

# Gardens for people with dementia

<b>Submission date</b> 15/07/2022	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered <input checked="" type="checkbox"/> Protocol
<b>Registration date</b> 28/07/2022	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
<b>Last Edited</b> 08/05/2025	<b>Condition category</b> Mental and Behavioural Disorders	<input type="checkbox"/> Individual participant data <input checked="" type="checkbox"/> Record updated in last year

## Plain English summary of protocol

### Background and study aims

A limited amount of research has examined how nature-based palliative rehabilitation can be implemented in nursing homes for people with dementia, even though evidence suggests that these gardens are underused. The aim of the study is to develop and implement a nature-based palliative rehabilitation intervention on how nursing home gardens can be used by people with dementia to improve a range of health outcomes.

### Who can participate?

People with dementia living in a long-term care nursing home and their care staff

### What does the study involve?

An intervention where researchers, staff, residents and relatives co-design an activity program in a garden whereafter the program will be tested. The intervention involves staff using the garden together with residents twice a week for one month.

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

Possible benefits are improvements in well-being, better sleep and higher job satisfaction. Possible risks are that it may be time-consuming.

### Where is the study run from?

The University of Southern Denmark (Denmark)

When is the study starting and how long is it expected to run for  
January 2019 to September 2023

### Who is funding the study

THE VELUX FOUNDATIONS (Velux Fonden) (Denmark)

### Who is the main contact

Dr Tanja Schmidt (Denmark)  
tbschmidt@health.sdu.dk

## Contact information

**Type(s)**

Scientific

**Contact name**

Dr Tanja Schmidt

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**Contact details**

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## **Additional identifiers**

**EudraCT/CTIS number**

Nil known

**IRAS number****ClinicalTrials.gov number**

Nil known

**Secondary identifying numbers**

Nil known

## **Study information**

**Scientific Title**

Nature-based palliative rehabilitation for people with dementia to lower behavioural and psychological symptoms of dementia

**Study objectives**

Rationale: we are assessing whether a nature-based palliative rehabilitation program in a nursing home for people with severe dementia, can positively affect residents' behavioural and psychological symptoms of dementia (BPSD), medication use, and care staff's burnout rate.

**Ethics approval required**

Ethics approval required

**Ethics approval(s)**

Approved 26/11/2019, RIO (University of Southern Denmark ethics board) (Campusvej 55, Odense M, 5230 , Denmark; +45 65507550; sdu.persondata@sdu.dk), ref: 10.804

**Study design**

Single-cased quasi-experimental intervention study with no control group

**Primary study design**

Interventional

**Secondary study design**

Non randomised study

**Study setting(s)**

Care home

**Study type(s)**

Quality of life

**Participant information sheet**

Not available in web format, please use the contact details to request a participant information sheet

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

Lowering behavioural and psychological symptoms of dementia (BPSD) symptoms and medication in people with severe dementia

**Interventions**

We will create a nature-based palliative rehabilitation program together with a nursing home for people with dementia. This includes re-designing their garden to accommodate activities for people with dementia. Staff are required to use the garden together with residents 2 times a week for a whole month. We will collect baseline and follow-up data on behavioural and psychological symptoms of dementia (BPSD) symptoms using the Neuropsychiatric Inventory Nursing Home Version (NPI-NH) survey, registration of medication use, and a survey on staff burnout.

**Intervention Type**

Behavioural

**Primary outcome measure**

Behavioural and psychological symptoms of dementia (BPSD) measured using the Neuropsychiatric Inventory Nursing Home Version (NPI-NH) survey at baseline and 1 month after

**Secondary outcome measures**

1. Staff burnout measured using a questionnaire administered to staff at baseline and 1 year after
2. Medication measured using staff registrations at baseline and 1 month after

**Overall study start date**

01/01/2019

**Completion date**

29/09/2023

**Eligibility**

**Key inclusion criteria**

1. People with dementia living at a long-term care nursing home in Denmark
2. Staff caring for people with dementia living at a long-term care nursing home in Denmark

**Participant type(s)**

Patient, Health professional

**Age group**

Adult

**Sex**

Both

**Target number of participants**

52 people with dementia and 86 care staff

**Key exclusion criteria**

Staff who do not have care responsibilities

**Date of first enrolment**

01/06/2022

**Date of final enrolment**

01/06/2022

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

Denmark

**Study participating centre**

Kildebakken Plejecenter

Varbergvej 13

Haderslev

Denmark

6100

**Sponsor information****Organisation**

The Velux Foundations

**Sponsor details**

Tobaksvejen 10

Søborg

Denmark  
2860  
+45 39 57 09 57  
info@VELUXFOUNDATIONS.dk

**Sponsor type**

Charity

**Website**

<https://veluxfoundations.dk>

**ROR**

<https://ror.org/007ww2d15>

## **Funder(s)**

**Funder type**

Charity

**Funder Name**

Velux Fonden

**Alternative Name(s)**

Velux Foundations, The Velux Foundations

**Funding Body Type**

Private sector organisation

**Funding Body Subtype**

Trusts, charities, foundations (both public and private)

**Location**

Denmark

## **Results and Publications**

**Publication and dissemination plan**

Current publication and dissemination plan as of 08/05/2025:

1. Planned publication in peer-reviewed journals
2. Participation in two international conferences
3. Develop a practical guide (The Dementia-Friendly Garden) for further dissemination

Previous publication and dissemination plan:

1. Planned publication in a high-impact peer-reviewed journal
2. Participation in two international conferences

## Intention to publish date

01/07/2025

## Individual participant data (IPD) sharing plan

Current IPD sharing plan as of 08/05/2025:

The data generated and/or analyzed during this study may be made available from the main contact person, Thomas Skovgaard (tskovgaard@health.sdu.dk), starting 01/01/2025, for a period of one year. Access may be granted upon reasonable request to researchers affiliated with recognized research institutions, for research purposes only. Data will be fully anonymized, and appropriate consent will be obtained prior to any sharing.

Previous IPD sharing plan:

The datasets generated during and analysed during the current study will be available upon request from Tanja Schmidt, tbschmidt@health.sdu.dk, anonymized data, 01/01/2025, for 1 year, by other researchers working at research institutes, for research purposes only, consent will be obtained, and data anonymized.

## IPD sharing plan summary

Available on request

## Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Protocol article</a>		23/10/2022	25/10/2022	Yes	No