

# A study into the effects of activities with animals on the well-being of Dutch nursing home patients with dementia

<b>Submission date</b> 23/08/2017	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered
<b>Registration date</b> 18/09/2017	<b>Overall study status</b> Completed	<input type="checkbox"/> Protocol
<b>Last Edited</b> 13/04/2021	<b>Condition category</b> Mental and Behavioural Disorders	<input type="checkbox"/> Statistical analysis plan
		<input checked="" type="checkbox"/> Results
		<input type="checkbox"/> Individual participant data

## Plain English summary of protocol

### Background and study aims

The aim of this study is to explore the effect of dog or robot assisted activities on nursing home clients with dementia. The researchers are specifically interested in what happens during the activities. Do participating clients display less problematic behavior? Do they interact more with either the dog/robot or each other?

### Who can participate?

Patients with dementia living in De Zorgboog, a large Dutch nursing home

### What does the study involve?

Participants are randomly allocated to attend videotaped weekly group activity sessions with either a dog (and handler), a robot (FurReal Friend, with handler), or a handler only, over a period of 8 weeks. Quality of life, mood and behaviour are assessed during this time period and a 4 week follow-up using questionnaires.

### What are the possible benefits and risks of participating?

Participating in this study will provide nursing home clients with an additional weekly activity for 8 weeks providing social contact and the possibility to interact with either a dog or an animal-robot. Interacting with dogs could potentially increase risk of injury, disease or inconvenience due to allergies. These risks have been minimised by using only certified animal-assisted intervention dogs that have been vaccinated and checked by a veterinarian. Furthermore, people with known dog allergies are excluded from participating. The study is also covered by a specific research insurance policy during the course of the intervention period.

### Where is the study run from?

De Zorgboog Nursing Homes (Netherlands)

### When is the study starting and how long is it expected to run for?

September 2014 to March 2019

Who is funding the study?  
De Zorgboog Nursing Homes (Netherlands)

Who is the main contact?  
Ms Lonneke Schuurmans

## Contact information

**Type(s)**  
Public

**Contact name**  
Ms Lonneke Schuurmans

**Contact details**  
Postalnr: 5330  
Postbus 16  
Bakel  
Netherlands  
5760 AA

## Additional identifiers

**Protocol serial number**  
NL50623.096.14

## Study information

**Scientific Title**  
Animal-assisted interventions in Dutch dementia care: effects on quality of life and neuropsychiatric symptoms

**Study objectives**  
Quality of life and neuropsychiatric symptoms of nursing home clients with dementia are positively influenced by group sessions offering either dog-assisted activities or robot-assisted activities, when compared with a control group.

**Ethics approval required**  
Old ethics approval format

**Ethics approval(s)**  
Medical Ethics Committee Atrium-Orbis-Zuyd (Heerlen, The Netherlands), 10/11/2014, ref: NL50623096.14

**Primary study design**  
Interventional

**Study design**  
Single-centre randomised controlled trial

## **Study type(s)**

Quality of life

## **Health condition(s) or problem(s) studied**

Dementia

## **Interventions**

Nursing home clients are randomised via computer generated random numbers to three groups with protocolled activities:

Group 1: dog assisted activity group sessions with handler

Group 2: robot assisted activity group sessions with handler (FurReal Friend robot)

Group 3: (control): group sessions with a visiting student

Nursing home clients attend videotaped once a week group sessions with a total duration of 8 weeks and a 4 week follow-up. Quality of life, mood and behavior of participating clients are measured using questionnaires.

## **Intervention Type**

Other

## **Primary outcome(s)**

1. Social interaction during sessions
2. Neuropsychiatric symptoms during sessions

Each client will participate in one intervention session a week. All sessions will be videotaped for the entire duration of the study (8 weeks). Videos will be analysed after the intervention period using video-coding to calculate the amount of social interactions and neuropsychiatric symptoms displayed during the sessions.

## **Key secondary outcome(s)**

Questionnaires will be used to measure several secondary outcomes at all or a subset of the following timepoints: baseline (t0), after 4 weeks (t1, halfway), after 8 weeks (t2, at the end of the intervention period), after 12 weeks (t3, 4 weeks post intervention follow-up):

1. Quality of life, measured using Qualidem at t0, t1, t2, t3
2. Depression, measured using Cornell Scale for Depression in Dementia (CSDD) at t0, t1, t2, t3
3. Neuropsychiatric symptoms, measured using Neuropsychiatric Inventory Questionnaire (NPI-Q) at t0, t1, t2, t3
4. Agitation, measured using Cohen-Mansfield Agitation Inventory (CMAI) at t0, t1, t2, t3
5. Medication usage, measured using medical records at t0, t2
6. Intercurrent diseases, measured using medical records at t0, t2
7. Dementia stage, measured using Clinical Dementia Rating (CDR) at t0, t2
8. Functional state, measured using Interview for Deteriorating in Daily living activities in Dementia (IDDD) at t0, t2
9. Dementia, assessed using Gedragsobservatie Intramurale Psychogeriatric (GIP, general dementia assessment tool, Dutch) at t0, t2

## **Completion date**

01/03/2019

## **Eligibility**

**Key inclusion criteria**

1. 24/7 nursing home client
2. Diagnosis of dementia
3. Consent by legal guardian

**Participant type(s)**

Patient

**Healthy volunteers allowed**

No

**Age group**

Senior

**Sex**

All

**Key exclusion criteria**

1. Clients resisting participation, either verbal or non-verbal
2. Clients with a trauma related to animals in life history
3. Clients with a dog allergy
4. Clients with severe aggression that might endanger other clients or the participating dogs

**Date of first enrolment**

01/11/2014

**Date of final enrolment**

01/01/2015

**Locations****Countries of recruitment**

Netherlands

**Study participating centre**

**De Zorgboog**

Bakel

Netherlands

5760 AA

**Sponsor information****Organisation**

Open Universiteit Nederland

ROR

<https://ror.org/018dfmf50>

## Funder(s)

### Funder type

Hospital/treatment centre

### Funder Name

De Zorgboog Nursing Homes

## Results and Publications

### Individual participant data (IPD) sharing plan

Due to the sensitive nature of the video-material the trialists are obliged under restrictions set by the medical ethics committee to destroy the video-material after completion of the PhD project. The medical records and questionnaires of participants will be kept in the medical archive of the nursing home for 15 years.

### IPD sharing plan summary

Not expected to be made available

### Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Results article</a>		27/09/2019	13/04/2021	Yes	No