# Behavioural response of Individuals With Down's syndrome During a dental treatment

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Primary Objective: Analyse the behavioural response of individuals with Down's syndrome

directly after a painful dental stimulus and compare this with video-analysed behaviour. Secondary Objective(s): 1) Determine which observational scale can...

**Ethical review** Approved WMO **Status** Recruiting **Health condition type** Other condition

**Study type** Observational non invasive

# **Summary**

#### ID

NL-OMON38348

#### Source

**ToetsingOnline** 

#### **Brief title**

Response of Individuals With Down's syndrome During dental treatment

#### **Condition**

- Other condition
- Chromosomal abnormalities, gene alterations and gene variants

#### **Synonym**

Down's syndrome

#### **Health condition**

Downsyndroom

#### Research involving

Human

#### **Sponsors and support**

**Primary sponsor:** Universiteit van Amsterdam

Source(s) of monetary or material Support: instelling waar onderzoekers werkzaam zijn

#### Intervention

**Keyword:** behaviour, dentistry, Down's syndrome, pain

#### **Outcome measures**

#### **Primary outcome**

The participants will all have a different mental level. Which will probably mean the will all react in a different way.

The primary study outcomes are the pain-scores of the dentist, the dental assistant and the patient.

#### **Secondary outcome**

The pain behaviour will be assessed using different observation scales:

- 1) 3 behaviours form the Facial Action Coding system
- 2) Non-communicating Pain Checklist for adults
- 3) Numeric pain scale
- 4) Comfort scale

# **Study description**

#### **Background summary**

A lack of research has limited our understanding of the prevalence and experience of pain and its longterm implications for individuals with developmental disabilities. Little research is done to discribe the way in which individuals with Down's syndrome express and communicate pain. The dental setting provides the opportunity to observe these individuals during a potentially painful dental stimulus.

#### Study objective

#### Primary Objective:

Analyse the behavioural response of individuals with Down's syndrome directly after a painful dental stimulus and compare this with video-analysed behaviour.

#### Secondary Objective(s):

- 1) Determine which observational scale can be used to reliably and accurately assess pain during a dental treatment with individuals with Down's syndrome.
- 2) Determine the inter-analyst reliability of the two independent analysts who analyse the video's.
- 3) Compare the response of individuals with Down's syndrome on a aversive dental treatment with the response on a painful dental treatment (anaesthesia injection or mechanical removal of calculus) to indicate behavioural expression related to pain.

#### Study design

The participants will be videotaped during their dental treatment. These video's will be assessed using different pain-observation scales to assess the painbehaviour of the participants.

Directly after the potential painful stimulus (dental injection) the participants will be asked how much pain they had. Furthermore, the dentist and the dental assistent will give a score on how much pain they thought the participant felt.

Afterwards, the scores of the different observation scales will be compared with each other and with the scores given by the clinicians. Also the inter-rater reliability will be assessed and the validity of the different scales by comparing the scores of a painful with a non-pain stimulus.

#### Study burden and risks

Not applicable

## **Contacts**

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### **Trial sites**

#### **Listed location countries**

**Netherlands** 

# **Eligibility criteria**

#### Age

Adults (18-64 years) Elderly (65 years and older)

#### Inclusion criteria

Individuals 18 years or older with Down's syndrome.

# **Exclusion criteria**

Indivuduals with Down's syndrome younger than 18 years.

# Study design

# **Design**

Study type: Observational non invasive

Masking: Open (masking not used)

Control: Uncontrolled

Primary purpose: Other

#### Recruitment

NL

Recruitment status: Recruiting
Start date (anticipated): 15-11-2010

Enrollment: 50

Type: Actual

# **Ethics review**

Approved WMO

Date: 17-05-2010

Application type: First submission

Review commission: METC Isala Klinieken (Zwolle)

Approved WMO

Date: 08-10-2012
Application type: Amendment

Review commission: METC Isala Klinieken (Zwolle)

# **Study registrations**

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

No registrations found.

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

No registrations found.

### In other registers

Register ID

CCMO NL28326.075.10