A virtual reality game for patients with Obsessive-Compulsive Disorder : Neuro-imaging

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Ethische beoordeling	Positief advies
Status	Anders
Type aandoening	-
Onderzoekstype	Interventie onderzoek

Samenvatting

ID

NL-OMON25755

Bron
Nationaal Trial Register

Verkorte titel
VR for OCD

Aandoening

obsessive-compulsive disorder

In dutch: obsessieve-compulsieve stoornis

Ondersteuning

Primaire sponsor: AMC Amsterdam
Overige ondersteuning: AMC Amsterdam

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

Main study parameters involve (1) the VR-game output scores and (2) brain activity on fMRI and (3) Y-BOCS scores

Toelichting onderzoek

Achtergrond van het onderzoek

Obsessive-compulsive disorder (OCD) is a chronic psychiatric disorder characterized by obsessions and repetitive compulsions. To date, a diagnosis of OCD is based on retrospective and subjective measures. There is a need for standardized and objective tools to improve diagnostics.
Interestingly, virtual reality (VR) can be used to actively provoke and assess OCD specific symptoms in a controlled and standardized environment. In a former study, we showed the VR-game is capable of inducing OCD symptoms of self-reported anxiety and compulsive behaviour in OCD patients. We will now investigate whether the VR-game is able to activate the pathophysiological substrates of OCD. This will support the objectivity and specificity of the use of the VR-game as a tool to provoke and assess OCD symptoms.

The primary objective of this study is to investigate if the VR-game is able to activate the pathophysiological substrate associated with OCD in OCD patients, as opposed to healthy controls The secondary objective is to investigate the correlation between the activity of the substrate and the severity of OCD.

We will perform a cross-sectional study including 27 OCD patients and 27 healthy controls. The participants will play the VR-game while time alterations in blood flow are visualized with fMRI. A comparison between OCD-patients and healthy controls will be made.

Doel van het onderzoek

The primary objective of this study is to investigate if a specifically designed VR-game is able to activate the pathophysiological substrate associated with OCD in OCD patients, as opposed to healthy controls. This will be investigated by visualizing brain activity using fMRI while participants play the game. We hypothesize increased VR-game output scores and increased brain activity within the orbitofrontal cortex, anterior cingulate cortex and the amygdala in OCD patients and relative to healthy controls.

The secondary objective is to investigate the correlation between the degree of activation of the pathophysiological substrate and the severity of OCD in OCD patients.

Onderzoeksopzet

Subjects will participate only once, participation will take 3 hours.

Onderzoeksproduct en/of interventie

In this research project we will investigate a virtual reality game (VR-game) for OCD. This VR-game is interactive and designed to provoke and assess OCD symptoms in a controlled and standardized way. In the VR-game OCD patients encounter 15 OCD-specific items like running gas, an open window and a dirty toilet. They are asked to rate their emotional responses, subdivided in anxiety, tension, uncertainty and urge to control on a 0-10 visual analogue scale. Subsequently they are expected to intervene in the OCD-specific item and rate their emotional responses again afterwards. Thereafter, OCD patients have the option to perform compulsive behavior (e.g. checking or repeating the intervention) followed by another rating of their emotional responses (for an overview, see figure 1).

Contactpersonen

Publiek

AMC

Martine van Bennekom
[default]
The Netherlands

Wetenschappelijk

AMC

Martine van Bennekom
[default]
The Netherlands

Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

- Diagnosis of primary OCD by DSM-IV criteria,

- Age between 18-65

- Written informed consent of the subject

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

- Severe neurological disorders (including seizures) and cardiovascular disorders

- Use of psychiatric medication including tricyclic antidepressants, antipsychotics and benzodiazepines.

- Mental retardation

- Use of medication potentially influencing cerebral blood flow and the cardiovascular system

- Severe comorbid axis I disorders including schizophrenia like disorders and bipolar disorder

- Alcohol or substance abuse (including benzodiazepines) during the last 6 months

- Use of alcohol or benzodiazepines in the 24 hours prior to investigation or recreational drugs in the 72 hours prior to investigation

- Abnormal hearing and uncorrected vision
Irregular sleep/wake rhythm (e.g. regular nightshifts or cross timeline travel)

- Contraindications for fMRI

Onderzoeksopzet

Opzet

Type:	Interventie onderzoek
Onderzoeksmodel:	Cross-over
Toewijzing:	Niet-gerandomiseerd
Blindering:	Open / niet geblindeerd
Controle:	Actieve controle groep

Deelname

Nederland
Status: Anders

(Verwachte) startdatum:	01-05-2017
Aantal proefpersonen:	54
Type:	Onbekend

Ethische beoordeling

Positief advies

Datum:	12-04-2017
Soort:	Eerste indiening

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	NL6240
NTR-old	NTR6420
Ander register	METC AMC : 2016_297

Resultaten