

A Study on Aggressive Behavior Among Nursing Home Residents with Cognitive Impairment

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Purpose. With a sample of cognitively impaired nursing home residents and nursing staff, the following were examined 1) the proportion and nature of aggressive behavior, 2) the frequency and types of aggressive behavior, 3) the difference between the residents who demonstrate aggressive behavior and those who do not demonstrate aggressive behavior (age, mental status, functional status, and pain, length of nursing home stay), and 4) nursing staff responses to aggressive behavior by residents.

Methods. A cross-sectional descriptive study design was used. Data were collected from cognitively impaired nursing home residents (N=205) and nursing staff (N=60) at two nursing homes using Ryden Aggression Scale I and II, Mini-Mental State Exam, Modified Barthel Index, Verbal Descriptor Scale, and aggressive behavior management questionnaire. Data were analyzed using descriptive statistics including t-test.

Results. About 62.9% residents were found to be aggressive and 38.5% were both physically and verbally aggressive. Pushing, making threatening gestures, hitting, slapping, cursing/obscene/vulgar languages, making verbal threats were occurred frequently. Aggressive residents were significantly older, had more cognitive impairment, had more pain, and stayed longer in the nursing home when compared with non-aggressive residents. Considerable proportion of nursing staff responded to aggressive behaviors inadequately.

Conclusion. Aggressive behavior among cognitively impaired nursing home residents is prevalent thus needs to be prevented and reduced. Along with environmental modification, educational programs for nursing staff and family caregivers need to be developed and implemented so that they can have extensive knowledge and skills to manage aggressive behaviors.

Key Words: Aggression, Aged, Dementia, Nursing homes

INTRODUCTION

Aggressive behavior in cognitively impaired nursing home residents is a frequent and complex problem for both residents and nursing staff. The prevalence of aggressive behavior in nursing home residents has been reported as 74–96% (Oh, 1998; Ryden, Bossenmaier, &

McLachlan, 1991; Soured, McCusker, Cole, & Abrahamowicz, 2001). Aggression in nursing home residents found to be associated with cognitive and functional impairments. Loss of memory, diminished judgement, and decreased inhibition and impulse control affect the individual's ability to use thought processes to mediate between feeling and behavior (Ryden, 1992; Ryden & Feldt, 1992). Aggressive behavior frequently

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This work was supported by BumSuk Academic Research Fund of 2002.

Received September 11, 2004 ; Accepted October 18, 2004

occurs with various precipitating events. It may be a response to touch or invasion of personal space, as it often occurs during assistance with activities of daily living (Hoeffler, Rader, McKenzie, Lavelle, & Stewart, 1997). It has been hypothesized that aggression arises as an attempt to defend the self from perceived threat, to guard against pain and physical discomfort, to maintain control, or to respond to stressful environmental stimuli (Bridges-Parlet, Knopman, & Thompson, 1994).

Aggressive behavior often occurs towards caregivers because they are most likely in direct contact with the residents. Caregivers will continue to be the target of aggression as they are primary providers of direct care. However, caregivers often have minimal training on management of aggressive behaviors (Gates, Fitzwater, & Deets, 2003). Consequently, caregivers in nursing homes experience frequent aggressive behavior, harassment, threats, and assaults (Fitzwater & Gates, 2002). Aggressive behavior can seriously affect caregivers in nursing home as they experience various emotional reactions such as anger, frustration, and fear (Oh, 2000). Caregivers inability to cope with the emotional and physical stress from aggressive behavior can result in burnout, turnover, job dissatisfaction, and reciprocal aggression against the residents.

Despite the severity of the problem, research examining aggressive behavior among Korean elders is scant. Few studies explored how caregivers respond to aggressive behaviors in nursing home setting. Thus, with a Korean nursing home resident sample, the followings were 1) the proportion and nature of aggressive behavior, 2) the frequency and types of aggressive behavior 3) the difference between the residents who demonstrate aggressive behavior and those who do not demonstrate aggressive behavior (age, mental status, functional status, pain, and length of nursing home stay), and 4) nursing staff responses to aggressive behavior by resident's.

REVIEW OF LITERATURE

Concept of aggressive behavior

Aggressive behavior frequently occurs among nursing home residents, particularly those with cognitive impairment. Despite numerous research studies conducted in the past, there is no consensus regarding accepted definition of aggressive behavior. Ryden (1988) defined aggressive behavior as "a hostile action directed toward other persons or objects or toward oneself." She consid-

ered behavior as aggressive if it is against the expressed will and/or despite the resistance of the other person. She includes three categories of aggressive behavior in her definition; physically aggressive behavior (PAB), verbally aggressive behavior (VAB), and sexually aggressive behavior (SAB). Of the three aggressive behaviors identified by Ryden(1988), physical aggressive behavior and verbal aggressive behavior are most distinct and commonly cited types of behaviors in other studies (Cohen-Mensfield & Werner, 1998). Another definition by Patel and Hope (1993) adds more understanding of aggressive behavior. They defined, "aggressive behavior is an overt act, involving the delivery of noxious stimuli to (but not necessarily aimed at) another object, organism or self, which is clearly not accidental". (p. 458).

Aggressive behavior is often included as one of cluster of behavioral problems. Many researchers measure aggressive behavior under the concept of assaultive behavior (Gates, Fitzwater, & Deets, 2003), aggression (Talerico, Evans, & Strumpf, 2002), disruptive behavior (Beck et al., 1998), disturbing behavior (Kolanowski, 1995) aggressiveness (Soreff & Siddle, 2004), agitated behavior (Souriel, McCusker, Cole, & Abrahamowicz, 2001; Schreiner, Yamamoto, & Shitonani, 2000). These discrepancies result in various and differing operational definitions and diverse methods of measuring aggressive behaviors. Although definition and use of the term 'aggressive behavior' need more clarification, definitions addressed above provide us some pictures of aggressive behavior among cognitively impaired nursing home residents.

Prevalence, type, and factors contributing to aggressive behavior

Prevalence of aggressive behavior among cognitively impaired elders reported in the literature vary widely. In nursing homes, as many as 44-86% of nursing home residents with cognitive impairment demonstrated aggressive behavior (Kolanowski & Garr, 1999; Oh, 1998; Ryden et al., 1991). In a long term care facility, 18% of the staff noted aggressive behavior as a daily occurrence (Astrome & Umea, 2000). Five percent of nursing home residents will be involved with aggressive behavior each week and 40% of nursing home residents aggression is recurrent (Cohen-Mensfield, Billing, Lipson, Rosenthal, & Pawlson, 1990). In another study, 74% of Korean nursing home residents demonstrated aggressive behavior with a total of 299 occurrences in 2 days (Oh, 1998).

Aggressive behavior is not only significant in nursing homes, but is also common in elders living in the community. In a study of 262 patients with Alzheimer's disease, 52% exhibit some aggressive behavior, 35% were reported to be verbally aggressive and 18% were assaultive to their caregivers (Eastly & Wilcock, 1997).

There are three types of aggressive behaviors identified in the literature (Marx, Cohen-Mensfield, & Warner, 1990; Oh, 1998; Ryden et al., 1991). These include physically aggressive behaviors such as hitting, kicking, pulling hair, and spitting; verbally aggressive behavior such as cursing, obscene, vulgar languages, making verbal threats; hostile language; sexually aggressive behaviors such as touching body part of another person, hugging, and kissing.

In nursing home, aggressive behavior were frequently occurred in day shift, in resident's room and the nursing staff were the primary target of the aggressive behavior (Ryden et al., 1991). Most episodes of aggressive behavior occurred as a response to touch or invasion of residents' personal space that are inherent in daily caregiving like bathing (Hoeffler, Rader, McKenzie, Lavelle, & Stewart, 1997; Oh, 1998; Ryden et al., 1991). Many factors were found to contribute to incidence of aggressive behavior. Age, mental status, depressive affect were strong predictors of aggressive behavior (Cohen-Mensfield & Werner, 1998; Talerico et al., 2002). Other factors associated with aggressive behaviors include longer stays in nursing home, impaired functional ability (Winger, Schirm, & Stewart, 1987), and pain (Feldt, Warne, & Ryden, 1998; Olson, 2000).

Consequence of aggressive behavior on caregiving

The results of two qualitative studies present the serious consequence of aggressive behavior on caregiving. In a study by Miller (1996), nursing staff reported that they were subjected to aggressive behavior and experienced a decline in physical and mental health as a consequence of caring for aggressive elders. Caregivers also reported a perceived decline in the amount and quality of nursing care, an increased potential for staff-to-patient abuse and neglect, desire to eventually leave the nursing home or the dementia care unit. In another study by Oh (2000), caregivers experienced stress, anger, frustration, anxiety, and fear from aggressive behavior and used inappropriate management skills such as ignoring the situation, being patient, leaving the situation, appeasing, scolding, using restraint/isolation to handle the aggressive behavior.

These results indicate the limited ability of nursing staff to manage the aggressive behavior.

METHODS

Design

A cross-sectional, descriptive study design was used.

Setting and Sample

Subjects were recruited from two proprietary nursing homes located in Choongchung providence. The residents were required to meet the following inclusion criteria: (a) 65 years or older (b) have cognitive impairment (MMSE score < 24) (c) stayed in nursing home 1 month or longer (d) able to respond verbally (e) agreed to participate. Nursing staff, nurses and nursing assistants, who met the following inclusion criteria were eligible for the study: (a) worked in nursing home at least 1 month (b) agreed to participate.

Procedure

A pilot study was conducted in one nursing home to test research procedure and instruments. Following the pilot study, two nursing homes were randomly selected from the total list of long term care facilities in Choongchung providence. A researcher contacted administrators to determine willingness of the facility to participate. Upon agreement a researcher met residents, administrator, and nursing staff in separate session to explain about the study. Subjects were informed that their participation was voluntary and were assured of anonymity. Consent was sought from families and guardians for cognitively impaired residents. For the nursing homes where families or guardians had already given written permission for participation in activities and psychosocial research projects, residents were eligible to participate in the study. Written consents were obtained from nurses and nursing assistants. Multiple staff orientation session were held so that nursing staff had explanation of the study and practice in the use of Ryden Aggression Scale I (RAS I) and II (RAS II). Nursing staff were given extra time to ask questions. Since nursing assistants have the most extensive and intimate contact with residents, they were charged with primary responsibility for documenting aggressive behavior under researchers' supervision.

Data were collected through two steps of the procedure. In the first step, one licensed nurse and two nurs-

ing assistants were asked to evaluate each residents on their aggressive behaviors using RAS I to identify the aggressive residents. Of 205 residents evaluated, 129 subjects were screened as aggressive at least once within the past 1 year. Of 129 aggressive residents 75 residents were identified as aggressive at least once a month.

In step two, using RAS II, close observation and recording of aggressive behaviors were conducted for 3 days on the 75 residents identified as aggressive at least once a month. Researcher and research assistants were on the unit for the data collection period to provide support, answer questions and monitor the staff's documentation of RAS II. Mental and functional status, pain were assessed by researcher and demographic data were obtained from medical records. Nurses and nursing assistants were invited and asked to complete aggressive behavior management questionnaire.

Instruments

The instruments originally developed in English were translated into Korean by the researcher, back translated into English by two nursing professors who completed graduate study in the US. Then the discrepancies were discussed with two bilingual nursing scholars and the revisions were made upon agreement.

Aggressive behavior

Aggressive behavior was measured using RAS I and RAS II (Ryden, 1988). The RAS I is a 26 item, 6 point likert scale that has 3 subscales: physically aggressive behavior (PAB), verbally aggressive behavior (VAB), and sexually aggressive behavior (SAB). It is designed as a retrospective measure, score ranges from 0 (none) to 5 (more than once/day) with higher score indicating higher frequency of aggressive behavior. Inter-rater reliability of RAS I was .89 in this study. RAS II include 26 items of aggressive behavior listed in a table form with space for recording the number of times each behavior is observed. Inter-rater reliability of RAS II was .88 (Ryden et al., 1991).

Cognitive status

Residnet's cognitive status was assessed using the Folstein Mini Mental State Exam (MMSE) (Folstein, Folstein & McHugh, 1975). The MMSE consists of 11 items, scores range from 0 to 30 with lower scores indicating more cognitive dysfunction. The internal consistency was .99 (Tombaugh & McIntyre, 1992).

Pain

Pain was assessed using the Verbal Descriptor Scale (VDS) (Herr & Mobily, 1993). The VDS has 7 pain severity descriptions including 'no pain (0)' to 'pain as bad as it could be (6)'. The VDS was chosen over other pain rating scales because it has been found to be better understood by elders with lower education levels (Herr & Mobily, 1993). Test-retest reliability of VDS was .89 in this study.

Functional status

Functional status was assessed using Modified Barthel Index (Fricke & Unworth, 1997). Barthel Index is widely used tool to assess physical function. It consists of 15 items and measures type of support that is needed in basic activities of daily living. Scores on Modified Barthel Index ranges from 0 to 100 with higher scores indicating better functional ability. Cronbach's alpha was .92 in this study.

Nursing staff response to aggressive behavior

Nursing staff response to aggressive behavior by residents was assessed using a questionnaire developed in this study. The questionnaire was designed based on the findings of a study by Oh (2000). The questionnaire consists of 8 descriptions of nursing staff responses to aggressive behavior. Nursing staff are asked to answer to each item with 'never (0)', 'seldom (1)', 'sometimes (3)', 'often (4)', or 'always(5)'. Cronbach's alpha of this instrument was .86 in this study.

Data analysis

Data were analyzed using SPSS/PC 12.0. Descriptive statistics were used to identify demographic characteristics of subjects, proportion, type and frequency of aggressive behavior. The t-test was used to compare aggressive residents with non-aggressive residents according to age, mental status, functional status, pain and length of stay.

Limitations of study

The research sample was a non-random convenience sample in the settings to which the researcher had access for data collection. Generalizability of the findings is limited. As inherent with retrospective measure, data obtained using RAS I may have been influenced by nursing staff subject's recall.

RESULTS

1. Characteristics of subjects

At the beginning, 225 resident subjects participated. Of 225 residents enrolled, those who were cognitively intact (n=5) and those with incomplete data (n=15) were excluded. A total of 205 residents were entered for final data analysis. The mean age of the residents was 76.48 years (SD=±8.58) ranged from 65 to 98 years. Sixty-five percent (n=133) were female; all were Korean. Forty-four percent (n=91) were widowed and about half (49.3%) had no education. Mean length of nursing home stay was 22

months (SD=±15.59). All were cognitively impaired with mean MMSE score of 11.72 (SD=±7.62). Most (81.5%, n=167) of them were dependent for physical functioning and 60% (n=123) reported having pain. Sixty nursing staff participated. The mean age of the nursing staff was 34.3 years (SD=±7.68). Mean length of nursing experience was 21.3 months (SD=±18.91). The characteristics of subjects are presented in Table 1.

2. Proportion and nature of aggressive behavior screened by RAS I

Of 205 residents evaluated with RAS I, 62.9% (n=129) subjects demonstrated some form of aggressive

Table 1. Characteristics of Subjects

Nursing home residents (N = 205)					
	n	%		n	%
Gender			MMSE		
Male	72	35.1	0-10	85	41.5
Female	133	64.9	11-20	85	41.5
			21-23	35	17.1
			Mean (SD) = 11.72 (7.62)		
Age			Marital status		
65-69	61	29.8	Married	74	36.1
70-79	66	32.2	Widowed	91	44.4
80-89	59	28.7	Not married	4	2.0
90-98	19	9.3	Other/Unknown	36	17.5
Mean (SD) = 76.48(8.58)					
Length of stay (month)			Physical function		
1-6	39	19.2	Totally dependent	50	24.4
7-12	34	16.6	Severely dependent	32	15.6
13-24	48	23.4	Moderately dependent	55	26.8
25-36	39	19.0	Slightly dependent	30	14.6
37 and more	45	22.0	Independent	38	18.5
Mean (SD) = 22.28 (15.59)					
Education			Pain severity		
No education	101	49.3	None	82	40
Elementary	56	27.3	Slight-Mild	70	33.2
Middle School	7	3.4	Moderate-Severe	48	23.4
High School & over	10	4.9	Extreme and more	5	2.5
Unknown	31	15.1			
Nursing staff (N = 60)					
	n	%		n	%
Gender			Education		
Male	17	28.3	High school	28	46.7
Female	43	71.7	College & over	32	53.3
Age			Length of nursing experience (months)		
22-30	21	35.0	1-6	14	23.3
31-40	25	41.7	7-12	9	15.0
41-50	13	21.6	13-24	11	18.4
51 & over	1	1.7	24-36	17	28.3
Mean (SD) = 34.32(7.68)			37 & more	9	15.0
			Mean(SD) = 21.33(18.91)		

behavior at least once within past the 1 year. About 55% subjects demonstrated PAB, 52.7% VAB, and 11.2% SAB. Aggressive behavior co-occurred with other forms of aggressive behavior. PAB seemed to occur most frequently with VAB (38.5%), and to a lesser extent with VAB and SAB. About 6% demonstrated all three forms (physical, verbal, and sexual) of aggressive behaviors. Proportion and nature of aggressive behaviors are shown in Table 2.

3) Frequency and types of aggressive behavior observed for 3 days

A total of 76 aggressive behaviors were occurred dur-

Table 2. Proportion and Nature of Aggressive Behaviors Screened by RAS I (N = 205)

Category	n	%
demonstrate aggressive behavior	129	62.9
demonstrate PAB*	113	55.1
demonstrate VAB**	108	52.7
demonstrate SAB***	23	11.2
demonstrate both PAB & VAB	79	38.5
demonstrate both PAB & SAB	5	2.4
demonstrate both VAB & SAB	2	1.0
demonstrate all PAB, VAB & SAB	12	5.9

* PAB: Physically aggressive behavior
 ** VAB: Verbally aggressive behavior
 *** SAB: Sexually aggressive behavior

ing 3 days. The most frequently observed form was PAB (n=41) followed by VAB (n=26), and SAB (n=9). Of 41 PAB that occurred, pushing and making threatening gestures, hitting, slapping, and kicking were common. Use of cursing/obscene/vulgar languages (n=9) was the most frequently observed VAB along with hostile language (n=7) and making threats (n=7). Total 9 SAB occurred including making obscene gesture (n=4), touching body part of another person (n=3), and hugging (n=2). Frequency and types of aggressive behavior observed during 3 days are shown in Table 3.

4) Comparison of aggressive residents with non-aggressive residents

When aggressive residents were compared with non-aggressive subjects, the mean scores for age in the two groups were significantly different (t=-3.667, p=.000); the aggressive residents were significantly older than non-aggressive residents. The mean scores for mental status, pain, length of stay scores of two groups were significantly different; the aggressive residents had more cognitive impairment (t=2.284, p=.023), had more pain (t=-2.793, p=.006), and they stayed longer in the nursing home (t=-2.230, p=.029). The mean scores for functional status for the two groups did not differ significantly (t=.165, p=.845). Comparisons of the mean scores of

Table 3. Frequency and Types of Aggressive Behaviors Observed for 3 days Using RAS II (N = 75)

Physically aggressive behavior	n	Verbally aggressive behavior	n	Sexually aggressive behavior	n
Pushing	7	Cursing/obscene/ vulgar languages	9	Making obscene gesture	4
Making threatening gesture	6	Hostile language	7	Touching body parts of another person	3
Hitting	5	Making verbal threats	7	Hugging	2
Slapping	5	Name calling	3		
Kicking	5				
Throwing an object	4				
Pinching/Squeezing	3				
Scratching	2				
Spitting	2				
Striking a person with an object	1				
Pulling hairs	1				
Total	41		26		9

Table 4. Comparison of Aggressive Residents with Non-aggressive Residents (N = 205)

Variable	Aggressive residents (n = 129)		Non-aggressive residents (n = 76)		t	p
	Mean	(SD)	Mean	(SD)		
Age	78.12	(8.61)	73.70	(7.86)	-3.667	.000
Mental status	10.80	(7.42)	13.29	(7.76)	2.284	.023
Functional Status	61.29	(33.93)	62.13	(37.69)	.165	.845
Pain	1.60	(1.55)	1.01	(1.25)	-2.793	.006
Length of stay	24.12	(15.59)	19.14	(15.86)	-2.230	.029

age, mental status, functional status, pain and length of stay for the two groups are shown in Table 4.

5) Nursing staff responses to aggressive behaviors

About half (48.3%) of the residents reported that they often appease the residents like a child. Nursing staff answered they often scolded the residents (25%), or try to be patient in any circumstances (15%). Twenty percent answered that they did not know what to do with the incidence of aggressive behavior. Nursing staff’s responses to aggressive behaviors are presented in Table 5.

DISCUSSION

The prevalence of aggressive behaviors in these residents, at 62.9%, is lower than the prevalence (74%) in a sample of Korean nursing home residents (Oh, 1998) and than 86.3% found in a study by Ryden et al. (1991) with American nursing home residents, in the united states but higher than the prevalence (44%) in another sample of nursing home residents (Kolanowski & Garr, 1999). This variability in aggressive behavior prevalence may largely be due to use of various and differing operational definitions and diverse methods for data collection. For instance, several previous studies measured physical, verbal, sexual aggressive behaviors (Feldt, Warne, & Ryden, 1998; Kolanowski & Garr, 1999; Oh, 1998; Ryden et al., 1991), while others (Eastly & Wilcock, 1997; Souriel et al., 2001; Talerico et al., 2002) only measured physical and verbal aggressive behaviors. Such absence of consensus on operational definition and measures makes it difficult to compare findings across studies or determine to what extent each type of aggressive behaviors occurs. Therefore, clarification of the concept and operational definition is an urgent need for future research. Although prevalence varied by studies in the past, a high incidence rate was a common finding. Consistent with findings in previous studies a significant

proportion of residents in this study (n=129; 62.9%) demonstrated aggressive behavior and greater proportion of residents showed physical aggressive behavior compared to verbal or sexual aggressive behavior. Also a considerable proportion of residents demonstrated more than one form of aggressive behavior suggesting that a resident can be aggressive physically, verbally, or sexually.

During the 3 days of data collection, a total of 76 aggressive behaviors such as hitting, kicking, pulling hairs, use of vulgar languages, and touching body part of other person had occurred. From this result, it can be assumed that either nursing staff or the residents in nursing home had suffered such behaviors. Although it appears that no serious injury had resulted from these aggressive behaviors, experiencing such behaviors can be quite distressing. Thus, it is necessary to protect both residents and nursing staff from brutal behaviors. To do so, it would be necessary to determine in what context the aggressive behaviors occur and what have triggered the aggressive behavior. In addition, the negative impact of aggressive behavior on residents’ quality of life and staff morale and job satisfaction should not be overlooked.

To have better understanding on the etiology of aggressive behaviors, aggressive residents were compared with non-aggressive residents. The result showed that the aggressive residents were characterized by being older age, having more cognitive impairment, a higher level of pain, and longer stays in the nursing home. As cognitive function decreases with normal aging, advanced age and cognitive impairment may have been contribute to aggressive behaviors (Beck et al., 1998) which often results from misinterpretation of environmental stimuli (Ryden et al., 1991). In terms of pain and aggressive behavior, the result support previous research findings. In a study by Cohen and Werner (1998), a correlation between pain and aggressive behavior was found. In another study, aggressive behaviors were significantly more fre-

Table 5. Response to Aggressive Behaviors by Nursing Staff (N=60)

Nursing staff's response	Always (%)	Often(%)	Sometimes (%)	Seldom (%)	Never (%)
Appease the resident like a child.	5.0	48.3	26.7	16.7	3.3
Scold the resident.	3.3	25.0	30.0	28.3	13.3
Don't know what to do.	1.7	20.0	18.3	35.0	25.0
Try to be patient in any circumstances.	1.7	15.0	23.3	53.3	6.7
Leave the resident and situation.	3.3	13.3	16.7	50.0	16.7
Apply restraint or isolate the resident.	1.7	13.3	23.3	31.7	30.0
Ignore the situation.	1.7	1.7	13.3	61.7	21.7
Confront or assault the resident.	1.7	10.0	10.0	43.3	35.0

quent in elders with pain-related diagnoses such as arthritis (Feldt, Warne, & Ryden, 1998). These findings suggest that untreated pain may have trigger aggressive behaviors. Considering limited ability of cognitively impaired elders to verbalize their pain experience, aggressive behavior in elders with dementia can be understood as a non-verbal expression of their pain experience (Olson, 2000). As recommended by Feldt et al. (1998), careful assessment, amelioration of pain and strategies to increase physical comfort need to be included in intervention programs. Length of stay in a nursing home was significantly higher in aggressive subjects, and this finding is consistent with that of Souriel et al. (2001). However, this result raises questions concerning the meaning of 'staying longer in a nursing home'. What aspects of staying longer in a nursing home can affect elders behavior? It is possible that maladjustment and other stressors experienced from an extended nursing home stay might have caused the aggressive behavior. The answer to this question is unclear so further investigation is needed in this area. Previous studies have shown that decreased functional status is associated with increased aggressive behavior but this was not supported in this study.

Aggressive behaviors by cognitively impaired older adults in nursing home create high level of stress and burden to caregivers (Rodney, 2000). Unfortunately, the result have shown that nursing staff responses to aggressive behaviors are inadequate. Responses used most often included appeasing the resident like a child, scolding the resident, and trying to be patient in any circumstances. Many answered that they did not know what to do. In fact, in nursing homes, most of direct care is being provided by nursing assistant who have minimal training in interpersonal or communication skills. Thus, carefully designed educational interventions to improve aggressive behavior management skills are needed. Some nursing staff reported that they apply restraints, isolate, confront, or assault the aggressive residents. This indicates need for educating nursing staff to treat cognitively impaired residents in a way that their human dignity is maintained.

CONCLUSION

This study investigated aggressive behaviors in cognitively impaired nursing home residents and nursing staff' responses to such behaviors in nursing homes in Korea.

We believe the findings of this study add small evidence to the body of knowledge on aggressive behavior in elders with dementia. Based on the findings discussed above, we have drawn the following conclusions. First, aggressive behaviors in this population should be prevented by identifying and removing trigger factors. In doing so, environmental modification might be a strategy to be considered. Second, nurses and nursing assistants face immense challenges in providing nursing care to aggressive residents. Educational programs need to be developed and implemented so that the nursing staff can have extensive knowledge and skills to manage aggressive behaviors. The use of geriatric advanced practice nurses to teach interpersonal approaches and to assist in role modeling in direct care of aggressive resident is recommended. Also, staff education including training session designed to teach what approaches to use in different situations might be useful. Third, we suggest conducting future research to implement environmental and behavioral interventions and evaluate the effects of them.

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