# Romantic love and serotonin

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**Ethical review** Approved WMO **Status** Recruitment stopped

**Health condition type** Other condition

**Study type** Observational invasive

# **Summary**

#### ID

NL-OMON33943

**Source** 

ToetsingOnline

**Brief title** 

Romantic love and serotonin

#### Condition

• Other condition

#### **Synonym**

infatuation, romantic love

**Health condition** 

verliefdheid

#### **Research involving**

Human

## **Sponsors and support**

**Primary sponsor:** Erasmus Universiteit Rotterdam

Source(s) of monetary or material Support: Ministerie van OC&W

#### Intervention

**Keyword:** love, obsessions, serotonin

#### **Outcome measures**

#### **Primary outcome**

Serotonin (5-HT) levels in the blood and self-reported amount of intrusive thinking about the beloved.

#### **Secondary outcome**

Also 5-HIAA levels in the blood will be measured. Morever, it will be investigated whether correlations exists between blood serotonin levels and measures of intensity and duration of the romantic love. Furthermore, if the participants agree, their blood plasma and serum will be stored in the freezer for future additional measurements of 5-HT in serum and blood platelets, as well as tryptophan and tyrosine levels.

# **Study description**

#### **Background summary**

Infatuated individuals think about their beloved a lot. The notions that these frequent thoughts resemble the obsessions of obsessive-compulsive disorder (OCD) patients and that those patients benefit from serotonin reuptake inhibitors (SSRIs), have led to the hypothesis that romantic love is accompanied by reduced levels of serotonin in the brain.

### Study objective

In the current study this hypothesis will be tested by examining whether blood serotonin levels, which are indicative of central serotonin levels, differ between infatuated and non-infatuated individuals. Furthermore, it will be investigated whether these serotonin measure are associated with the extent of obsessive thinking about the beloved.

#### Study design

Between-subject, observational study

## Study burden and risks

Participants have to visit the Erasmus MC once. The duration of the testing session will be approximately 30 minutes. The infatuated participants will fill out four questionnaires, and the non-infatuated participants will fill out two questionnaires. Following one venapunction, in which two tubes (approximately 14 ml) of blood will be drawn, will be performed.

## **Contacts**

#### **Public**

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# **Trial sites**

## **Listed location countries**

Netherlands

# **Eligibility criteria**

#### Age

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

### Inclusion criteria

between 18 and 30 years old maximal love duration of 6 months (for infatuated group) not in love and not involved in romantic relationship (non-infatuated group)

### **Exclusion criteria**

Depression, hypercholesterolemia, or hypertensia Use of antidepressants, statins or anti-hypertensives

# Study design

## **Design**

Study type: Observational invasive

Intervention model: Other

Allocation: Non-randomized controlled trial

Masking: Open (masking not used)

Control: Active

Primary purpose: Basic science

#### Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 12-05-2009

Enrollment: 40

Type: Actual

## **Ethics review**

Approved WMO

Date: 29-01-2009

Application type: First submission

(Rotterdam)

# **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 NL23865.078.08