

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

22 Jun 2026

### The effect of 8 weeks of suspension training with TRX on sport-related injury predictor factor, performance and musculoskeletal pain in personnel of different branch of Navy of the Islamic Revolutionary Guard Corps

#### Protocol summary

##### Study aim

Investigation of the effect of 8 weeks suspension training with TRX on sport-related injury predictor factor, performance and musculoskeletal pain in personnel of different branch of Navy of the Islamic Revolutionary Guard Corps

##### Design

Randomized trial with two arm parallel group, randomized assignment, on 50 subjects

##### Settings and conduct

The study will be conducted in one of the naval barracks of the Navy of the Islamic Revolutionary Guard Corps, and in coordination with the local authorities, with a full description of the purpose and how to implement the plan, according to the inclusion and exclusion criteria, 50 soldiers will enter the research plan.

##### Participants/Inclusion and exclusion criteria

Inclusion criteria: - Being in the desired age range - Membership in personnel of different branch of Navy of the Islamic Revolutionary Guard Corps - Exclusion criteria: the history of injury that makes movement restriction - the existence of any visible musculoskeletal deformities in the lower and upper extremity in normal standing posture - Failure to complete the training program for any reason - Absence of more than three practice sessions or two consecutive sessions - abnormal BMI, BMI<18 or BMI>28

##### Intervention groups

intervention group: TRx suspension training control group: Without receiving any intervention

##### Main outcome variables

Performance test, lower extremity injury risk factors predictors, musculoskeletal pain, quality of life

#### General information

##### Reason for update

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20180821040843N2**

Registration date: **2020-06-13, 1399/03/24**

Registration timing: **prospective**

Last update: **2020-06-13, 1399/03/24**

Update count: **0**

##### Registration date

2020-06-13, 1399/03/24

##### Registrant information

##### Name

Esmail Mozafaripour

##### Name of organization / entity

The university of Tehran

##### Country

Iran (Islamic Republic of)

##### Phone

+98 21 8835 1730

##### Email address

e.mozafaripour@ut.ac.ir

##### Recruitment status

**Recruitment complete**

##### Funding source

##### Expected recruitment start date

2020-07-22, 1399/05/01

##### Expected recruitment end date

2020-10-22, 1399/08/01

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

**Trial completion date**

empty

**Scientific title**

The effect of 8 weeks of suspension training with TRX on sport-related injury predictor factor, performance and musculoskeletal pain in personnel of different branch of Navy of the Islamic Revolutionary Guard Corps

**Public title**

The effect of 8 weeks of suspension training with TRX on sport-related injury predictor factor and performance

**Purpose**

Prevention

**Inclusion/Exclusion criteria****Inclusion criteria:**

membership in at least different branch of Navy of the Islamic Revolutionary Guard Corps Being in the desired age range

**Exclusion criteria:**

the existence of any visible musculoskeletal deformities in the lower and upper extremity in normal standing posture Not to participate in pre or post test losing more than three training sessions or two consecutive sessions abnormal BMI, BMI<18 or BMI>25

**Age**

From **18 years** old to **35 years** old

**Gender**

Male

**Phase**

N/A

**Groups that have been masked**

*No information*

**Sample size**

Target sample size: **50**

**Randomization (investigator's opinion)**

Randomized

**Randomization description**

In order to randomly assign the subjects to the intervention and control groups, one number was considered for each subject. The numbers were randomly assigned to two groups using a random number table. To conceal numbers in each group, they were written on paper, and each one was kept in a numbered sealed, opaque envelope.

**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**

Ethics committee of Baqiyatallah University of Medical Sciences

**Street address**

Vank square, Molla sadra st, Sheikh bahaei st Tehran, Islamic Republic of Iran

**City**

Tehran

**Province**

Tehran

**Postal code**

1435916471

**Approval date**

2020-01-28, 1398/11/08

**Ethics committee reference number**

IR.BMSU.BAQ.REC.1398.016

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

Musculoskeletal pain, musculoskeletal injuries

**ICD-10 code**

G89.2

**ICD-10 code description**

Chronic pain, not elsewhere classified

**Primary outcomes****1****Description**

Physical performance

**Timepoint**

In pre test before intervention and in post test after intervention

**Method of measurement**

Cooper's 12-minute run, DEEP SQUAT JUMP, push-ups, sit-ups

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

injury risk factor predictors

**Timepoint**

In pre test before intervention and in post test after intervention

**Method of measurement**

Functional Movement Sneering test

**2****Description**

Musculoskeletal pain

**Timepoint**

In pre test before intervention and in post test after

intervention

#### Method of measurement

Nordic pain questionnaires

### Intervention groups

#### 1

##### Description

Intervention group: Suspension Training with TRX: The intervention group will perform eight weeks of TRX Suspension Exercises as 3 sessions a week. This training protocol will be performed in the three phases (structural adaptation), the second phase (the main part of the exercise), and the third phase (maintenance phase). The design of the exercises in this protocol is such that in addition to focusing on improvement on the strength related factors of the different muscle groups, it will be implemented in circular methods in order to affect the cardiovascular system.

##### Category

Prevention

#### 2

##### Description

Control group: without any intervention

##### Category

Prevention

### Recruitment centers

#### 1

##### Recruitment center

###### Name of recruitment center

Baqiyatallah University of Medical Sciences

###### Full name of responsible person

Esmail Mozafaripour

###### Street address

Vanak square, Molla Sadre st, Sheikh bahaei st,  
Tehran, Islamic Republic

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###### Phone

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###### Email

e.mozafaripour@yahoo.com

###### Web page address

<https://www.bmsu.ac.ir/>

### Sponsors / Funding sources

#### 1

##### Sponsor

###### Name of organization / entity

Bagheiat-allah University of Medical Sciences

##### Full name of responsible person

Hossein Shirvani

##### Street address

Vanak square, Molla sadre st, Sheikh Bahaei st,  
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##### Email

shirvani.h2006@gmail.com

##### Grant name

##### Grant code / Reference number

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

Yes

##### Title of funding source

Bagheiat-allah University of Medical Sciences

##### Proportion provided by this source

50

##### 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

Bagheiat-allah University of Medical Sciences

###### Full name of responsible person

Esmail Mozafaripour

###### Position

دانش آموخته مقطع دکتری رشته تربیت بدنی دانشگاه تهران

###### Latest degree

Ph.D.

###### Other areas of specialty/work

Others

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## Person responsible for scientific inquiries

### Contact

**Name of organization / entity**

The University of Tehran

**Full name of responsible person**

Esmail Mozafaripour

**Position**

PHD graduated

**Latest degree**

Ph.D.

**Other areas of specialty/work**

Others

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## Person responsible for updating data

### Contact

**Name of organization / entity**

The University of Tehran

**Full name of responsible person**

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**Position**

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**Latest degree**

Ph.D.

**Other areas of specialty/work**

Others

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## Sharing plan

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

Yes - There is a plan to make this available

**Study Protocol**

Yes - There is a plan to make this available

**Statistical Analysis Plan**

Yes - There is a plan to make this available

**Informed Consent Form**

Yes - There is a plan to make this available

**Clinical Study Report**

Yes - There is a plan to make this available

**Analytic Code**

Yes - There is a plan to make this available

**Data Dictionary**

Yes - There is a plan to make this available

**Title and more details about the data/document**

dependent variables value and how they will change in the post-test compared to the pre-test will be shared.

**When the data will become available and for how long**

Immediately after when the results published

**To whom data/document is available**

everyone

**Under which criteria data/document could be used**

Applicants declare their affiliations

**From where data/document is obtainable**

Esmail Mozafaripour Email: E.mozafaripour@yahoo.com

Phone: 00989192787818

**What processes are involved for a request to access data/document**

The applicant can access the data by sending an email and a complete introduction of yourself.

**Comments**