The effectiveness of an online exercise program in early cardiac rehabilitation after cardiac surgery

No registrations found.

Ethical review	Not applicable
Status	Pending
Health condition type	-
Study type	Interventional

Summary

ID

NL-OMON26493

Source
NTR

Health condition

cardiac surgery (openhartoperatie) including CABG (bypass operatie) and valve surgery (klepoperatie)

Sponsors and support

Primary sponsor: Medisch Spectrum Twente
Paramedische Zorg
Source(s) of monetary or material Support: Pioneers in Healthcare innovation fund

Intervention

Outcome measures

Primary outcome

The primary outcome measure is exercise capacity, measured with the 6 minutes walk test.

Secondary outcome

Secondary outcome measures are:

- Physical activity, objectively measured with an accelerometer, subjectively measured with the International Physical Activity Questionnaire (IPAQ) short form.

- Quality of life, measured with the Quality of Life after Myocardial Infarction (QLMI) questionnaire.

- Disability, measured with the Groningen Activiteiten Restrictie Schaal (GARS).

- Anxiety and depression, measured with the Hospital Anxiety and Depression Scale (HADS).

- Satisfaction with treatment (Client Satisfaction Questionnaire).

Study description

Background summary

* Rationale:

Cardiac rehabilitation (CR) has shown to be an effective treatment to reduce mortality and morbidity among cardiac patients who underwent cardiac surgery. Exercise training is a major component of CR. It usually starts in the hospital and continues in an outpatient setting six weeks after discharge from the hospital. In the invervening period patients continue rehabilitation by themselves with the advices they received in the hospital. Research has shown that patients experience this intervening period as stressful. They feel insufficiently supported and are in need of more information and advice. No general consensus exists concerning the best timing of exercise-based CR. However, there seems to be a positive relation between the timing of the start of an exercise program and physical functioning.

* Objective:

This study aims to investigate the effects of an early online exercise-based CR program among patients after cardiac surgery.

* Study design:

A quasi-experimental study will be conducted comparing patients who completed a traditional outpatient exercise-based CR program (control group) with patients who completed an early (home-based) online exercise CR program (in the first 6 weeks after discharge from the hospital) as adjuvant to the traditional outpatient exercise-based CR program (intervention group).

* Study population:

Patients who underwent CABG or valve surgery in the MST and are intended to participate in exercise-based CR offered by the MST.

* Intervention:

Online exercise program which consists of three modules: exercises, monitoring health status and telecommunication (with physical therapist).

* Main study parameters/endpoints:

Main outcome measue is exercise capacity, measured with the 6 min walktest. Secondary outcomes measures are physical activity, quality of llife, disability, anxiety, depression and

Study objective

The current study aims to investigate the effects of an early exercise-based cardiac rehabilitation program among patients after cardiac surgery. By starting the exercise program in an earlier phase, immediately after discharge from the hospital, we respond to the needs of patients to get more (tailored) support in the first weeks after discharge from the hospital, resulting in improved satisfaction with treatment. Furthermore, patients might gain greater health benefits at the end of cardiac rehabilitation.

Study design

- Baseline (1 day before discharge from the hospital)

- At the start of the traditional exercise-based outpatient cardiac rehabilitation program

- At the end of the traditional exercise-based outpatient cardiac rehabilitation program.

Intervention

A home-based exercise program to start cardiac rehabilitation in an early phase (immediately after discharge from the hospital). This program will be offered as adjuvant to the traditional outpatient exercise-based cardiac rehabilitation program (starting approximately 6 weeks after discharge from the hospital). The online exercise program consists of three different modules: exercise progam, monitoring and telecommunication.

Goal of the online exercise program is to support the patient in his reconditioning at home. The module has a database of exercise video recordings of different exercises, composed and

recorded by physiotherapists. From this database, the physiotherapist selects together with the patient appropriate exercises and schedules when the patient will do these exercises during the week. On the professional's portal, the physiotherapist gets feedback on what exercises are performed by the patient and during which moment of the day.

Telemonitoring makes it possible to identify health problems or to gain insight in the rehabilitation progress of the patient and can be used for optimal treatment (eg by modifying the exercise program). As such, different standardized questions are asked at fixed time intervals to gain insight into the health status of the patient. The answers to these questions are presented in a clear overview on the portal of the health care professional. Answers are also made visible to the patient to give them insight into his health status and progress in rehabilitation.

Telecommunication makes it possible for the patient and professional to have contact with each other. The physiotherapist and patients are notified of new messages when they log in to the portal and the new messages are shown in a clear overview. Professionals are explained that patients have the option to use telecommunication. It is up to the professional how often they view these messages and whether they respond. Patients know that there is an option to contact the professional, but the professional may not respond immediately. In case of emergency issues, they need to make contact by telephone.

Contacts

Public
University Twente, Department of Psychology and Communication of Health and Risk,
P.O. Box 217
M.M. Veehof
Enschede 7500 AE
The Netherlands
+31 (0)53 4892939
Scientific
University Twente, Department of Psychology and Communication of Health and Risk,
P.O. Box 217
M.M. Veehof
Enschede 7500 AE
The Netherlands
+31 (0)53 4892939

Eligibility criteria

Inclusion criteria

In order to be eligible to participate in this study, a patient must meet all of the following criteria:

- CABG or valve surgery

- Clinically stabile and capable of performing an exercise program (judgement cardiologist)

- Intended to participate in the regular outpatient exercise program

- Access to the internet

- Master of Dutch language (reading and writing)

- Live in adherence area of MST

- Age >18 years

Exclusion criteria

No exclusion criteria are defined.

Study design

Design

Study type:	Interventional
Intervention model:	Other
Allocation:	Non-randomized controlled trial
Masking:	Open (masking not used)
Control:	Active

Recruitment

NL

Recruitment status:	Pending
Start date (anticipated):	01-12-2016
Enrollment:	100
Type:	Anticipated

Ethics review

Not applicable
Application type: Not applicable

Study registrations

Followed up by the following (possibly more current) registration

ID: 46925
Bron: ToetsingOnline
Titel:

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

No registrations found.

In other registers

Register	ID
NTR-new	NL6135
NTR-old	NTR6274
CCMO	NL59315.044.16
OMON	NL-OMON46925

Study results