Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

An approach towards reducing road traffic injuries and improving public health through big-data telematics: a randomized trial

Protocol summary

Study aim
Effect of Telematics in reducing road traffic injuries
Design
This study is an intelligent trial which will be conducted by equipping 2000 vehicle with telematics (a device which collect and transfer data from engine and driving style to a data warehouse).
Settings and conduct
Vehicles will be randomly assigned to control vs. intervention.Data regarding any driving patterns and traffic accidents will be collected from both arms (intervention and control) for 18 months and to estimate the efficacy of device on several outcomes. The devices will also provide descriptive data on air pollution and roads conditions as well as specific markers of high-risk driving patterns, such as speed, sudden acceleration, deceleration, changing direction etc. These markers will be used as the main study outcomes to measure the efficacy of the intervention. Only in the intervention arm, the device will send two types of feedback to drivers.
Participants/Inclusion and exclusion criteria
Inclusion criteria: age over 18 years old, having driving certificate, owing the vehicle or being the driver of the vehicle, having informed consent, having mobile for receiving SMS. Exclusion criteria: addiction, having criminal record
Intervention groups
Our Telematics provided GPS-based travel data and accelerometer-based crash information and sensory data for the purpose of this research. All data comes will be stored in systems database which makes it possible to load the data conveniently into our designed analytical software packages without noticeable pre processing. . the intervention group will receive SMS feed back and control group do not receive any SMS .
Main outcome variables
parameters such as high risk driving pattern ,..to measure efficacy of intervention.

General information

Reason for update
Acronym
IRCT registration information
IRCT registration number: **IRCT20180708040391N1**
Registration date: **2018-09-19, 1397/06/28**
Registration timing: **retrospective**

Last update: **2018-09-19, 1397/06/28**
Update count: **0**
Registration date
2018-09-19, 1397/06/28

Registrant information
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Nazila Rezaei
Name of organization / entity
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Recruitment status
Recruitment complete
Funding source

Expected recruitment start date
2017-11-26, 1396/09/05
Expected recruitment end date
2018-01-19, 1396/10/29
Actual recruitment start date
2017-11-26, 1396/09/05
Actual recruitment end date
2018-01-19, 1396/10/29
Trial completion date
2018-01-19, 1396/10/29

Scientific title

An approach towards reducing road traffic injuries and improving public health through big-data telematics: a randomized trial

Public title
Effect of Telematics in reducing road traffic injuries
Purpose
Prevention
Inclusion/Exclusion criteria
Inclusion criteria:
age over 18 years old having driving certificate owing the vehicle or being the driver of the vehicle having inform consent having mobile for receiving SMS
Exclusion criteria:
addiction having criminal record
Age
From **18 years** old
Gender
Both

Phase
3
Groups that have been masked

- Participant

Sample size
Target sample size: **2000**
Actual sample size reached: **2000**
Randomization (investigator's opinion)
Randomized
Randomization description
clusters were randomly allocated to intervention and control group by simple randomization method .
Blinding (investigator's opinion)
Single blinded
Blinding description
the participants do not know about who will receive SMS
Placebo
Not used
Assignment
Parallel
Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
National Institute for Medical Research Development
Street address
No. 21, Beasat Str. West Fatemi Str
City
Tehran
Province
Tehran
Postal code
1419693111
Approval date
2016-03-05, 1394/12/15
Ethics committee reference number
IR. NIMAD. REC.1394.016

Health conditions studied

1

Description of health condition studied
Examination for driving licence
ICD-10 code
Z02.4
ICD-10 code description
Encounter for examination for driving license

Primary outcomes

1

Description
Driver's driving behavior
Timepoint
Every week for 18 months
Method of measurement
from our servers from the data that Telematix sent

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group: SMS from TELEMATIX
Category
Prevention

2

Description
Control group: Do not receive SMS from TELEMATIX
Category
Prevention

Recruitment centers

1

Recruitment center
Name of recruitment center
Non_Communicable Diseases Research center
Full name of responsible person
Ayyoob Jafari
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Sponsors / Funding sources

1

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Grant name
National Institute for Medical Research Development
Grant code / Reference number
940567
Is the source of funding the same sponsor organization/entity?
No
Title of funding source
National Institute for Medical Research Development
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
Tehran University of Medical Sciences
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Nazila Rezaei
Position
Associate Researcher
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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
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