

# Prevention of dehydration of independently living elderly people at risk by education and technological support

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<b>Ethische beoordeling</b>	Positief advies
<b>Status</b>	Werving gestopt
<b>Type aandoening</b>	-
<b>Onderzoekstype</b>	Interventie onderzoek

## Samenvatting

### ID

NL-OMON22652

### Bron

Nationaal Trial Register

### Verkorte titel

RPHS=Regional Public Health Service

### Aandoening

Dehydration of elderly people. Insufficient fluid intake.  
Uitdroging bij ouderen. Onvoldoende vochtinname.

### Ondersteuning

**Primaire sponsor:** The primary performer is Regional Public Health Service West-Brabant. The study is performed in association with Tilburg University and General practice de Keen in Etten-Leur.

**Overige ondersteuning:** The study is funded by the CZ-fonds (a fund from a health insurance provider).

## Onderzoeksproduct en/of interventie

### Uitkomstmaten

#### Primaire uitkomstmaten

The main parameter on individual and group level is the daily fluid intake (the quantity of daily used cups/glasses). The fluid intake is measured by open-end questions regarding the quantity of intake of different kinds of fluid (water, coffee, tea, milk, soda, excluding alcoholic drinks) the day before completing the questionnaire. The answers on the questionnaire regarding the quantity of different fluids they drink are summed to one overall score of cups/glasses a day and a total quantity of cc a day.

## Toelichting onderzoek

#### Achtergrond van het onderzoek

Dehydration of elderly people is a very important public health issue. It increases the risk of diseases and fatality and is an important cause of hospitalisation.

This study compares two interventions to prevent dehydration of elderly people at risk: an educational intervention and an educational intervention in combination with a drink reminder device. The educational intervention is given by practice nurses of the general practice de Keen in Etten-Leur. The Dutch Regional Public Health Service West-Brabant develops and provides information materials, coordinates the interventions and together with Tilburg University and will conduct the study on effects of the interventions.

People of 80 years and older and people of 65 years and older who have a heart disease receive a letter from the general practice in which they are asked if they want to participate in the study and if so to return the form. People who want to participate and whose daily fluid intake is insufficient are randomised to receive either the educational intervention or the educational intervention in combination with a drink reminder device (called the Obli).

The participants are asked to fill in a questionnaire before the intervention, 6 weeks after the start of the intervention and at 6 months follow-up. The two groups will be compared with regard to fluid intake, knowledge, awareness (of the risks of dehydration) and quality of life by means of multivariate analysis. MANOVA repeated measures will be used to compare the changes in mean total scores on fluid intake within and between the two groups.

Countries of recruitment: the Netherlands,

#### Doel van het onderzoek

There are no effective interventions to prevent dehydration of elderly people available. Therefore the RPHS West-Brabant, together with the General Practice de Keen, decided to develop and analyse the effect of an education strategy. Besides that we decide to assess

the effectiveness of a recently developed drink reminder device.

## **Onderzoeksopzet**

All participating elderly people are asked to answer questions on a questionnaire. We measure the fluid intake, the knowledge and awareness (of risks of dehydration) and the quality of life at the following moments:

- at baseline, during a home visit or consultation with the practice nurse, before the intervention starts
- 6 weeks after the start of the interventions during a home visit by the health promoter of the Regional Public health Service West-Brabant
- and at 6 months follow-up during a home visit by the health promoter

Since, to our best knowledge, no validated questionnaires to measure the fluid intake, knowledge and awareness of the risks of dehydration are available, we designed one for measuring these parameters in our study.

## **Onderzoeksproduct en/of interventie**

### **Intervention 1. Education**

The elderly people in this group receive information from a practice nurse during a home visit or consultation. Information is given on the recommended daily fluid intake and the risks of insufficient fluid intake. The elderly also receive materials on the subject and are shown how to incorporate sufficient fluid intake into their daily routines.

### **Interventie 2. Education in combination with a drink reminder device.**

The elderly in this group receive the same information as mentioned in intervention 1 as well as a demonstration of the drink reminder device which they are asked to use during 6 weeks. A caregiver or family member can be present at the demonstration. The drink reminder device (called Obli) measures the fluid intake and gives a visual (red) and auditive signal if the daily fluid intake is insufficient, so the elderly can adjust their drink behavior. The intensity of the signal can be adjusted to the preference of the elderly. The device registers the quantity of fluid taken from the decanter placed on the device-base. If the elderly drinks coffee/tea (not from the decanter or not at home) a button on the device can be pushed so this quantity of fluid intake is also measured.

The device registers the fluid intake and sends the data to a remote computer from which the practice nurse can monitor the fluid intake. If the amount of fluid intake is reason for concern the practice nurse contacts the elderly to offer some advice if needed. With the consent of the elderly also caregivers or careworkers who frequently visit the elderly will be informed about the project.

## **Contactpersonen**

## **Publiek**

GGD West-Brabant <br>  
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## **Wetenschappelijk**

GGD West-Brabant <br>  
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## **Deelname eisen**

### **Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)**

Patients of 80 years and older.  
Patients of 65 years and older with a heart disease.

### **Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)**

Patients who are not able to correspond in Dutch.  
Patients with cognitive impairments.  
Patients with kidney-/bladder diseases.

## **Onderzoeksopzet**

## Opzet

Type:	Interventie onderzoek
Onderzoeksmodel:	Parallel
Toewijzing:	Gerandomiseerd
Blinding:	Open / niet geblindeerd
Controle:	Actieve controle groep

## Deelname

Nederland	
Status:	Werving gestopt
(Verwachte) startdatum:	01-09-2013
Aantal proefpersonen:	50
Type:	Werkelijke startdatum

## Ethische beoordeling

Positief advies	
Datum:	01-05-2014
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	NL4431

**Register**

NTR-old

Ander register

**ID**

NTR4553

METC en CZ-fonds : M521, NL45169.028.013/CZnr 201300043

## Resultaten