# Pilot-study into the effectiveness of neurofeedback in the treatment of major depressive disorder (MDD).

No registrations found.

**Ethical review** Positive opinion

**Status** Pending

Health condition type

**Study type** Interventional

## **Summary**

#### ID

NL-OMON26159

**Source** 

Nationaal Trial Register

**Brief title** 

N/A

**Health condition** 

major depressive disorder, depression

## **Sponsors and support**

Primary sponsor: University Maastricht (UM), Department of Psychiatry and

Neuropsychology

Source(s) of monetary or material Support: University Maastricht (UM), Department of

Psychiatry and Neuropsychology

#### Intervention

#### **Outcome measures**

#### **Primary outcome**

- 1. Hamilton depression rating scale (17-item);
  - 1 Pilot-study into the effectiveness of neurofeedback in the treatment of major de ... 30-05-2025

2. Baseline frontal alpha-activity in resting EEG.

#### **Secondary outcome**

Quick Inventory Depression Scale- SelfRating (16 items).

# **Study description**

#### **Background summary**

It is claimed that neurofeedback (NF) is efficacious in the treatment of MDD. So far, no studies have systematically examined such claims. However, basic neurophysiological studies appear to support the premise of NF that depression is associated with frontal alphaasymmetry in the resting EEG. Reduction of this FA is thought to be related to a decrease in depressive symptomatology. The aim of this pilot-study is to investigate the effectiveness of NF (delivered as a frontal asymmetry protocol) in MDD by (1) decreasing FA, and (2) reducing severity of depressive symptomatology.

In case of positive results in this pilot-study a larger scale RCT will be conducted.

#### Study objective

Neurofeedback is effective in the treatment of major depressive disorder.

## Study design

- 1. Premeasure; diagnosis and assessment of clinical variables (like severity of MDD);
- 2. Measurement of MDD severity before every NF session;
- 3. Assessment of clinical variables (like severity of MDD) upon completion of the intervention.
- 1. Premeasure: 6 days ESM;
- 2. Postmeasure: after 8 weeks of mindfulness training/time control: 6 days ESM;
- 3. Follow-ups are planned, but were not yet submitted to ethical committee;
- 4. Follow-up at 6 months;
- 5. Follow-up at 12 months.

#### Intervention

Neurofeedback will be administered based by means of frontal alpha-asymmetry (FA) feedback. Baseline resting-EEG signal will be analyzed and individual thresholds will be used to provide real-time visual feedback in order to diminish FA. A maximum of 30 NF sessions will be delivered with a frequency of 3 sessions each week.

## **Contacts**

#### **Public**

Department of Psychiatry University Hospital Maastricht P.O. Box 5800 F.P.M.L. Peeters Maastricht 6202 AZ The Netherlands 043-3874130

#### **Scientific**

Department of Psychiatry University Hospital Maastricht P.O. Box 5800 F.P.M.L. Peeters Maastricht 6202 AZ The Netherlands 043-3874130

# **Eligibility criteria**

## Inclusion criteria

- 1. MMD as a primary axis-1 diagnosis according to criteria of the DSM-IV-TR;
- 2. Informed consent.

#### **Exclusion criteria**

- 1. History of braintrauma (commotio or contusio cerebri);
- 2. Current use of antipsychotics, moodstabilizers, benzodiazepines. the use of antidepressants is permitted if type and dosage are not changed during participation in the
  - 3 Pilot-study into the effectiveness of neurofeedback in the treatment of major de ... 30-05-2025

stu	ıd	٧	•
	, ,	,	,

- 3. Chronic MDD (>2 years duration of current episode);
- 4. Dysthymia;
- 5. Bipolar disorder;
- 6. Lefthandedness;
- 7. Severe (HDRS-17 > 25) episode of MDD which indicates prompt effective treatment;
- 8. Pregnancy;
- 9. Other psychiatric disorders other than co-morbid anxiety and personality disorders.

# Study design

## **Design**

Study type: Interventional

Intervention model: Other

Allocation: Non controlled trial

Masking: Open (masking not used)

Control: N/A , unknown

#### Recruitment

NL

Recruitment status: Pending

Start date (anticipated): 01-04-2009

Enrollment: 10

Type: Anticipated

# **Ethics review**

Positive opinion

Date: 14-01-2009

# **Study registrations**

## Followed up by the following (possibly more current) registration

ID: 33576

Bron: ToetsingOnline

Titel:

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

No registrations found.

## In other registers

Register ID

NTR-new NL1551 NTR-old NTR1629

CCMO NL25291.068.08

ISRCTN wordt niet meer aangevraagd

OMON NL-OMON33576

# **Study results**

#### **Summary results**

N/A