

# 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)

##### Phone

+98 21 6692 7171

##### Email address

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

**Other areas of specialty/work****Street address**Medical-Surgical unit, Faculty of Nursing & Midwifery  
Tehran University of Medical Science and Health Services, Tehran, Iran**City**

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**Web page address****Person responsible for scientific inquiries****Contact****Name of organization / entity**

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**Web page address**

*empty*

## **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*