# Testing the effectiveness of online cognitive behavioral therapy for insomnia compared to waiting list on sleep-efficiency in adolescent and young adults after childhood cancer.

Published: 01-08-2018 Last updated: 15-05-2024

Objectives: 1) to evaluate the effectiveness of the e-CBT-i \*i-Sleep\* compared to a waiting list condition on sleep efficiency at 3, 6 and 12 months in ACC. 2) to assess the effects of eCBT-I on secondary outcomes: fatigue, quality of life, chronic...

**Ethical review** Approved WMO **Status** Recruitment stopped

Health condition type Sleep disorders and disturbances

Study type Interventional

## Summary

#### ID

NL-OMON50766

#### Source

**ToetsingOnline** 

#### **Brief title**

Managing Insomnia after cancer in adolescents (MICADO-2 project)

#### Condition

Sleep disorders and disturbances

#### **Synonym**

Insomnia, sleeplessness

### Research involving

Human

Sponsors and support

**Primary sponsor:** Prinses Máxima Centrum voor Kinderoncologie

Source(s) of monetary or material Support: KWF

Intervention

**Keyword:** childhood cancer, cognitive behavioral therapy, insomnia, online

**Outcome measures** 

**Primary outcome** 

The main outcome sleep efficiency will be evaluated at baseline (T0), 3 (T3), 6

(T6) and 12 (T12) months after randomization. Sleep efficiency will be measured

with a 7-day watch Actigraph (GTX3+) and sleep log. SE contains information on

difficulties falling asleep as well as difficulties staying asleep and is

therefore often considered the best primary outcome measure as it represents

different types of sleep problems.

**Secondary outcome** 

Insomnia: Insomnia Severity Index (ISI)

Quality of life: Pediatric Quality of Life Inventory (PedsQL)

Fatigue: Checklist Individual Strenght (CIS)

Depressive and Anxiety symptoms: Hospital Anxiety and Depression Scale (HADS)

Chronic stress: Chronic Stress Questionnaire for Children and Adolescents

(CSQ-CA)

General questionnaire will also be assessed with suicidality and current

psychological treatment for psychopathology on T0 and subjective pain, sleep

medication use on T3, T6 and T12.

Post-treatment intervention feedback and satisfaction of i-Sleep will be

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evaluated at T3 with a a 20-item satisfaction questionnaire, adherence and intervention feedback per session.

# **Study description**

## **Background summary**

Insomnia after childhood cancer is prevalent (26-28%) and a disabling sleep disorder impacting quality of life, fatigue, pain and general functioning. Adolescents after childhood cancer (ACC) may be also at increased risk for insomnia, being critically ill during a phase of life that is important in the development of good sleep habits. Currently, screening for insomnia is not routinely done and guidelines for treatment are lacking within pediatric oncology. The first-line treatment of insomnia is the cognitive behavioral therapy for Insomnia (CBT-I)- protocol. However, access this care is often limited. Therefore, the online CBT-I treatment \*i-Sleep\* has been developed to facilitate access via online care. i-Sleep has been shown feasible and effective in adult (cancer) patients, but it is unknown if online CBT-I is feasible and effective in adolescents after cancer treatment.

## Study objective

### Objectives:

- 1) to evaluate the effectiveness of the e-CBT-i \*i-Sleep\* compared to a waiting list condition on sleep efficiency at 3, 6 and 12 months in ACC.
- 2) to assess the effects of eCBT-I on secondary outcomes: fatigue, quality of life, chronic stress and psychosocial functioning.
- 3) To psychometrically assess the responsiveness of the PROMIS sleep item banks over time.
- 4) Feasibility and acceptability of i-Sleep in the target population

## Study design

Randomized-controlled clinical trial with two conditions: 1) e-CBT-I and 2) a waiting-list condition, stratified on sleep medication use in the past month. There are 3 (control group) to 4 (intervention group) measurement at T0, T3, T6 and T12. After T6 participants in the waiting-list condition are offered to also follow the e-CBT-I.

#### Intervention

Participants that are randomized to the intervention group will receive 5 online sessions within the eCBT-I program i-Sleep over 5-8 weeks supported by

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an online coach. The coach will be a trained and supervised by a clinical psychologist. Participants in the waiting-list (WL) group will be asked not to seek any new sleep interventions for the duration of the study. After 6 months they will be offered the eCBT-I program.

## Study burden and risks

The risks for taking part in this study are minimal. Participants will invest time to complete the e-CBT-I program. The time-burden of the accompanying measurements per time-point are: wearing an Actigraph for 7 days, sleep log (+/- 1 minute/day) and filling out questionnaires (25-30 min.). We expect that participation will improve insomnia complaints and increase the quality of life of the participants. Patients that are allocated to the WL-group, are therefore offered the program after 6 months.

## **Contacts**

#### **Public**

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## **Trial sites**

### **Listed location countries**

**Netherlands** 

# **Eligibility criteria**

#### Age

Adolescents (12-15 years)

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Adolescents (16-17 years) Adults (18-64 years) Elderly (65 years and older)

### Inclusion criteria

- insomnia symptoms according to the ISI >= 8
- diagnosed with cancer
- diagnosed with cancer within the last 10 years
- 12-30 years old at time of study participation

## **Exclusion criteria**

- anti-cancer treatment within the last 6 months
- patients receiving palliative therapy
- patients that are not able to properly fill out the study questionnaires or participate in the online CBT-I because they are insufficiently fluent in Dutch or have significant cognitive impairment
- patients with comorbidities that can affect sleep: retinoblastoma with severely diminished eye-sight, schizophrenia, substance abuse or history of seizure disorder or seizure in the past 12 months
- pregnancy or had a baby <6 months
- shift work employment
- current psychological treatment for a sleeping disorder or psychopathology
- comorbid sleep disorders explain the sleep problems instead of insomnia as assessed in telephonic screening.
- suicidality
- lack of informed consent

# Study design

## **Design**

Study type: Interventional

Intervention model: Parallel

Allocation: Randomized controlled trial

Masking: Open (masking not used)

Control: Active

Primary purpose: Treatment

### Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 24-01-2019

Enrollment: 70

Type: Actual

# **Ethics review**

Approved WMO

Date: 01-08-2018

Application type: First submission

Review commission: METC NedMec

Approved WMO

Date: 14-11-2018

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 05-04-2019

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 25-10-2019

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 11-12-2019

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 02-12-2021

Application type: Amendment

Review commission: METC NedMec

# **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: 27901 Source: NTR

Title:

# In other registers

Register ID

Other inschrijving NTR/NCT na goedkeuring METC

CCMO NL65009.041.18 OMON NL-OMON27901