

Clinical Trial Protocol

Iranian Registry of Clinical Trials

27 Jun 2026

The effect of education and follow-up using peak flow meter based on asthma action plan on asthma control

Protocol summary

Summary

The aim of this study was to investigate the effect of education on using peak flow meter based on asthma action plan on asthma control. The study is a quasi-experimental controlled trial. A total of 95 asthma patients, recruited from Shariati and Imam Khomeini pulmonary clinics in Tehran were randomly assigned into intervention or control group. The patients in the intervention group received two educational sessions that including asthma, peak flow meter and asthma action plan in the intervention group. The patients sent SMS about peak flow rate to researcher in a period of 12 weeks. Also, the researcher provided feedback to patients about their asthma control weekly. The patients in the control group did not receive education or peak flow meter. Asthma control test and asthma attack form were obtained before and after study (3 months) and compared between the two groups.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201105146472N1**

Registration date: **2011-08-05, 1390/05/14**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2011-08-05, 1390/05/14

Registrant information

Name

Shadan Pedram Razi

Name of organization / entity

Tehran University of Medical Sciences and Health Services

Country

Iran (Islamic Republic of)

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+98 21 6692 7171

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pedramrazi@tums.ac.ir

Recruitment status

Recruitment complete

Funding source

Tehran University of Medical Sciences and Health Services

Expected recruitment start date

2010-04-30, 1389/02/10

Expected recruitment end date

2010-12-31, 1389/10/10

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of education and follow-up using peak flow meter based on asthma action plan on asthma control

Public title

The effect of using peak flow meter based on asthma action plan on asthma control

Purpose

Supportive

Inclusion/Exclusion criteria

Inclusion criteria: Age 18-60 years old, having a confirmed diagnosis of asthma for at least six months, not having a severe or acute asthma disease, not having concurrent other chronic diseases such as: COPD, cystic fibrosis, severe rheumatoid arthritis, neoplasia, severe heart or kidney or liver disease, not having cognitive deficits or psychiatric co-morbidity, ability to read and speak Persian, having minimum literacy to read and

understand text messages sent, having own mobile phones or in their close relatives, not having any sight problem or there is a third person for reading messages, not having asthma action plan based on peak flow meter
Exclusion criteria: Admission in hospital for any reason during the study, relapse of severe or acute stage, not sending 9 consecutive messages

Age

From **18 years** old to **65 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **95**

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

Tehran University of Medical Sciences and Health Services

Street address

Tehran University of Medical Sciences and Health Services, Keshavarz Ave., Tehran, Iran

City

Tehran

Postal code

Approval date

2011-05-14, 1390/02/24

Ethics committee reference number

297/ 130/ 90 /ص

Health conditions studied

1

Description of health condition studied

Asthma

ICD-10 code

J45

ICD-10 code description

Asthma

Primary outcomes

1

Description

Asthma disease control

Timepoint

The first and 3 months after the study

Method of measurement

Asthma control test

Secondary outcomes

1

Description

Peak flow rate

Timepoint

3 times a week

Method of measurement

Peak flow meter based on asthma actin plan

Intervention groups

1

Description

Intervention group: two educational sessions. The first session was about asthma disease, also the patients were instructed to blow three times every morning and evening into a peak flow meter and recorded the best reading in peak expiratory flow chart. During two weeks, patients in intervention group measured peak expiratory flow values and recorded in their chart, also they sent one SMS to researcher about the best peak expiratory flow rate, three times in a week. After two weeks, second education session was held. This session was about education of asthma action plan. Then, the patients sent the SMS in a period of 12 weeks. Also, researcher provided feedback to patients about their asthma control, weekly.

Category

Treatment - Drugs

2

Description

Control group: not receiving education and peak flow meter

Category

Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center

Imam Khomeini Pulmonary clinic

Full name of responsible person

Shadan Pedram Razi

Street address**City**

Tehran

2**Recruitment center****Name of recruitment center**

Shariati hospital pulmonary clinic

Full name of responsible person

Shadan Pedram Razi

Street address**City**

Tehran

Sponsors / Funding sources**1****Sponsor****Name of organization / entity**

Tehran University of Medical Sciences and Health Services

Full name of responsible person

Shadan Pedram Razi

Street address

Tehran University of Medical Sciences and Health Services, tehran, iran

City

Tehran

Grant name**Grant code / Reference number****Is the source of funding the same sponsor organization/entity?**

Yes

Title of funding source

Tehran University of Medical Sciences and Health Services

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**

Tehran University of Medical Sciences and Health Services

Full name of responsible person

Shadan Pedram Razi

Position

Teacher

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Web page address

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Sharing plan

Informed Consent Form

empty

Deidentified Individual Participant Data Set (IPD)

Clinical Study Report

empty

empty

Study Protocol

Analytic Code

empty

empty

Data Dictionary

Statistical Analysis Plan

empty