclusion criteria:
Suffering from severe psychiatric disorders Taking psychiatric medications Receiving concurrent psychotherapy

Age
From **20 years** old to **40 years** old

Gender
Female

Phase
N/A

Groups that have been masked
No information

Sample size
Target sample size: **74**

Randomization (investigator's opinion)
Randomized

Randomization description
Eligible subjects were selected via convenience sampling from patients attending infertility clinics in Birjand. To achieve balanced allocation and control for potential confounders, a permuted block randomization technique was applied. Fixed-size blocks of four were defined, ensuring an equal distribution of participants between the intervention group (A) and the control group (B) within each block. The randomization process involved six possible block arrangements (AABB, ABAB, BBAA, BABA, ABBA, and BAAB). The specific sequence of these blocks was determined using the RANDBETWEEN(1,6) command in Microsoft Excel, tailored to the study's required sample size. Following this generated sequence, participants were allocated to the two groups in a 1:1 ratio. This methodology was adopted to mitigate selection bias and ensure a balanced distribution of subjects, providing each participant with an equal and fair probability of assignment to either study arm.

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 Birjand University of Medical Sciences

Street address
Central Organization of Birjand University of Medical Sciences , Ghaffari Street ,Birjand ,South Khorasan

City
Birjand

Province
South Khorasan

Postal code
۹۷۱۷۸۵۳۰۷۶

Approval date
2026-01-28, 1404/11/08

Ethics committee reference number
IR.BUMS.REC.1404.463

Health conditions studied

1

Description of health condition studied
Infertility under IVF treatment

ICD-10 code
N97

ICD-10 code description
Female infertility

Primary outcomes

1

Description
Perceived stress

Timepoint
Before and after the intervention

Method of measurement
Perceived Stress Scale

2

Description
Self - efficacy

Timepoint
Before and after the intervention

Method of measurement
Infertility Self Efficacy Scale

Secondary outcomes

empty

Intervention groups

1

Description
Intervention Group: The intervention group will participate in a four-week online resilience training program conducted via the Eitaa messenger application. The training content, provided in both text and video formats, consists of eight sessions held one hour twice weekly. The curriculum covers the following topics: Introduction and understanding of resilience, Stress and emotion management, Cognitive restructuring, self-care and emotion regulation, Effective communication and social support, Meaning-making and growth through challenges, Problem-solving and flexibility, and Consolidation and future planning. The intervention group will receive the training virtually and will be under supervision throughout the program.

Category
Lifestyle

Recruitment centers

1

Recruitment center

Name of recruitment center
Royesh Infertility Treatment Center of Birjand

Full name of responsible person
Vajihe Hazari

Street address
Valiasr Hospital (AJ) , Opposite the University of Medical Sciences , Zakariya Razi Street , Birjand Town

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Birjand University of Medical Sciences

Full name of responsible person
Masoud Yousefi

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Birjand University of Medical Sciences, Ghafari Street

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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
Birjand 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
Birjand University of Medical Sciences

Full name of responsible person
Mina Salmanpour

Position
Student

Latest degree
A Level or less

Other areas of specialty/work
Health Technology Assessment

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Person responsible for scientific inquiries

Contact

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Mina Salmanpour

Position
Student

Latest degree

A Level or less

Other areas of specialty/work

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Person responsible for updating data

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

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

Study Protocol

Undecided - It is not yet known if there will be 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

Yes - There is 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

Not applicable

Title and more details about the data/document

-

When the data will become available and for how long

-

To whom data/document is available

-

Under which criteria data/document could be used

-

From where data/document is obtainable

-

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

-

Comments