

Clinical Trial Protocol

Iranian Registry of Clinical Trials

17 Sep 2026

Investigation of training based on augmented reality in compliance with treatment in respiratory patients

Protocol summary

Study aim

Determining the relationship between augmented reality-based training and adherence to treatment in respiratory patients

Design

Clinical trial with a control group, with factorial groups, without blinding, phase 2 on 80 patients. A table of random numbers was used for randomization.

Settings and conduct

This study is a randomized controlled trial based on a pre-test-post-test design with a control group. The sample size is 80 patients who refer to Imam Ali clinic in Kurd city, who are randomly divided into two groups of 40 people, intervention and control. The control group receives the routine training and the intervention group receives the produced content in addition to the routine training. Then, after one month, the two groups will be examined in terms of treatment, patient satisfaction, hospitalization rate, disease recurrence rate, patient stress and anxiety rate, and reduction in material costs.

Participants/Inclusion and exclusion criteria

inclusion criteria: consent to participate in the research, necessary cooperation, having a smartphone
exclusion criteria: not agreeing to participate in the study

Intervention groups

Intervention group: recipient of augmented reality training
Control group: did not receive the above intervention

Main outcome variables

Hospitalization frequency; severity of symptoms; response to treatment; health problems

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20220711055436N1**

Registration date: **2022-08-16, 1401/05/25**

Registration timing: **prospective**

Last update: **2022-08-16, 1401/05/25**

Update count: **0**

Registration date

2022-08-16, 1401/05/25

Registrant information

Name

hamid rajabi

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 31 3765 2083

Email address

st-rajabi.h@skums.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2022-09-23, 1401/07/01

Expected recruitment end date

2022-12-22, 1401/10/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Investigation of training based on augmented reality in compliance with treatment in respiratory patients

Public title

Investigation of training based on augmented reality in compliance with treatment in respiratory patients

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:
respiratory patients over 18 years old performing the necessary cooperation Having a smartphone having consent to participate in the research

Exclusion criteria:

Age
From **18 years** old

Gender
Both

Phase
N/A

Groups that have been masked
No information

Sample size
Target sample size: **80**

Randomization (investigator's opinion)
Randomized

Randomization description
Simple randomization will be done individually using a table of 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

Ethics committee of Shahr kord University of Medical Sciences

Street address

kashani Blvd

City

shahrekord

Province

Chahar-Mahal-va-Bakhtiari

Postal code

۸۸۱۵۷۱۳۴۷۱

Approval date

2021-12-22, 1400/10/01

Ethics committee reference number

ir.skums.rec.1400.202

Health conditions studied

1

Description of health condition studied

athma

ICD-10 code
J45

ICD-10 code description
Asthma

2

Description of health condition studied

copd

ICD-10 code

J44

ICD-10 code description

Other chronic obstructive pulmonary disease

Primary outcomes

1

Description

Adherence to treatment

Timepoint

The time periods of measuring adherence to treatment before the start of the intervention and one month after the start of the intervention

Method of measurement

Measurement of medication adherence using Morisky Medication Adherence Scale, eight-option version (MMAS-8).

2

Description

respiratory health quality

Timepoint

Measurement periods before the start of the intervention and one month after the start of the intervention

Method of measurement

SGRQ scale

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: recipient of routine training plus training based on augmented reality. In this study, in order to design the educational content of a group consisting of lung disease specialists, nurses, e-learning group and medical education, medical students who are fully familiar with content creation software were used to familiarize themselves with the educational needs of patients. It is designed from DEVAR software and other software approved by the team

Category

Behavior

2

Description

Control group: recipient of routine training without training based on augmented reality.

Category

Behavior

Recruitment centers

1

Recruitment center

Name of recruitment center

Imam Ali (A.S.) Specialized Clinic

Full name of responsible person

Hamid Rajabi

Street address

Shariati Blvd

City

Shahr Kord

Province

Chahar-Mahal-va-Bakhtiari

Postal code

۸۸۱۵۷۱۳۴۷۱

Phone

+98 38 3224 2696

Email

St-rajabi.h@skums.ac.ir

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Shahre-kord University of Medical Sciences

Full name of responsible person

Masoume Moezzi

Street address

Shahrekord unevirsiy of medical scinece, Rahmatiye Blvd

City

Shahrekord

Province

Chahar-Mahal-va-Bakhtiari

Postal code

88155571

Phone

+98 31 3765 2083

Email

St-rajabi.h@skums.ac.ir

Web page address

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Shahre-kord 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

Shahre-kord University of Medical Sciences

Full name of responsible person

Hamid Rajabi

Position

General medical student

Latest degree

A Level or less

Other areas of specialty/work

Others

Street address

Qasr dead end, Ferdowsi Quay, 35 Alley, Ashrafi esfahani Ave

City

isfahan

Province

Isfahan

Postal code

8187743895

Phone

+98 31 3765 2083

Email

St-rajabi.h@skums.ac.ir

Person responsible for scientific inquiries

Contact

Name of organization / entity

Shahre-kord University of Medical Sciences

Full name of responsible person

Hamid Rajabi

Position

General medical student

Latest degree

A Level or less

Other areas of specialty/work

Others

Street address

Qasr dead end, Ferdowsi Quay, 35 Alley, Ashrafi esfahani Ave

City

isfahan

Province

Isfahan

Postal code

8187743895

Phone

+98 31 3765 2083

Email

St-rajabi.h@skums.ac.ir

Fax**Email**

st-rajabi.h@skums.ac.ir

Person responsible for updating data**Contact****Name of organization / entity**

Shahre-kord University of Medical Sciences

Full name of responsible person

Hamid Rajabi

Position

Student

Latest degree

A Level or less

Other areas of specialty/work

General Practitioner

Street address

Qasr dead end, Ferdowsi Quay, 35 Alley, Ashrafi
esfahani Ave

City

Isfahan

Province

Chahar-Mahal-va-Bakhtiari

Postal code

8187743895

Phone

+98 31 3765 2083

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

Undecided - It is not yet known if there will be 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

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