

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

23 Jul 2026

### Comparison of physicians training via smart phone applications in the field of pediatric oral health with traditional continuing education in Tehran

#### Protocol summary

##### Summary

This study is a randomized trial. It will especially assess the level of physicians' knowledge, attitude and practice toward the prevention of oral diseases in children in Tehran and it will also assess the effectiveness of smart phone application in promoting children's oral health compared with conventional methods of physicians' continuing education in Tehran. Study population is a sample of general practitioners working in primary health centers in Tehran which are selected by census sampling method. First, baseline data of the physicians will be collected by the questionnaire. The sample will be randomly divided into two groups. While the first group (n=135) receives training through a smart phone application, physicians of the second group (n=100) will receive traditional CE. Interventions will be completed within 10 days after baseline data collection. First follow up would be performed 10 days after baseline data collection, and the second follow up would be done four months after baseline data collection. Follow up data collections would be done with the same questionnaire as baseline tool. Some questions on feedback of the training method will also be added to the follow up questionnaire. Each participant would enter a personal code in the both baseline and follow ups questionnaires in order to provide the possibility of measuring individual changes.

#### General information

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT2016091029765N1**

Registration date: **2016-11-09, 1395/08/19**

Registration timing: **registered\_while\_recruiting**

Last update:

Update count: **0**

##### Registration date

2016-11-09, 1395/08/19

##### Registrant information

###### Name

Mohammad Reza Khani

###### Name of organization / entity

Tehran University of Medical Sciences, School of Dentistry

###### Country

Iran (Islamic Republic of)

###### Phone

+98 21 8801 5960

###### Email address

mkhami@tums.ac.ir

##### Recruitment status

###### Recruitment complete

##### Funding source

Research Center for Caries Prevention, Dentistry Research Institute, Tehran University of Medical Sciences- Deputy for Education, Tehran University of Medical Sciences.

##### Expected recruitment start date

2016-10-10, 1395/07/19

##### Expected recruitment end date

2017-10-10, 1396/07/18

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

##### Scientific title

Comparison of physicians training via smart phone applications in the field of pediatric oral health with traditional continuing education in Tehran

**Public title**

Electronic training of physicians in the field of pediatric dentistry and oral health

**Purpose**

Health service research

**Inclusion/Exclusion criteria**

inclusion:working in health network of Tehran as physician; exclusion: lay offing as physician of health networks of Tehran

**Age**

No age limit

**Gender**

Both

**Phase**

N/A

**Groups that have been masked**

No information

**Sample size**

Target sample size: **235**

**Randomization (investigator's opinion)**

Randomized

**Randomization description****Blinding (investigator's opinion)**

Not blinded

**Blinding description****Placebo**

Not used

**Assignment**

Parallel

**Other design features**

simple random randomization

**Secondary Ids**

empty

**Ethics committees****1****Ethics committee****Name of ethics committee**

Ethics committee of Tehran University of Medical Sciences

**Street address**

TUMS.Main building.Qods st.Keshavarz blv.

**City**

Tehran

**Postal code****Approval date**

2016-04-02, 1395/01/14

**Ethics committee reference number**

IR.TUMS.REC.1395.2252

**Health conditions studied****1****Description of health condition studied**

General physician's knowledge, attitude and behavior in pediatric oral health

**ICD-10 code****ICD-10 code description****Primary outcomes****1****Description**

General physicians knowledge in pediatric dentistry and oral health care

**Timepoint**

will be assessed once 4 months after the start point of study

**Method of measurement**

Questionnaire

**2****Description**

General physicians attitude in pediatric dentistry and oral health care

**Timepoint**

will be assessed once 4 months after the start point of study

**Method of measurement**

Questionnaire

**3****Description**

General physicians behavior in pediatric dentistry and oral health care

**Timepoint**

will be assessed once 4 months after the start point of study

**Method of measurement**

Questionnaire

**Secondary outcomes****1****Description**

General physicians tendency for preventive screening of oral disease and risk estimation and refering children to dentist during practice

**Timepoint**

will be assessed once 4 months after the start point of study

**Method of measurement**

Questionnaire

**2****Description**

Barriers of preventive practice in the field of pediatric dentistry and screening

**Timepoint**

will be assessed once 4 months after the start point of study

**Method of measurement**

questionnaire

## Intervention groups

### 1

#### Description

Group 1: Training through Smart Phone Application. Smart phone application will be developed with a content which has been extracted from the booklet of other intervention group. The application also has the dynamic section for asking questions and a tutorial of how to work with it. Reminders for using it will be sent twice a week.

#### Category

Other

### 2

#### Description

Group 2: Traditional continuing education (CE) method. As traditional CE method a booklet will be used. The booklet contains information on pediatric oral and dental disease (caries and its etiology, signs and care, dietary habits, fluoride therapy, fissure sealants, and dental traumas). Also there would be a lecture session for this group in which the participants can ask their questions regarding oral health. Every month a reminder text message will be sent to them.

#### Category

Other

## Recruitment centers

### 1

#### Recruitment center

##### Name of recruitment center

Deputy for Health, Tehran University of Medical Sciences

##### Full name of responsible person

Dr Shariati

##### Street address

##### City

Tehran

### 2

#### Recruitment center

##### Name of recruitment center

Deputy for Health, Shahid Beheshti University of Medical Sciences

##### Full name of responsible person

Dr Arshi

##### Street address

##### City

Tehran

### 3

#### Recruitment center

##### Name of recruitment center

Deputy for Health, Iran University of Medical Sciences

##### Full name of responsible person

Dr Joneidi Jafari

#### Street address

#### City

Tehran

## Sponsors / Funding sources

### 1

#### Sponsor

##### Name of organization / entity

Vice Chancellor for research of Tehran University of Medical Sciences. Research Center for

##### Full name of responsible person

Dr Khorshidi

##### Street address

Oral health and caries research center of dental school TUMS. Qods St

##### City

Tehran

#### Grant name

-

#### Grant code / Reference number

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

Yes

#### Title of funding source

Vice Chancellor for research of Tehran University of Medical Sciences. Research Center for

#### 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

School of Dentistry, Tehran University of Medical Sciences

##### Full name of responsible person

Maedeh Bonabi

##### Position

PhD student

##### Other areas of specialty/work

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1439955991 End of North Karegar Street

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## Person responsible for scientific inquiries

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Associated Professor

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## Person responsible for updating data

### Contact

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PhD candidate.

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**Web page address**  
-

## Sharing plan

**Deidentified Individual Participant Data Set (IPD)**  
*empty*

**Study Protocol**  
*empty*

**Statistical Analysis Plan**  
*empty*

**Informed Consent Form**  
*empty*

**Clinical Study Report**  
*empty*

**Analytic Code**  
*empty*

**Data Dictionary**  
*empty*