

Clinical Trial Protocol

Iranian Registry of Clinical Trials

18 Jun 2026

design and evaluation of a Mobile application based on the protection motivation theory on the preventive behaviors of harmful effects of sunshine in girl and boy students

Protocol summary

Study aim

Determining the effect of a Mobile application based on the protection motivation theory on the preventive behaviors of harmful effects of sunshine in girl and boy students

Design

Clinical trial with control group, with parallel groups, Not blinded , randomized, phase zero on 320 male and female students

Settings and conduct

The place of study in Zahedan and how to implement it by installing an educational application on a mobile phone

Participants/Inclusion and exclusion criteria

Male and female students in the fourth to sixth grades of elementary school in Zahedan in the year 1399-1400

Intervention groups

. We will provide a 3D mobile application for aging the face that allows the user (target group students) to take a 3D selfie and then offers the person two categories of classification 1. Daily protection Sun exposure 2- Lack of daily protection from the sun and then the changed face of a person during the next 5 to 25 years when exposed to prolonged and frequent exposure to ultraviolet light of the sun. All effects by type. The skin is the person that the user can choose at the beginning of the program. The app also shows the most common skin cancers caused by ultraviolet light through additional buttons and calculates how the odds ratio increases with different behaviors. In addition, the program advises on sun protection, explains facial changes, and examines the skin using ABCDE (asymmetry), border irregularity, color variation. encourages variety, diameter, and evolution. The control group is a group that does not intervene in order to satisfy the maximum internal validity. But at the end of the study and after collecting the data, we do the same intervention that we did in the intervention group

in the control group.

Main outcome variables

The effect of education on the behavior and structures of protection motivation theory

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20200924048825N1**

Registration date: **2021-02-08, 1399/11/20**

Registration timing: **prospective**

Last update: **2021-02-08, 1399/11/20**

Update count: **0**

Registration date

2021-02-08, 1399/11/20

Registrant information

Name

ESMAT-TOSADAT HOSSEINI

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 54 3344 0098

Email address

e.hosseini@stu.ssu.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2021-06-22, 1400/04/01

Expected recruitment end date

2021-12-22, 1400/10/01

Actual recruitment start date

empty
Actual recruitment end date
empty
Trial completion date
empty

Scientific title
design and evaluation of a Mobile application based on the protection motivation theory on the preventive behaviors of harmful effects of sunshine in girl and boy students

Public title
The effect of education Mobile application on the preventive behaviors of harmful effects of sunshine

Purpose
Prevention

Inclusion/Exclusion criteria
Inclusion criteria:
Male and female students in the fourth to sixth grades of elementary school in Zahedan in the year 1399-1400
Exclusion criteria:
Reluctance and satisfaction to participate in the study
Absence of students

Age
No age limit

Gender
Both

Phase
0

Groups that have been masked
No information

Sample size
Target sample size: **320**

Randomization (investigator's opinion)
Randomized

Randomization description
Randomization method: Limited randomization because we want the sample size to be equal in both intervention and control groups, so we will choose this limited randomization as a block randomization with 5 blocks and in each block one school in the intervention group and one school in the group Control is placed.
Randomization unit: Multi-stage cluster
Randomization tool: statistical software
Random allocation concealment: using opaque envelopes sealed with random sequence
In this way, based on the volume of the research sample, a number of envelopes with aluminum wrappers (in order not to clarify the contents of the envelopes) are prepared and each of the random assignments created is recorded on a card And the cards are placed in the mail envelopes in order . In order to maintain a random sequence, envelopes are numbered in the same way on the outer surface. Finally, the lids of the letter envelopes are glued and placed inside the boxes, respectively. At the beginning of the registration of participants, based on the order of entry of eligible participants to study, one of the envelopes of the letter is opened in order and the assigned group of the participant is revealed.

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
دانشگاه علوم پزشکی شهید صدوقی یزد
Street address
Sarollah Boulevard 7
City
zahedan
Province
Sistan-va-Balouchestan
Postal code
9817765377
Approval date
2020-10-21, 1399/07/30
Ethics committee reference number
IR.SSU.SPH.REC.1399.135

Health conditions studied

1

Description of health condition studied
skin cancer
ICD-10 code
ICD-10 code description

Primary outcomes

1

Description
knowledge and behavior and structures of protection motivation
Timepoint
pretest and posttest
Method of measurement
questionnaire

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group: The intervention in the school under evaluation, which includes a educational session of

approximately 25 to 30 minutes, including the installation and download time of 45 minutes, will be performed in the virtual classroom environment of Shad software using a photography application. For the first 10 minutes, the student takes a three-dimensional selfie, then offers two categories of classification. . In 15 to 20 minutes, the student interacts with the remaining functions of the program, including facial changes, ABCDE rules, and sun protection instructions. In the last 5 to 10 minutes. After the intervention, the participants are sent instructions to remove the application from their phone and immediately after the intervention, students are asked to assess the understanding of the intervention immediately after the intervention. Complete (posttest) and send to the executor. Again, 3 and 6 months after the intervention, an invitation will be sent to the students' knowledge, who will be asked to receive a post-test questionnaire and send it to the project manager after completion.

Category

Prevention

2**Description**

Control group: There is no intervention and at the end of the work, educational materials will be provided to them.

Category

Other

Recruitment centers**1****Recruitment center****Name of recruitment center**

مدارس ابتدایی دخترانه و پسرانه شهر زاهدان

Full name of responsible person

عصمت السادات حسینی

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Boulevard saralah 7

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

Yazd University of Medical Sciences

Full name of responsible person

esmat sadat hosseini

Street address

Yazd-Alam Square Boulevard shohaday gomnam

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Yazd

Postal code

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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

Yazd 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**

Yazd University of Medical Sciences

Full name of responsible person

esmat sadat hosseini

Position

student phd

Latest degree

Master

Other areas of specialty/work

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

Yazd University of Medical Sciences

Full name of responsible person

esmat sadat hosseini

Position

student phd

Latest degree

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Other areas of specialty/work

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Latest degree

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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

Not applicable

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

Not applicable

Data Dictionary

Not applicable