# The effect of music as a preoperative anxiety-reducing aid

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Preoperative anxiety can cause a range of negative outcome effects in the perioperative fase, e.g. higher consumption of medication, more pain, prolonged stay at hospital and more postoperative infections. Music as a anxiety reducing aid in the...

**Ethische beoordeling** Niet van toepassing

**Status** Werving nog niet gestart

Type aandoening -

**Onderzoekstype** Interventie onderzoek

## Samenvatting

#### ID

NL-OMON28077

#### **Bron**

Nationaal Trial Register

### **Aandoening**

preoperative anxiety, music intervention, coping and sense of control dutch: preoperatieve angst, muziekinterventie, copingstrategieen, gevoel van controle

## **Ondersteuning**

**Primaire sponsor:** fonds=verrichter=sponsor

**Overige ondersteuning:** fonds=verrichter=sponsor

## Onderzoeksproduct en/of interventie

#### **Uitkomstmaten**

#### Primaire uitkomstmaten

Heartrate: t0, t1,t2,t3<br>
Bloodpressure: t0, t1,t2,t3<br>
Skintemperature: t1,t2,t3<br>
VAS-anxiety: t0, t1,t2,t3<br>

VAS-controle: t0,t1,t2,t3<br>

VAS-pain: t3<br>

Coping strategy: t0<br>

Preoperative anxiety anesthetic: t0<br/>preoperative anxiety surgery: t0<br/>need for information anesthetic; t0<br/>br>need for information anesthetic: t0<br/>br>

## **Toelichting onderzoek**

### Achtergrond van het onderzoek

This research is taken place in the St. Elisabeth Hospital in Tilburg The Netherlands, assigning a Master Thesis Health Psychology at the Open University Heerlen Netherlands.

#### Rationale

In most cases ongoing surgery will cause an amount of anxiety within the patient. Listening to music in the preoperative fase can have an anxietyreducing effect. Some researchers state that self-chosen music is most effective, others state that calming-music is most effective. Perhaps copingstrategies give an answer to the question which type of music is most effective.

#### Objective

Daycare patients premedicated with benzodiazepines sometimes have a prolonged stay at daycare centre. This is a negative side effect. Music can be a alternative to premedication because of its anxiety reducing effects. When this music is offered more custom-made, suited to the patients copingstrategy, it will be more beneficial to patient and hospital.

#### Study design

200 participants allocated at-random to one of the 3 groups: 1. Self-chosen music.2. calming music. 3. Controle group/ care-as-usual/no music

Measurements t0, t1, t2, t3: Several physiological and psychological parameters of anxiety were measured four times. Heartrate, bloodpressure, skintemperature, Visual Analoge Scaleanxiety, VAS-sense of control, Amsterdam Preoperative Anxiety Information Scale. Coping was measured with Coping Inventory Stressful Situations-NL. And pain with VAS-pain (t3)

#### Study population

Day-care patients over 18 years old, understanding Dutch language. Excluding patients with mental diseases, patients with diseases that influence directly HR and BB, patients who take medication that influence HR and BB, visual and/or hearing limitations.

#### Intervention

First measurement of BB and HR at the PPO screening. At home daycare patient fill out the questionnaire they received at de PPO screening (it includes VAS, APAIS, CISS-NI). Within several weeks the daycare patients undergoing surgery arrive at the holding of the OR. After scoring VAS and measuring BB and HR they listen to music(self-chosen or calming) with a headphone. Controle group doesn't receive music, but care-as-usual. At some point the patient is transported tor he OR. Music is continuated at the OR. The Third measurements are taken place just before the anesthetics are injected. The patient scores VAS, and BB and HR are registered. Postoperative at the daycare centre the fourth measurements are taken place.

#### **Doel van het onderzoek**

Preoperative anxiety can cause a range of negative outcome effects in the perioperative fase, e.g. higher consumption of medication, more pain, prolonged stay at hospital and more postoperative infections. Music as a anxiety reducing aid in the preoperative fase has proven to be effective. But there is still no consensus on which music is most effective (selfchosen or calming music) Are coping strategies and sense of controle of patients related to the kind of music that is applied in the preoperative fase.

Problem-focused coping strategies relate to more sense of control and therefore self-chosen music is more effective in anxiety reduction. Emotion-focused coping strategies are therefore more effective when calming music is offered in the preoperative fase. We expect that music is anxiety reducing, especially when the kind of music is meeting the needs of the patient.

#### Onderzoeksopzet

t0; PPO outpatients

t1: arrival holding OR

t2: arrival OR

t3: arrival daycare centre

#### Onderzoeksproduct en/of interventie

Patient are at-random allocated to one of the three intervention groups:

1. self-chosen music

- 2. calming music
- 3. control group/ no music/ care-as-usual

When patient arrive at the holding of the OR, the listing to music by headphones. The control-group receive care-as-usual. The music continues at the arrival of the OR. Just after the anesthetics are injected the music intervention stops.

## Contactpersonen

### **Publiek**

Lennondreef 30

S. Wölke Tilburg 5012 AT The Netherlands

## Wetenschappelijk

Lennondreef 30

S. Wölke Tilburg 5012 AT The Netherlands

## **Deelname** eisen

## Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

- 1. patients over 18 year
- 2. daycare patients
- 3. speaking Dutch language

# Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

- 1. mental diseases
- 2. diseases that influence heartrate and bloodpressure
- 3. medication that influence heartrate and bloodpressure
- 4. vision difficulties
- 5. hearing difficulties

## **Onderzoeksopzet**

## **Opzet**

Type: Interventie onderzoek

Onderzoeksmodel: Parallel

Toewijzing: Gerandomiseerd

Blindering: Enkelblind

Controle: Geneesmiddel

#### **Deelname**

Nederland

Status: Werving nog niet gestart

(Verwachte) startdatum: 01-10-2013

Aantal proefpersonen: 200

Type: Verwachte startdatum

## **Ethische beoordeling**

Niet van toepassing

Soort: Niet van toepassing

## **Registraties**

## Opgevolgd door onderstaande (mogelijk meer actuele) registratie

Geen registraties gevonden.

## Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

## In overige registers

Register ID

NTR-new NL3958 NTR-old NTR4138

Ander register METC St. Elisabethziekenhuis Tilburg : ISRCTN ISRCTN wordt niet meer aangevraagd.

## Resultaten

## Samenvatting resultaten

N/A