The efficacy of core-stability training on drop-out and injury risk in basic military training of the Dutch Marine Corps.

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Our primary objective is to assess the preventive effects of core stability training in reduction of the incidence density for injury and dropout rate in the Basic Dutch Marine Corps Training 15/2 , 16/1 and 16/2.We want to establish the preventive...

Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Tendon, ligament and cartilage disorders
Study type	Interventional

Summary

ID

NL-OMON45099

Source
ToetsingOnline

Brief title
Efficacy core-stability training on injury in Basic Training Marine Corps

Condition

- Tendon, ligament and cartilage disorders

Synonym
overuse injury

Research involving
Human

Sponsors and support

Primary sponsor: Ministerie van Defensie, Koninklijke Marine,Geneeskundige Dienst
Source(s) of monetary or material Support: er is geen geldstroom! Het onderzoek wordt als afstudeer opdracht uitgevoerd en gefaciliteerd door Defensie

Intervention

Keyword: Core, Military, Stability, Training

Outcome measures

Primary outcome

The primary outcome measures are:

1) the Dropout rate and the significance of the Chi square and Fisher exact are determined

2) the Hazard ratio. The incidence density for injuries of the intervention and the controlgroup are analyzed .

Secondary outcome

A Kaplan-Meijer survival curve will be determined for the intervention group and control group.

The log-rank tests will be used to determine the significant differences between the survival curves of the intervention and control group.

Additional outcome measures

The Functional Movement Screen (FMS) score will be determined. The score distribution will be determined. The difference in mean scores between the intervention and control group will be tested, with the T test (independent samples).

Change of the FMS score for the intervention and control group will be

determined using the T-test (dependent samples)

Study description

Background summary

Basic Military training of the Dutch Marine Corps is compromised by a high inidence of musculoskeletal injury. This heavy military training is known to have a dropout rate of 50%. Core stability training may have a preventive effect on the incidence of musculosketale injury.
With this RCT we want to assess if core stability training can reduce the injury-rate en dropout-rate in basic military training of the Dutch Marine Corps. To our knowledge no former trails have been executed to assess the effects of core stability training in this population.
Our hypothesis is that core stability training will reduce the injury-rate and the dropout-rate.
With this research we aim to develop evidence based preventive strategies .

Study objective

Our primary objective is to assess the preventive effects of core stability training in reduction of the incidence density for injury and dropout rate in the Basic Dutch Marine Corps Training 15/2 , 16/1 and 16/2.
We want to establish the preventive effects of core stability training in this military population

Study design

Randomized Clinical trial

Intervention

The intervention consists of core stability training twice a week for 60 minutes during 23 weeks.
Training sessions can be canceled for operational and field training priorities. The control group participates in the regular military training.
There will be no placebo training applied.

Study burden and risks

The intervention is considered to be a normal professional treatment, usual care.
There are minimal to no risks. The intervention group takes weekly two hours

of extra training during 23 weeks.
In addition, both groups undergo the tests of the Functional Movement Screen.
This means an additional time spend for all participants of three hours, for
the baseline test, the intermediate and end measurement.

Contacts

Public
Ministerie van Defensie, Koninklijke Marine,Geneeskundige Dienst

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NL
Scientific
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Rijkszee- en Marinehaven 1
Den Helder 1781ZZ
NL

Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age
Adults (18-64 years)
Elderly (65 years and older)

Inclusion criteria

Participants who passed the medical screening by the Dutch Navy Selecting Center (Dienst Werving & Selectie) and successfully passed the physical and psychological selection tests for admission to the EMV MARNS 15/2 are recruited.
Recruits who are selected for the Basic Marine Corps Training (EMV MARNS 15/2,16/1 and 16/2) who are Injury-free at the time of start of initial training are potentially suitable for inclusion

Exclusion criteria

Poor understanding of the Dutch languae
Age younger than 18 years

Study design

Design

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial
Masking:	Open (masking not used)

Primary purpose: Prevention

Recruitment

NL

Recruitment status:	Recruitment stopped
Start date (anticipated):	28-09-2015
Enrollment:	280
Type:	Actual

Ethics review

Approved WMO Date:	08-09-2015
Application type:	First submission
Review commission:	METC Noord-Holland (Alkmaar)
Approved WMO Date:	08-09-2016
Application type:	Amendment
Review commission:	METC Noord-Holland (Alkmaar)

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

ID: 28740
Source: NTR
Title:

In other registers

Register	ID
CCMO	NL54431.094.15
OMON	NL-OMON28740