Cognitive behaviour therapy delivered by internet for chronic fatigue in type 1 diabetes: a randomized controlled trial

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Recent research revealed that severe fatigue is a common complaint in patients with type 1 diabetes. This fatigue is often chronic (duration > 6 months) and has a negative impact on the daily functioning of patients. Cognitive behavioural factors...

Ethische beoordeling Positief advies **Status** Werving gestopt

Type aandoening

Onderzoekstype Interventie onderzoek

Samenvatting

ID

NL-OMON27693

Bron

Nationaal Trial Register

Verkorte titel

Dia-fit

Aandoening

Fatigue, Type 1 diabetes mellitus, vermoeidheid, diabetes mellitus type 1

Ondersteuning

Primaire sponsor: Radboud University Medical Center

Overige ondersteuning: Diabetes Fonds

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

Fatigue severity assessed with the subscale fatigue of the Checklist Individual Strength (CIS). Timepoints: baseline, T1 (5 months after start of the intervention), T2 (6 months after the end of the intervention)

Toelichting onderzoek

Achtergrond van het onderzoek

Severe fatigue is a common complaint in patients with type 1 diabetes patients which has high impact on daily functioning of patients. Cognitive behavioral factors can maintain the fatigue. Cognitive behaviour therapy which is designed to change dysfunctional thoughts and behaviours could be effective in reducing severe fatigue. Until now there is no evidenced based intervention to treat severe fatigue in type 1 diabetes patients. An intervention was developed for this study consisting of a blended-care CBT of web-based modules and face-to-face sessions with a therapist. The efficacy of CBT directly following treatment will be compared with a waiting list condition in a randomized controlled trial. Furthermore, long term effects of this intervention will be determined.

Patients will be recruited from the diabetes outpatient clinic of the Radboud university medical center in Nijmegen, the Netherlands. When accrual of patients is not sufficient in this center, other hospitals will be approached for participation.

Doel van het onderzoek

Recent research revealed that severe fatigue is a common complaint in patients with type 1 diabetes. This fatigue is often chronic (duration > 6 months) and has a negative impact on the daily functioning of patients. Cognitive behavioural factors can perpetuate the fatigue. Several studies in other chronic conditions have shown that cognitive behaviour therapy (CBT), specifically designed to change fatigue related thoughts and behaviours, is effective in reducing severe fatigue. CBT for fatigue in type 1 diabetes has not been applied so far. Primary objective of this study is to test whether CBT is also effective for severe and chronic fatigue in patients with type 1 diabetes. The CBT will be a combination of face to face sessions with a therapist and interventions delivered by the internet. Research questions:

- 1. Does CBT lead to a significant decrease in fatigue in chronically fatigued DM1 patients directly following treatment compared to a waiting list condition?
- 2. Does CBT for chronically fatigued DM1 patients lead to a significant reduction in the level of disabilities, HbA1c, and glucose variability directly following treatment compared to a waiting list condition?
- 3. Are the effects of CBT on the primary and secondary outcome measures sustained at follow-up, six months after the intervention?

4. Do changes in the proposed fatigue maintaining factors mediate the effect of treatment on fatigue severity?

Onderzoeksopzet

- 1. T0 baseline assessment
- 2. T1 following the intervention; 5 months after start of the intervention
- 3. T2 follow-up; 6 months after the end of the intervention

Onderzoeksproduct en/of interventie

Patients will receive cognitive behaviour therapy (CBT), offered in a blended-form of web-based modules and face-to-face sessions with a therapist. Based on previous research in fatigued patients with type 1 diabetes a treatment protocol 'CBT for fatigue in type 1 diabetes patients' is developed. The protocol consists of five to eight web-based modules aimed at perpetuating factors of fatigue. Five modules will be followed by all patients, three modules are tailored to the patients needs. Baseline assessment determines which of these modules are delivered to the patient. Besides the web-based modules, patients receive five to eight face-to-face sessions with a therapist. The amount of the sessions also depends on patients' needs. Patients will follow the therapy for a period of 5 months.

Patients assigned to the waiting list conditions also receive CBT after a waiting period of 5 months.

Contactpersonen

Publiek

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Wetenschappelijk

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Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

- 1. Between 18 and 70 years old
- 2. Being diagnosed with type 1 diabetes at least 1 year ago
- 3. Able to speak, read and write Dutch
- 4. Being severely fatigued operationalize as scoring 35 or higher on the subscale fatigue severity of the Checklist Individual Strength (CIS)
- 5. Fatigued for at least 6 months

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

- 1. Moderate to severe renal failure operationalised as having a glomerular filtration rate $(GFR) \leq 45$
- 2. Blindness or severe visual impairment
- 3. Medical history of congestive heart failure
- 4. Medical history of a stroke in the past five years
- 5. Body Mass Index (BMI) \geq 40
- 6. Wheelchair-dependent
- 7. Other concurrent psychiatric or medical co-morbidity that could explain the fatigue

Onderzoeksopzet

Opzet

Type: Interventie onderzoek

Onderzoeksmodel: Parallel

Toewijzing: Gerandomiseerd

Blindering: Enkelblind

Controle: Actieve controle groep

Deelname

Nederland

Status: Werving gestopt

(Verwachte) startdatum: 01-01-2014

Aantal proefpersonen: 120

Type: Werkelijke startdatum

Voornemen beschikbaar stellen Individuele Patiënten Data (IPD)

Wordt de data na het onderzoek gedeeld: Nog niet bepaald

Ethische beoordeling

Positief advies

Datum: 10-12-2013

Soort: Eerste indiening

Registraties

Opgevolgd door onderstaande (mogelijk meer actuele) registratie

ID: 40479

Bron: ToetsingOnline

Titel:

Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

In overige registers

Register ID

NTR-new NL4123 NTR-old NTR4312

CCMO NL43178.091.13

ISRCTN wordt niet meer aangevraagd.

OMON NL-OMON40479

Resultaten

Samenvatting resultaten

N/A