The effect of person-centred dementia care to prevent agitation and other neuropsychiatric symptoms and enhance quality of life in nursing-home patients

A 10 months randomized controlled trial

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Background

Persons with dementia often develop neuropsychiatric symptoms (NPS) like agitation and depression.

NPS lead to impaired quality of life (QoL) and cause distress for the person with dementia and caregivers.


Psychosocial interventions are recommended as the effect of drug treatment on NPS is modest.

Background

- Person-centred care (PCC) is an approach with emphasis on basic psychosocial needs
  Kitwood 1997

- PCC is recommended and advocated in several national dementia care guidelines
  Swedish Council on Health Technology Assessment (SBU), 2006
  National Institute for Health and Care Excellence (NICE), UK 2011

- The evidence base for effect of PCC on neuropsychiatric symptoms is limited
  Chenoweth et al 2009
Objective of our study

To examine if two methods based on PCC; Dementia Care Mapping (DCM) (Kitwood & Bredin 1992) and the VIPS practice model (VPM) (Røsvik 2011) are more effective than giving lectures about dementia to nursing home staff (control condition)

- in reducing agitation and other neuropsychiatric symptoms in persons with dementia
- in improving quality of life in persons with dementia
The VIPS Practice Model (VPM)

Developed by Røsvik et al 2011
Based on The VIPS framework (Brooker 2004, 2007)

- **V**  Value regardless of age or cognitive ability
- **I**  Individualised approach, recognising uniqueness
- **P**  Perspective of the person with dementia
- **S**  Social environment in which the person with dementia can experience well-being

6 indicators for each element
The VPM procedure

Weekly consensus meetings with set roles and structure using the VIPS-framework to analyse a concrete care situation and discuss psychosocial interventions that are subsequently evaluated.

The staff receives a manual comprising practical examples of psychosocial interventions related to each indicator in the VIPS framework.

Røsvik et al 2011
Dementia Care Mapping

Developed by Kitwood and Bredin (1992)

Mapping/systematic observation of patients conducted for 4-6 hours with trained staff to record
- levels of ill or well-being
- interaction with staff
- levels of engagement

After the mapping feed-back is given to staff, the findings are discussed and used for action planning
Methods

A ten-month randomized controlled trial
-DCM compared with control
-VPM compared with control

The control group received 5 lectures about dementia on DVD (30 minutes each)
The intervention groups also received these DVDs
624 patients

VPM
189, 4 nh
29% died
138 analysed

DCM
229, 5 nh
31% died
158 analysed

Control group
206, 5 nh
27% died
150 analysed
Outcomes

Primary outcome:
Agitation - Change in score on the Brief Agitation Rating Scale (BARS)

Secondary outcomes:
Neuropsychiatric symptoms, depression and quality of life

Change in score on
- Neuropsychiatric Inventory Questionnaire (NPI-Q)
- Cornell Scale for Depression in Dementia (CSDD)
- Quality of Life in late-stage Dementia scale (QUALID)
Results - Primary outcome

No significant difference in mean change in score of agitation/BARS between DCM and control or between VPM and control after 10 months

Difference in mean change in score on BARS:
DCM vs. control: -2.0  p 0.19
VIPS vs. control: -1.1  p 0.42

The analysis is adjusted for age, gender, severity of dementia, general physical health, number of patients per ward, ward type and number of patients per staff on a day shift
Significant beneficial effect for both models regarding Neuropsychiatric symptoms

NPI-Q-10, difference in mean change in score:

- **DCM** vs. control -2.7  p 0.01
- **VIPS** vs. control -2.4  p 0.01

Agitation, NPI-Q-10, difference in mean change in score:

- **DCM** vs. control -0.9  p 0.04
- **VIPS** vs. control -0.9  p 0.02

Psychosis, NPI-Q-10, difference in mean change in score:

- **DCM** vs. control -0.9  p <0.01
- **VIPS** vs. control -0.6  p 0.04

The analysis was adjusted for age, gender, severity of dementia, general physical health, number of patients per ward, ward type and number of patients per staff on a day shift.
Results - Secondary outcomes

Significantly less deterioration of quality of life for DCM compared to control
mean change in QUALID score: -3.0  p 0.02

Significantly reduced depression
For VIPS compared to control
mean change in CSDD score: -2.6  p 0.02
Conclusions

We did not find a significant effect in the primary outcome, agitation measured by BARS, but we found encouraging significant effect in secondary outcomes:

- Neuropsychiatric symptoms in general for both methods
- Agitation for both methods
- Psychotic symptoms both methods
- Depression for the VIPS Practice Model
- Quality of life For Dementia Care Mapping
Implementation and effects of person-centred care should be researched further

Thank you