

Wearables and challenging behaviour in dementia in a nursing home (geriatric psychiatry department)

No registrations found.

Ethical review	Positive opinion
Status	Pending
Health condition type	-
Study type	Observational non invasive

Summary

ID

NL-OMON19930

Source

Nationaal Trial Register

Brief title

Wearables & challenging behaviour in dementia

Health condition

Dementia
Challenging behavior
BPSD

Sponsors and support

Primary sponsor: Fontys Hogescholen

Source(s) of monetary or material Support: - Fontys Hogescholen
- SIA RAAK postdoc grant

Intervention

Outcome measures

Primary outcome

the relationship between challenging behaviour ('golden standard') and biomedical variables ('index test') (sensitivity, positive predictive value)

Secondary outcome

- Determine the reaction of people with dementia regarding the putting on and wearing of the wearable. Do they show discomfort?
- The identification of environmental factors preceding challenging behaviour and/or increase in stress-related parameters as measured by the wearable.
- The usability of aforementioned objective data as starting point for a conversation between involved stakeholders (health professionals, care givers) to, based on this insight, prevent stress and/or behavioural problems.

Study description

Background summary

In nursing homes, dementia is often (up to 80%) accompanied by challenging behaviour, such as anxiety, agitation, apathy, delusions, aberrant motor behaviour, nighttime behaviour disturbances and disinhibition. Stress plays an important role in the cause of challenging behaviour. This negatively influences the quality of life of the specific resident and his environment. The cause of challenging behaviour can be treated psychosocially, by means of a thorough analysis of behaviour and context. However, behavioural analysis is very complex, among other things caused by the client's limited communicative capabilities. They cannot indicate themselves what they experience as being stressful. This hampers the identification of the stressors which cause challenging behaviour. By measuring biomedical variables, such as movement, temperature, heart rate variability, blood pressure and skin conductance, by means of a wearable (wristband), stress-related parameters can be measured easily and continuously.

The purpose of this research is to determine the usability of a wearable regarding the care of people with dementia showing challenging behaviour in a nursing home (geriatric psychiatry department). The relationship between biomedical data and behavioural observations will be investigated, as the conditions under which a wearable can be used in practice. How can biomedical data be visualized best, and how can information (e.g. training) be operationalized regarding the use/implementation in practice, considering multiple perspectives (e.g. health professionals and caregivers) and optimal guaranteeing privacy?

Study objective

By measuring biomedical variables, such as movement, temperature, heart rate variability, blood volume pulse and skin conductance, by means of a wearable (wristband), stress-related parameters can be measured easily and continuously. It is hypothesized that these values are related to challenging behaviours, and they can be used to predict an/or detect

challenging behaviours.

Study design

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Intervention

none

Contacts

Public

Fontys Hogescholen
Manon Peeters

06-53318835

Scientific

Fontys Hogescholen
Manon Peeters

06-53318835

Eligibility criteria

Inclusion criteria

Subjects can participate when they are:

- diagnosed with dementia
- resident of a geriatric psychiatry department in a nursing home
- show challenging behaviour (established by involved health care professionals): anxiety, agitation, aberrant motor behaviour and/or disinhibition

Exclusion criteria

Subjects are excluded in case of circumstances which cause an unrepresentative picture of the situation (e.g. in the case of an infection)

Study design

Design

Study type:	Observational non invasive
Intervention model:	Other
Allocation:	Non controlled trial
Masking:	Open (masking not used)
Control:	N/A , unknown

Recruitment

NL	
Recruitment status:	Pending
Start date (anticipated):	01-06-2019
Enrollment:	10
Type:	Anticipated

IPD sharing statement

Plan to share IPD: Undecided

Ethics review

Positive opinion	
Date:	15-03-2019
Application type:	First submission

Study registrations

Followed up by the following (possibly more current) registration

ID: 48071
Bron: ToetsingOnline
Titel:

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

No registrations found.

In other registers

Register	ID
NTR-new	NL7604
CCMO	NL67835.015.19
OMON	NL-OMON48071

Study results