# Dopamine, stress reactivity & hearing impairment.

No registrations found.

**Ethical review** Not applicable

**Status** Pending

Health condition type -

**Study type** Observational non invasive

# **Summary**

#### ID

NL-OMON26246

Source

Nationaal Trial Register

#### **Health condition**

psychosis stress hearing impairment psychose slechthorendheid

## **Sponsors and support**

**Primary sponsor:** Maastricht University

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

#### Intervention

#### Outcome measures

#### **Primary outcome**

Relationship between hearing impairment and reactivity (changes in affect and psychotic symptoms) to self-reported stress in daily life, assessed using the Experience Sampling Method (ESM).

#### **Secondary outcome**

- 1. Association between dopamine release and stress reactivity;
- 2. Group level differences in reactivity to other forms of (event related, activity) stress;
- 3. Additional parameters measured: IQ (non-verbal), non-clinical psychotic symptoms, depression score, discrimination, perception of living environment, childhood care and abuse, life events, bullying, perceived effects of stigma. Also data from study NL24257.018.08.; self-other schemas, childhood trauma, social defeat score, family structure, SES, urbanicity, self-esteem, drug-use.

# **Study description**

#### **Background summary**

Background of the study:

It has been suggested that the experience of social defeat / social exclusion is a major risk factor for psychosis. Such experience may account for a large portion of the increased psychosis risk under hearing impaired individuals, a group which has trouble participating in hearing society and does not identify with the signing Deaf. Research with the Experience Sampling Method has shown that psychosis patients and their siblings react more strongly to daily life stress. Increased stress reactivity meets the criteria for an endophenotype for psychosis. We hypothesize that sensitisation of the stress system through chronic exposure to

social stress is an important mechanism leading to increased psychosis risk in the hard of hearing. If this is the case, healthy hearing impaired individuals should show increased stress reactivity and this result should be related to dopaminergic activity. Understanding the pathogenic mechanism would allow for the development of preventive interventions to improve minority mental health.

Objective of the study:

To examine whether hearing impaired young adults are sensitised to social stress and whether this related to dopaminergic activity.

Study design:

Observational, 2 groups (normal hearing / hearing impaired).

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#### Study population:

30 healthy human volunteers, 18-30 years old. Participated in study NL24257.018.08. Bilateral hearing loss > 60 dB (hearing impaired) or < 20 dB (normal hearing).

Primary study parameters/outcome of the study:

Relationship between hearing impairment and reactivity (changes in affect and psychotic symptoms) to self-reported stress in daily life, assessed using the Experience Sampling Method (ESM).

Secundary study parameters/outcome of the study:

- 1. Association between dopamine release and stress reactivity;
- 2. Group level differences in reactivity to other forms of (event related, activity) stress.

Nature and extent of the burden and risks associated with participation, benefit and group relatedness:

Briefing, debriefing and all tests and questionnaires can be done at home in 3 hours. ESM is integrated in daily life and takes about 3 hours over a period of eight days. Time investment (6.5 hrs) will be compensated with a monetary reward. Participants will not benefit directly, but will contribute to better prevention of psychotic disorder. No health risks are involved in the study.

Hard of hearing individuals are selected as proxy for social exclusion because of reports of elevated psychosis risk in that group.

#### Study objective

We hypothesize that sensitisation of the stress system through chronic exposure to social stress is an important mechanism leading to increased psychosis risk in the hard of hearing. If this is the case, healthy hearing impaired individuals should show increased stress reactivity and this result should be related to dopaminergic activity.

#### Study design

1. Briefing session;

- 2. 8 days of Experience sampling;
- 3. Debriefing session.

#### Intervention

N/A

## **Contacts**

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# **Eligibility criteria**

#### Inclusion criteria

Completed study NL24257.018.08.

# **Exclusion criteria**

N/A

# Study design

### **Design**

Study type: Observational non invasive

Intervention model: Parallel

Allocation: Non-randomized controlled trial

Masking: Open (masking not used)

Control: N/A, unknown

#### Recruitment

NL

Recruitment status: Pending
Start date (anticipated): 01-10-2011

Enrollment: 30

Type: Anticipated

# **Ethics review**

Not applicable

Application type: Not applicable

# **Study registrations**

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

ID: 37943

Bron: ToetsingOnline

Titel:

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

No registrations found.

# In other registers

Register ID

NTR-new NL2832 NTR-old NTR2973 Register ID

CCMO NL37458.068.11

ISRCTN wordt niet meer aangevraagd.

OMON NL-OMON37943

# **Study results**

## **Summary results**

N/A