

Care practices of older people with dementia in the surgical ward: A questionnaire survey

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Abstract

Objectives: The objective of this study was to describe the care practices of nursing staff caring older people with dementia in a surgical ward.

Methods: The data were collected from nursing staff (n = 191) working in surgical wards in one district area in Finland during October to November 2015. Data were collected using a structured questionnaire and analyzed statistically. The instrument consists of a total number of 141 items and four dimensions. The dimensions were as follows: background information (12 of items), specific characteristics of older people with dementia in a surgical ward (24 of items), specific characteristics of their care in a surgical ward (66 of items) and use of physical restraints and alternative models for use of restraints for people with dementia (39 of items).

Results: The questions which measure the nursing staff's own assessment of care practices when caring for people with dementia in surgical wards were selected: counseling people with dementia, reaction when a surgical patient with dementia displays challenging behavior and use of alternative approach instead of physical restraints. Most commonly the nursing staff pay attention to patient's state of alertness before counseling older people with dementia. Instead of using restraints, nursing staff gave painkillers for the patient and tried to draw patients' attention elsewhere. The nursing staff with longer work experience estimate that they can handle the patients' challenging behavior. They react by doing nothing more often than others. They pretend not to hear, see or notice anything.

Conclusion: The findings of this study can be applied in nursing practice and in future studies focusing on the care practices among older people with dementia in acute care environment. The results can be used while developing patient treatments process in surgical ward to meet future needs.

Keywords

Older people, dementia, surgical ward, nursing staff, counseling, challenging behavior, physical restraints

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Introduction

The term dementia is used to describe a syndrome involving progressive decline in memory, reasoning, communication skills and the ability to carry out daily activities.¹ It is estimated that there are almost 36 million people with dementia in the world. The number is increasing with almost 8 million new cases annually.² Dementia is one of the biggest challenges in healthcare worldwide. It impacts individuals, their families and friends, caregivers and society.^{3–5}

Also, the visits of outpatients with a memory disorder in specialized healthcare are rising every year.⁶ The current system, which is focused on acute care, is unprepared to offer coordinate care for older people in different care environments.⁷ According to the estimates, a quarter of hospital beds

are occupied by people with dementia over the age of 65 years.³ A hospital stay is likely to be longer for a person with dementia compared with others admitted for the same procedure.⁸ Patients older than 65 years undergo more than 55% of all surgical procedures performed.⁷ Hospitalized people with dementia have increased risk of suffering

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delirium, falls, dehydration, and untreated pain.⁹ Thus, the nursing staff caring people with dementia need specialized training in dealing with this patient group. The training needs include communication, managing agitation, nutrition and hygiene.¹⁰

Background

Admission to a hospital can worsen the effects of dementia because of disorientation and distress caused by separation from familiar people, environments and routine, as well as through the cognitive effects of physical illness leading to increased cognitive impairment.^{8,11,12} Insecurity, fear, anxiety, restlessness and aggressiveness are among the typical feelings of hospitalized people with dementia. The behaviors resulting from the feelings may trigger potential threats not only to the patients' own well-being but also to the fellow patients, the nursing staff and physicians at the ward.¹²

The nursing staff strive to provide good care, but this is not always successful. Caring for people with dementia in acute care settings is described as challenging.^{10,13,14} The reasons for nursing staff's missing interest in caring older people are lack of gerontology-related competencies and low general interest in caring for older people.^{12,15} The amount of staff training in dementia care has remarkable gaps compared with needed training level.^{15,16} The Alzheimer's Society³ reported that acute hospital staff should have the appropriate knowledge and skills to better meet the need of people with dementia. They found that nurses do not always recognize or understand dementia.^{17,18}

Needed time to perform tasks is often longer among the hospitalized people with dementia. They also tend to repeat several times what they say.¹⁹ Hospitalized older people with cognitive impairments appear to benefit from a family member or caregiver participation in the treatment.^{4,14} Sharing information with staff is considered as beneficial family participation. Information about typical behavior patterns may help healthcare professionals to individualize the care plans to include routines that are comparably consistent and help patients feel more calm and secure.^{10,20}

People with dementia may be challenged with a big number of changes that influence their abilities to communicate.²¹ The surgical wards' nursing staff have described that people with dementia had frequent issues in understanding the reasons being hospitalized. Interaction and counseling were described being difficult due to their limited communication ability and their ability to understand what was said to them.¹⁵ Understanding the specific and individual communication challenges when counseling older people with dementia requires high competency level in assessing the respective needs and challenges.²¹

When the nurses need to make ethical decisions in working circumstances involving high stress such as in the acute care environment, caring patients with challenging behavior does

indicate to be affecting the nurses' practices.^{13,15} Staff concerns included managing challenging behavior, communication and not having enough time to spend on one-to-one care.^{3,15} Some nurses in acute care have expressed being afraid of people with dementia. The nurses have also reported using negative responses such as using force, abuse and neglect to manage the behavior of older people with dementia.¹³

Older people with dementia have the highest risk of being restrained when hospitalized.²² The main reported reason for using restraints is the improvement of patient safety. Physical restraints were mostly used to prevent patients from negatively impacting the treatment result by moving too soon or touching operated areas. Chemical restraints were used to keep the patients calm.^{15,22} The restraints are used to facilitate coping with the extensive workload dealing with patients' behavior or being not aware of the alternatives to restraints.^{15,19} Three factors were reported being obviously related to the use of restraints: elderly and healthcare organizations' different characteristics, nurses' attitudes and legislation.^{23,24}

Previous studies^{15,25} indicated that acute care wards have no official models for using physical and chemical restraints. In acute somatic care and care of older people in Finland, legislation for the use of physical restraints are missing. The use of restraints was depending on the decisions of individual nurses or physicians. In acute care, nurses employed alternative interventions for patient safety, like more frequent checks on the patients, use of sitters and distraction and disguising equipment.^{19,22} Other study¹⁰ found a number of alternatives for physical restraints for older patients in the hospitals. These include supporting their mobility, listening to their wishes and spending time with them.

The study

Aims

The aim of this study was to describe the care practices of nursing staff caring for older people with dementia in a surgical ward. The individual research tasks were as follows:

1. What are the nursing staff's professional approaches when counseling older people with dementia?
2. How do nursing staff most commonly react when older people with dementia show challenging behavior?
3. How do nursing staff use alternative approaches instead of physical restraints?
4. How are background variables linked to nurses' care practices when taking care of older people with dementia?

Design

A quantitative survey study design was used.

Participants

The data were collected by questionnaire in one district area in Finland, which include six ($n=6$) hospitals: one University hospital and five Central hospitals. The total population sample was used as the sampling method,²⁶ and the population were all nurses ($N=498$) working in surgical wards.

Data collection and instrument

The data were collected during October to November 2015. The target population consisted of practical nurses and registered nurses who worked in surgical wards. The survey was sent to the work email of the nursing staff ($N=498$). The response time was 2 weeks, and a reminder message was sent two times for the nursing staff during this time. Because of a low response rate (31%), the survey was sent one more time for the nursing staff who had not responded to survey. The response time given was 10 days. In the end, the total response rate was 38% ($n=191$).

The instrument was designed using Webropol online survey and analysis software, and all the data gathered were in electronic form. An Internet survey was selected because it is economical and it can reach a broad audience.²⁶

The instrument developed for this study is based on early studies^{15,25} and on the structured questionnaire.²⁷ A panel of experts ($n=12$) assessed the content and construct validity of the instrument. The panel of experts consisted of nursing science researchers interested in elderly care ($n=2$), a social and healthcare teacher ($n=1$), doctoral students interested in elderly care ($n=3$), a head nurse ($n=1$), assistant head nurses ($n=3$) and registered nurses ($n=2$). Based on the results, the questionnaire was modified by combining two questions into one and revising the language. After modification, the instrument was pre-tested in one surgical ward by nursing staff ($n=24$). After pre-testing, the questions containing "What, else?" were changed to a not enforced question.

The final instrument consists of a total number of 141 items and four dimensions. The dimensions are as follows: background information (12 of items), specific characteristics of older people with dementia in a surgical ward (24 of items), specific characteristics of their care in a surgical ward (66 of items) and use of physical restraints and alternative models for use of restraints for people with dementia (39 of items). The response alternatives followed a five-point Likert scale: 1 = very often, 2 = often, 3 = sometimes, 4 = seldom and 5 = never. The questionnaire included also two open-ended questions, and the analyses or results of those questions are not included in this article.

For this study, questions which measure the nursing staff's own assessment of care practices when caring for people with dementia in surgical wards were selected. Two question sets were chosen from specific characteristics of the care of people with dementia in a surgical ward. The first one was counseling people with dementia (13 items) which

formed a five-factor model: professional approach, proactive approach, focused approach, neutral approach and frustrated approach. The second was reaction when a surgical patient with dementia displays challenging behavior (12 items) which formed a four-factor model: react with care, react by ignoring, react with power and react casually.

One question set was chosen from use of physical restraints and alternative models: use of alternative approach instead of physical restraints (12 items) which formed a three-factor model: use of professional, use of medication and use of problem solving.

Data analysis

The data were processed and analyzed statistically using IBM SPSS Statistics for Windows 22. Distribution of variables was analyzed using frequency and percentage distributions and descriptive statistics.

The background variables and each statement were cross-tabulated and tested for statistical significance using the chi-squared test. Two continuous variables' (work experience in healthcare and work experience in a surgical ward) relationships with statements were analyzed using Pearson's and Spearman's correlation. In this study, the statistically significant limit value was $p < 0.05$, and statistically highly significant value was $p < 0.001$.^{26,28}

Exploratory factor analysis (EFA) was performed to investigate underlying factor structure. Factor analysis was used to summarize the variables by examining correlations between the variables and to create an entirely new set of variables to replace the original variables. Factors were derived using principal components, which summarize the original information into factors for prediction. Only factors with eigenvalues greater than 1 were included. Factors were rotated using the Varimax rotation method. After the factors were formed, they were named according to variables with higher factors loading. After the EFA sum of variables were analyzed, three questions items include the following variables: counseling people with dementia (13 items), reaction when a surgical patient with dementia displays challenging behavior (12 items) and use of an alternative approach instead of physical restraints (12 items).

Validity, reliability and rigor

The reliability of the study is presented through a few main points. First, the instrument used in the study is based on an indicator used in earlier studies.^{15,24,25} A panel of experts assessed the content and construct validity of the instrument, and the instrument was pre-tested which adds to the instrument reliability.²⁶ There was no missing values in the answers which increases the validity of the instrument.

Second, factors were extracted through principal component analyses. Factors whose eigenvalues were greater than 1.0 were extracted.²⁶ In addition, the number of factors

extracted was also indicated by the point before the curve in the screen plot as it flattens out. Items were dropped out if the factor loading of an item was less than 0.3. The loadings were above 0.478. Varimax rotation was used to aid interpretation. A total of 13 factors were extracted.

Third, the internal consistency of the sum variables formed on the basis of factor analysis was measured by Cronbach's alpha ($\alpha=0.63-0.77$), which can be considered good.²⁸

Ethical considerations

Permission to conduct the study was obtained from six ($n=6$) hospitals according to their procedures. Ethical permission was obtained from the Ethical Committee of the Hospital District. Participation in the study was voluntary, and the nurses responded to the questionnaire anonymously. No one could be identified based on the results.

Results

Background data

The majority of respondents were women (96%). The age of the respondents was divided fairly evenly, the majority of respondents were aged 34–43 years (31%), mean 43 years. Most of them (85%) were educated as a registered nurse. They had an average of 16 (range 1–42) years of working experience in nursing care and the average of working experience at a surgical ward was 12 (range 1–36) years. The majority were permanently employed (77.5%), and most of them (57%) evaluated their own skill in taking care of people with dementia as good. Only 4% of nursing staff had participated in further education which related to the care of people with dementia. The nursing staff background data are presented in Table 1.

Counseling people with dementia in the surgical ward

Counseling people with dementia in the surgical ward applied a five-factor model: professional approach, proactive approach, focused approach, neutral approach and frustrated approach. These five factors explained 62% of the total variance in counseling people with dementia in the surgical ward. The communalities of the 13 variables were between 0.56 and 0.81. Cronbach's internal reliability alpha was acceptable for respective scales: 0.70.

The nursing staff who use *professional approach* when counseling people with dementia pay attention to the clarity of their verbal communication. They also provide patient with written and verbal counseling. The nursing staff provide an opportunity for relatives to participate in the counseling. They record the counseling in the patient record. The nursing staff who use *proactive approach* when counseling people with dementia reported that before counseling they familiarize

Table 1. Nursing staff's background information ($n=191$).

	n	%
Age (years)		
23–33	44	23
34–43	58	31
44–53	50	26
54–63	39	20
Education		
Registered nurse	163	85
Practical nurse	24	13
Other	4	2
Work experience in healthcare (years)		
1–5	40	21
6–10	31	16
11–15	40	21
16–20	20	11
>20	60	31
Work experience in the surgical ward (years)		
1–5	62	33
6–10	45	24
11–15	31	16
16–20	14	7
>20	39	20
Hospital type		
University hospital	95	50
Central hospital	96	50
Type of employment		
Permanent employment	148	77.5
Fixed term	42	22
Other	1	0.5
My skills in taking care of people with dementia		
Very good	9	5
Good	110	57
Satisfactory	72	38
Poor	0	0
Very poor	0	0
Participated in training related to the care of people with dementia in the past year		
Yes	8	4
No	183	96

themselves with the patient's background information and also pay attention to the patient's state of alertness. Nursing staff also use demonstration when counseling. The nursing staff who use *focused approach* reserve time for themselves to provide counseling. The nursing staff pay attention to arranging a peaceful location for the counseling and reserve a separate place for that. The nursing staff with *neutral approach* reported that a person's dementia does not influence counseling. The nursing staff with *frustrated approach* found counseling of people with dementia frustrating because the patient does not remember.

The most commonly used approach between nursing staff was verbal counseling (49%), and over half (51%) of the nurses often pay attention to the clarity of their verbal communication with the patient. Over half (56%) of the nursing

Table 2. Counseling people with dementia in the surgical ward.

Factors (items)	Very often (%) (n)	Often (%) (n)	Sometimes (%) (n)	Seldom (%) (n)	Never (%) (n)	Communality	Load
F1: professional approach							
When providing counseling, I pay attention to the clarity of my verbal communication	41 (79)	51 (97)	6 (12)	2 (3)	0	0.59	0.60
I provide the patient with written counseling	30 (57)	32 (61)	19 (36)	17 (32)	3 (5)	0.71	0.76
I provide the patient with verbal counseling	49 (94)	47 (89)	4 (7)	0	1 (1)	0.66	0.69
I provide an opportunity for patient's relatives to participate/attend the counseling	28 (54)	47 (89)	21 (41)	4 (7)	0	0.55	0.60
I record the counseling in the patient record	48 (91)	42 (81)	7 (14)	2 (3)	1 (2)	0.45	0.52
F2: proactive approach							
Before counseling, I familiarize myself with patient's background information	31 (59)	56 (107)	13 (25)	0	0	0.58	0.60
I make use of demonstration (counseling by showing example)	17 (33)	39 (74)	30 (58)	13 (24)	1 (2)	0.56	0.66
Before counseling, I pay attention to patient's state of alertness	28 (47)	56 (107)	17 (33)	2 (4)	0	0.62	0.74
F3: focused approach							
I reserve time for myself to provide the counseling	12 (23)	46 (87)	30 (58)	12 (22)	1 (1)	0.56	0.48
During counseling, I pay attention for the peacefulness of the location	10 (19)	54 (104)	27 (51)	8 (16)	1 (1)	0.68	0.72
During counseling, I reserve a separate space	2 (3)	6 (11)	28 (54)	43 (82)	21 (41)	0.76	0.86
F4: neutral approach							
Patient's dementia does not influence counseling	5 (9)	7 (14)	15 (28)	51 (97)	23 (43)	0.61	0.75
F5: frustrated approach							
I find counseling of patients with dementia frustrating because she/he does not remember	5 (9)	24 (45)	48 (91)	19 (37)	5 (9)	0.81	0.90

staff reported that before counseling, they often familiarize themselves with the patient's background information and pay attention to the patient's state of alertness. They also often pay attention to the peacefulness of the location (54%) during counseling. Almost half of the nurses (47%) often provide an opportunity for the patient's relatives to participate in the counseling (Table 2).

Reacting to patients displaying challenging behavior

Reacting to patients displaying challenging behavior applied a four-factor model: react with care, react by ignoring, react with power and react casually. These four factors explained 52% of the total variance in reacting to patients displaying challenging behavior. The communalities of the 11 variables were between 0.37 and 0.73. Cronbach's internal reliability alpha was poor for respective scales: 0.63.

When people with dementia display challenging behavior, the nursing staff who *react with care* ask the patient what was wrong. They check the patient's record for the patient's background information and possible instructions. The nursing staff organize activities for the patient, for example, switching on the TV in the patient room, and they are present for the patient: they touch, speak and listen. The nursing staff who *react by ignoring* in situation of challenging behavior leave the situation and do nothing. They pretend not to hear,

see or notice anything. The nursing staff who *react with power* take the patient to the patient's room when encountering challenging behavior. They use physical force to calm down the situation and give orders to the patient. The nursing staff who *react casually* deal with situations with humor, and they tolerate the patient's behavior because the patients have the right to become angry.

When people with dementia displayed challenging behavior, the most commonly used (61%) reaction was asking what was wrong with the patient. Almost half (48%) of the nurses reported that they often take the patient to the patient's room, and more than half of them (53%) try to be present for patients: to touch, speak and listen. More than half (52%) of the nurses often check the patient's record for the patient's background information and possible instructions. Half of the nursing staff (50%) reported often organizing activities for the patient, for example, switching on the TV in the patient room (Table 3).

Use of alternative approach instead of physical restraints

Use of alternative approach instead of physical restraints applied a three-factor model: use of professional knowledge, use of medication and use of problem solving. These three factors explained 57% of the total variance in the use of an alternative approach instead of physical restraints. Cronbach's internal reliability alpha was acceptable for

Table 3. Reaction when a patient with dementia displays challenging behavior.

Factors (items)	Very often (%) (n)	Often (%) (n)	Sometimes (%) (n)	Seldom (%) (n)	Never (%) (n)	Communality	Load
F1: react with care							
I ask her/him what is wrong	61 (117)	37 (71)	1 (2)	0	1 (1)	0.45	0.63
I check the patient record for patient's background and possible instructions	35 (67)	52 (100)	12 (23)	1 (1)	0	0.53	0.69
I organize activities for the patient, for example, switching on the TV in the patient room	16 (31)	50 (96)	32 (61)	2(3)	0	0.49	0.67
I'm present for the patient; touch, speak and listen	17 (33)	53 (101)	28 (53)	2 (4)	0	0.56	0.57
F2: react by ignoring							
I do nothing	0	0	5 (9)	35 (67)	60 (115)	0.55	0.68
I pretend not to hear, see or notice anything	1 (1)	1 (2)	13 (25)	37 (70)	49 (93)	0.73	0.84
F3: react with power							
I take her/him to her/his own room	25 (48)	48 (92)	20 (38)	6 (11)	1 (2)	0.48	0.56
I use physical force to calm down the situation	1(2)	2 (3)	10 (20)	54 (104)	32 (62)	0.46	0.61
I give orders to the patient	2 (3)	6 (11)	40 (76)	46 (87)	7 (14)	0.55	0.71
F4: react casually							
I deal with humor	1 (2)	14 (26)	48 (92)	26 (49)	12 (22)	0.37	0.50
I tolerate the behavior because the patient has the right to become angry	10 (19)	38 (73)	38 (73)	11 (21)	3 (5)	0.49	0.69

respective scales: 0.77. The communalities of the nine variables were between 0.41 and 0.76.

The nursing staff who *use professional knowledge* try to make the physical care environment safer and be present for the patient; to touch, speak and listen to them. They can handle the patient's challenging behavior, and they negotiate with colleagues and the patient's family about the correct approach. The nursing staff who *use medication* give sedative medication and painkillers for the patient instead of using physical restraints. The nursing staff who *use problem solving* try to draw the patient's attention elsewhere, and they try to organize expert consultation for the patients.

In situations of challenging behavior, the nursing staff can often (59%) handle the situation. They give painkillers for the patients (59%) and try to draw patient's attention elsewhere (57%). The nursing staff often negotiate with colleagues (52%) about the correct approach. More than half of the nurses (54%) reported that they often try to make the physical care environment safer (Table 4).

Background variables linked to nurses' care practices

The study examined the correlation of background variables to nursing staff counseling approaches, reactions to patients displaying challenging behavior and use of alternative approaches. A statistically significant correlation between the nursing staff's background variables and counseling was found with hospital type, education, work experience in the surgical ward and type of employment. When counseling people with dementia, the nursing staff who work in the University hospital ($p < 0.001$, $X^2 = 21.8$) familiarized themselves with the patient's background information before

counseling. Registered nurses ($p = 0.003$, $X^2 = 41.9$) and nurses with longer work experience in the surgical ward ($p = 0.025$, $r = 0.155$) use written counseling more often than others. The nursing staff with permanent employment ($p = 0.002$, $X^2 = 24.3$) and nurses with longer working experience in the surgical ward ($p = 0.011$, $r = 0.185$) record the counseling in the patient record. Also, the nurses with longer working experience in the surgical ward reserve a separate space ($p = 0.023$, $r = 0.164$) during counseling.

A statistically significant correlation between background variables and the nursing staff's reactions to patient's displaying challenging behavior was found with the nursing staff's work experience in the surgical ward, long work experience in healthcare and education. In challenge situations, nursing staff with long work experience in the surgical ward ($p = 0.006$, $r = 0.197$) and a long work experience in healthcare ($p = 0.002$, $r = 0.226$) react by doing nothing more often than other nurses. The nurses who have long work experience in healthcare pretend not to hear, see or notice anything ($p = 0.047$, $r = 0.144$), but they ($p = 0.037$, $r = 0.226$) check the patient record for the patient's background and possible instructions in situation of challenging behavior. According to statistics, the practical nurses deal with challenging behavior more often with humor than registered nurses ($p = 0.002$, $X^2 = 43.4$).

A statistically significant correlation between background variables and the use of alternative approaches was found with the nursing staff's work experience in the surgical ward, long work experience in healthcare and hospital type. In situations where patients display challenging behavior, the nursing staff with long work experience in the surgical ward ($p = 0.018$, $r = 0.171$) and nurses with long experience in healthcare ($p = 0.041$, $r = 0.148$) negotiate with colleagues

Table 4. Use of alternative approaches instead of physical restraints.

Factors (items)	Very often (%) (n)	Often (%) (n)	Sometimes (%) (n)	Seldom (%) (n)	Never (%) (n)	Communality	Load
F1: use of professional knowledge							
I try to make the physical care environment more safe	31 (59)	54 (104)	14 (27)	1 (1)	0	0.67	0.81
I'm present for the patient; touch, speak and listen	30 (58)	52 (100)	17 (32)	1 (1)	0	0.56	0.70
I can handle the patient's challenging behavior	22 (42)	59 (112)	18 (34)	1 (2)	1 (1)	0.41	0.63
I negotiate with my colleagues about the correct approach	41 (78)	52 (99)	7 (14)	0	0	0.52	0.69
I negotiate with the patient's family about the correct approach	17 (33)	48 (92)	30 (57)	5 (9)	0	0.44	0.62
F2: use of medication							
I give sedative medication for the patient	6 (11)	31 (60)	55 (105)	6 (12)	2 (3)	0.76	0.88
I give painkillers for the patient	29 (56)	59 (113)	10 (19)	0	2 (3)	0.58	0.67
F3: use of problem solving							
I try to draw the patient's attention elsewhere	19 (36)	57 (108)	21 (41)	3 (6)	0	0.68	0.79
I try to organize expert consultation for the patient	10 (19)	19 (37)	40 (77)	28 (53)	3 (5)	0.64	0.78

about the correct approach instead using of restraints. The nursing staff with long healthcare work experience also negotiate with the patient's family about the correct approach ($p=0.022$, $r=0.165$). The statistics indicate that the nursing staff with long experience in healthcare ($p=0.045$, $r=0.145$) can handle challenging behavior better than others, and they are present for the patient: they touch, speak and listen ($p=0.050$, $r=0.167$) instead using of restraints. Also, the nursing staff who work in the University hospital ($p=0.001$, $X^2=29.6$) and have long work experience in healthcare ($p=0.001$, $r=0.234$) try to organize expert consultation for the patient instead using of restraints.

Additionally, the study examined the correlation of background variables to the nurses' own assessment of their level of skills in taking care of people with dementia. A statistically significant correlation in the nurses' skills was found between having participated in further education and type of employment. The nursing staff who had participated in further education ($p=0.002$, $X^2=20.5$) assess their own skill in taking care of people with dementia as good; also, the nurses with fixed term employment status ($p<0.001$, $X^2=23.0$) assess their own skill in taking care of people with dementia as good.

Discussion

According to the study results, there is a five-factor model regarding counseling people with dementia in the surgical ward: professional approach, proactive approach, focused approach, neutral approach and frustrated approach. The nursing staff working in the surgical ward prepare before counseling people with dementia: based on background variables, the nursing staff who are working in the University hospital more often familiarize themselves with patients' background

information and pay attention to patients' state of alertness. The most commonly used approach between nursing staff was verbal counseling. A previous study²⁹ found that surgical nurses have good knowledge of the contents of patient counseling. Nurses' skills were mainly good, and the attitude toward counseling was positive. The need for improvement pertained to the facilities, room and time reserved for patient counseling. It becomes more difficult for a person with dementia to understand what is being said to them or to respond so that others can understand them; therefore, the language used, tone and volume of words spoken and also non-verbal communication become increasingly important.²¹

Reacting to patients' displaying challenging behavior applied a four-factor model: react with care, react by ignoring, react with power and react casually. The result indicates that the most commonly used reaction was to ask what was wrong with the patient and taking the patient to the patient's room. Nursing staff who have longer work experience in healthcare more often check the patient record for the patient's background information and possible instructions for challenging situations. Even so, the data show that nurses with longer experience react by doing nothing and they pretend not to hear, see or notice anything in this kind of situation. In earlier studies,²⁵ the nursing staff working in the surgical ward tried intuitively to find ways to take care of people with dementia. In addition, challenging tasks, such as bathing patients, were carried out by groups of nurses. The ward had no official model for reducing mental or physical demands, so nursing staff creatively responded to situations, for instance, by singing and reminiscing in attempts to turn patients' attention away from care activities.

The use of alternative approaches instead of physical restraints applied a three-factor model: use of professional

knowledge, use of medication and use of problem solving. In situation where patients displayed challenging behavior, the nursing staff with longer healthcare work experience assess that they can handle the situation. According to the study results, the nursing staff negotiate with others in a situation of challenging behavior. The nursing staff with longer work experience in the surgical ward and/or long experience with healthcare negotiate with colleagues about the correct approach. The most common alternative approach was painkillers and nurses trying to draw the patient's attention elsewhere instead of physical restraints. There are studies which indicate that restraints can be replaced by one-on-one care,¹¹ which means that one nurse is able to take care of the person. In acute care, the use of restraints had been gradually replaced by alternatives.¹⁵ Even so, the use of physical restraints in the care of older people is a common practice in acute care.^{11,13} It is evident that physical restraints in most cases are used as safety measures, and the main reason is the prevention of falls. Other reasons are the prevention of patients' wandering and the control of patients' behaviors like aggression and restlessness.^{19,22}

According to the data, the nursing staff who had participated in further education assess their own skill of taking care of people with dementia as good. The importance of staff education and training is widely acknowledged and has been shown to improve staff behavior, attitudes and satisfaction and therefore patient outcomes.¹¹ Also, the organizational structure has a role in influencing the care of people with dementia in acute care setting.

The care practices among older people with dementia in the acute care environment require further and continuous education, evaluation and further improvement of policy and practices, as well as adequate regulation of standards and continuous quality improvement. Education program should be based on the research evidence and engage nursing staff on an ongoing basis. The care practices among older people with dementia should be based on evidence-based practices that can be applied by hospital wards.

Limitations

Despite the insight provided by this review, it has some limitations. First, the study was conducted in Finland, in one district area which includes six hospitals, which potentially limits the transferability of findings. Second, the data were conducted using a partially newly developed instrument, and it was pre-tested in only one surgical ward (n=24). Also, the study had a low response rate (38%) which weakens the generalizability of research results. To guarantee a sufficient sample, a reminder message was sent two times for the nursing staff during the data collection. The survey was also sent one more time for nursing staff who had not responded to the survey in time. On the other hand, a low response rate is not uncommon in web-based questionnaires in this area of research.²⁶ The reasons for the low response rate might be the respondents' busy schedule, survey timing during the autumn holiday and the participation of nursing staff in lot of surveys.

Conclusion

The quality of care of older people with dementia in the surgical ward is not consistent. The nursing staff working in the surgical ward are caring for people with dementia using their personal preferences. There are many different kinds of care practices among the nursing staff. The nursing staff counsel older people with dementia using different approaches: professional approach, proactive approach, focused approach, neutral approach and frustrated approach. They also react to the challenging behavior displayed by patients with four different approaches: caring, ignoring, use of power and casual approaches. As an alternative approach to the use of physical restraints, the nursing staff use professional skills, use medication and problem solving. The reason for using different kinds of care practices is the lack of nurses' further education and training. Also, there is a need for practical guidelines for acute care when taking care of older people with dementia.

Author contribution

All authors have agreed on the final version and meet at least one of the following criteria (recommended by the ICMJE (<http://www.icmje.org/recommendations/>)): (1) substantial contributions to conception and design, acquisition of data or analysis and interpretation of data and (2) drafting the article or revising it critically for important intellectual content.

Declaration of conflicting interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship and/or publication of this article.

Ethical approval

Ethical approval for this study was obtained from Ethical Committee of the Hospital District (approval number EETTMK: 60/2011).

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Informed consent

Written informed consent was obtained from legally authorized representatives before the study following hospital's standard procedures.

References

1. Current Care Guidelines Memory disorders. The Finnish Psychogeriatric Association and the Finnish Association of general practice, <http://www.kaypahoito.fi/web/kh/etusivu/naytaartikkeli/tunnus/hoi50044> (2010, accessed 1 January 2016).
2. World Health Organization. Dementia, http://apps.who.int/iris/bitstream/10665/75263/1/9789241564458_eng.pdf (2012, accessed 7 November 2015).
3. Alzheimer's Society. Counting the cost: caring for people with dementia on hospital wards. Report, Alzheimer's Society, London, 2009.

4. Madsen R and Birkelund R. "The path through the unknown": the experience of being a relative of dementia-suffering spouse or parent. *J Clin Nurs* 2013; 22: 3024–3031.
5. Ministry of social affairs and health. National memory programme 2012–2020. Creating a "Memory friendly" Finland. Report, Ministry of Social Affairs and Health, Helsinki, February 2013.
6. National Institute for Health and Welfare, <https://www.thl.fi/fi/tilastot/tilastot-aiheittain/ikaantyneiden-sosiaalipalvelut/muistisaira-at-asiakkaat-sosiaali-ja-terveyspalveluissa> (2011, accessed 7 November 2015).
7. Doerflinger DMC. Older adult surgical patients: presentation and challenges. *AORN J* 2009; 90: 223–240.
8. Department of Health. *Living well with dementia*. London: A National Dementia Strategy, 2009.
9. Cohen-Mansfield J, Thein K, Marx MS, et al. What are the barriers to performing nonpharmacological interventions for behavioral symptoms in the nursing home? *J Am Med Dir Assoc* 2012; 13: 400–405.
10. Weitzel T, Robinson S, Barnes MR, et al. The special needs of the hospitalized patient with dementia. *Medsurg Nurs* 2011; 20: 13–19.
11. Moyle W, Olorenshaw R, Wallis M, et al. Best practice for the management of older people with dementia in the acute care settings: a review of the literature. *Int J Older People Nurs* 2008; 3: 121–130.
12. Moyle W, Borbasi S, Wallis M, et al. Acute care management of older people with dementia: a qualitative perspective. *J Clin Nurs* 2010; 20: 420–428.
13. Cowdell F. The care of older people with dementia in acute hospitals. *Int J Older People Nurs* 2010; 5: 83–92.
14. Nufer TW and Spichiger E. How family carers of people with dementia experienced their stay on an acute care facility and their own collaboration with professionals: a qualitative study. *Pflege* 2010; 24: 229–237 (in German).
15. Hynninen N, Saarnio R and Isola A. The care of older people with dementia in surgical wards from the point of view of the nursing staff and physicians. *J Clin Nurs* 2015; 24: 192–201.
16. Leung D and Todd J. Dementia care in the acute district general hospital. *Clin Med* 2010; 10: 220–222.
17. Deschodt M, Dierckx de Casterle B and Milisen K. Gerontological care in nursing education programmes. *J Adv Nurs* 2009; 66: 139–148.
18. Digby R and Bloomer MJ. People with dementia and the hospital environment: the view of patients and family care. *Int J Older People Nurs* 2014; 9: 34–43.
19. De Bellis A, Mosel K, Curren D, et al. Education on physical restraint reduction in dementia care: a review of the literature. *Dementia* 2013; 12: 93–110.
20. Bradway C and Hirschman K. Working with families of hospitalizes older adults with dementia. *Am J Nurs* 2008; 108: 52–60.
21. De Vries K. Communicating with older people with dementia. *Nurs Older People* 2011; 25: 30–38.
22. Ludwick R, O'Toole R and Meehan A. Restraints or alternatives: safety work in care of older persons. *Int J Older People Nurs* 2010; 7: 11–19.
23. McCabe D, Alvarez DC, McNulty R, et al. Perceptions of physical restraints use in the elderly among registered nurses and nurses assistants in a single acute care hospital. *Geriatr Nurs* 2011; 32: 39–45.
24. Saarnio R, Isola A and Laukkala H. The use of physical restraint in institutional care of older people in Finland: nurses' individual, communal and alternative modes of action. *J Clin Nurs* 2009; 18: 132–140.
25. Hynninen N, Saarnio R and Isola A. Treatment of older people with dementia in surgical wards from the viewpoints of the patients and close relatives. *J Clin Nurs* 2015; 24: 3691–3699.
26. Polit DF and Beck CT. *Nursing research. Generating and assessing evidence for nursing practice*. 9th ed. Philadelphia, PA: Lippincott Williams & Wilkins, 2009.
27. Saarnio R and Isola A. Nursing staff perceptions of the use of physical restraint in institutional care of older people in Finland. *J Clin Nurs* 2010; 19: 3197–3207.
28. Burns N and Grove SK. *The practice of nursing research: appraisal, synthesis, and generation of evidence*. 6th ed. St. Louis, MO: Saunders Elsevier, 2009.
29. Lipponen K, Kyngäs H and Kääriäinen M. Surgical nurses readiness for patient counselling. *J Orthop Nurs* 2006; 10: 221–227.

Summary statement—care practices of older people with dementia in the surgical ward: nursing views

Why is this research or review needed?

- There has been little research on the impact of the increasing number of older people with dementia in surgical wards and the preparedness of the nursing staff caring for them.
- It is estimated that 25% of hospital beds are occupied by people with dementia over the age of 65 years.
- A stay in hospitals is likely to be longer for a person with dementia than for others admitted for the same procedure.

What are the key findings?

- The quality of care of older people with dementia in surgical wards is not consistent. The nursing staff working in surgical wards are caring for people with dementia using their personal preferences.
- There are many different kinds of care practices among the nursing staff. The reason for using different kinds of care practices is the lack of nurses' further education and training.

How should the findings be used to influence policy/practice/research/education?

- The findings of this study can be used in nursing practice and in future studies focusing on the care practices among older people with dementia in the acute care environment.
- The study results can be used while developing treatment processes for people with dementia in surgical wards to meet future needs.