# Can exercise adherence of cardiac patients be enhanced using implementation intentions and text message reminders?

No registrations found.

**Ethical review** Positive opinion

**Status** Recruiting

Health condition type -

Study type Interventional

# **Summary**

# ID

NL-OMON20572

Source

NTR

**Health condition** 

Status after CABG

# **Sponsors and support**

**Primary sponsor:** not applicable

Source(s) of monetary or material Support: not applicable

## Intervention

### Outcome measures

## **Primary outcome**

The main study parameter is the Baecke Questionnaire of a Person's Habitual Physical Activity. Baecke, Burema and Frijters (1982) developed a questionnaire for evaluating a person's physical activity within three distinct dimensions occupational activity (eight questions), sports activity (two questions), and leisure activity (six questions).

# **Secondary outcome**

The secondary parameter is the Six-Minute Walk Test that evaluates the distance that a person can walk within six minutes on a flat, hard surface at their own preferred space (Butland, Pang, Gross, Woodcock, & Geddes, 1982; Lenssen et al., 2010). Participants will be instructed to cover as much ground as possible in 6 min. The distance that a person can walk reflects their functional capacity in every day life activities. This sub maximal test has been used in many disorders to measure both your pulmonary and cardiac functioning. The 6MWT is a practical simple test that requires a 100-ft hallway but no exercise equipment.

# **Study description**

# **Background summary**

### Rationale:

Adherence to lifestyle recommendations in cardiac patients such as reluctance to exercise is a known problem. An exercise adherence intervention for cardiac patients would produce beneficial outcomes such as increasing physical activity and quality of life factors. A trend in health science research attempts to increase exercise levels through implementation intentions (specific action plans) and text message reminders.

## Objective:

The primary objective of this research is whether adherence to an active lifestyle recommendation like exercise can be improved in cardiac patients through implementation intentions and text message reminders.

## Study design:

An eight week 2 (Group: experimental-control) x 2 (Time of measurement: baseline-posttest) longitudinal randomized controlled pilot study will be performed.

## Study population:

Around 24-36 cardiac patients between the ages of 45 and 75 years will be recruited from the cardiac rehabilitation program in the Academic Hospital of Maastricht.

2 - Can exercise adherence of cardiac patients be enhanced using implementation inte ... 5-05-2025

### Intervention:

The intervention of the control group will be the conventional treatment of the rehabilitation program. The intervention for the experimental group includes developing implementation intentions and receiving text message reminders of these implementation intentions over a period of eight weeks.

## Main study parameters/endpoints:

The main study parameter is the 6MWT (Six-Minute Walk Test) that evaluates the distance that a person can walk within six minutes. The secondary parameter is the Baecke Questionnaire that evaluates a person's physical activity. Other parameters are the HADS (Hospital Anxiety and Depression Scale) a questionnaire that assesses anxiety and depression and a questionnaire that will evaluate the process of compliance/non-compliance.

Nature and extent of the burden and risks associated with participation, and benefit:

The burden of participating in this research is minimal. Most measures are part of the conventional treatment, additional test are questionnaires, and no additional visits to the hospital are needed. Forming implementation intentions once combined with receiving text message reminders is expected to be of little inconvenience. Expected benefits are that the participants of the experimental group will exercise more, thus maintaining their physical health from the rehabilitation program. No risks of the measures, forming implementation intention or receiving text message reminders are expected.

## Study objective

Prestwich, Perugini and Hurling (2009; 2010) have proven that reminding individuals of their plans to exercise enhanced the impact of implementation intentions to exercise. The primary objective of this research is whether adherence to the active lifestyle advises can be improved in cardiac patients through implementation intentions and text message reminders. In other words, can the exercise levels reached during the cardiac rehabilitation program be maintained among cardiac patients in the experimental group. To solve some limitations of previous studies, cardiac patients will be studied during eight weeks with an experimental design looking at both objective and subjective data. The question that this research will try to answer is: "Can implementation intentions and text message reminders influence adherence in cardiac patients after rehabilitation"? Based on previous results of implementation intentions expected is that the experimental group will exercise more (Hypothesis 1) and that the experimental group will remain to have a good physical condition (Hypothesis 2) eight weeks after the rehabilitation compared to the control group.

# Study design

6 and 14 weeks postsurgery.

### Intervention

The intervention of the control group will be the conventional treatment of the rehabilitation program. Following the conventional tests during the last rehabilitation session, demographic data and one additional questionnaire, the control group will only be instructed to maintain an active and healthy lifestyle.

The intervention for the experimental group includes developing implementation intentions and receiving text message reminders of these implementation intentions over a period of eight weeks. Following the conventional tests during the last rehabilitation session, demographic data, and one additional questionnaire, the experimental group will be instructed to maintain an active and healthy lifestyle as well. Additionally, they will be instructed to read the following message: " People that specifically plan when, where and what kind of exercise they want to do are more likely to achieve their goals. To help you stay active in the following eight weeks the questions underneath will help you to make specific plans to exercise." The participants then have to choose from some options when, where, what, on which day and how long they are going to exercise. Lastly, they have to fill in at least three "if then" sentences. E.g. If I leave work on Monday, then I will walk home for about 30 minutes. When the personal implementation intentions are clear, instructions about the text message reminders on a computer will be given.

The participants will read that they have the possibility to remind themselves about the formed implementation intentions through text messages. They can choose the contents, the number of messages (maximum five), and the time of deliverance. During the eight weeks, the participants can freely change all these properties to whatever suits them best. Additionally, the researcher will sent some motivating text messages (once a week) to motivate the participants.

# **Contacts**

## **Public**

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# **Eligibility criteria**

# Inclusion criteria

- 1. Good knowledge of the Dutch language;
- 2. Completing the rehabilitation program;
- 3. An age between 45 and 75 years;
- 4. The possession of an computer and internet or know a person that has a computer;
- 5. The ability to use the internet or know a person that is willing to help;
- 6. The possession of a mobile phone and the ability to use a mobile phone.

# **Exclusion criteria**

The only exclusion criteria is the presence of psychological problems measured by the HADS with cut-off scores for both fear and depression of 10.

# Study design

# Design

Study type: Interventional

Intervention model: Parallel

Allocation: Randomized controlled trial

Masking: Single blinded (masking used)

Control: Active

5 - Can exercise adherence of cardiac patients be enhanced using implementation inte ... 5-05-2025

## Recruitment

NL

Recruitment status: Recruiting
Start date (anticipated): 01-01-2011

Enrollment: 36

Type: Anticipated

# **Ethics review**

Positive opinion

Date: 13-12-2010

Application type: First submission

# **Study registrations**

# Followed up by the following (possibly more current) registration

No registrations found.

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

No registrations found.

# In other registers

Register ID

NTR-new NL2532 NTR-old NTR2650

Other MEC / CCMO : 10-3-066 / NL 33775.068.10 ;

ISRCTN wordt niet meer aangevraagd.

# **Study results**

# **Summary results**