

## A study on the relationship between dementia partner nursing students' knowledge and attitudes on dementia

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**Abstract:** The purpose of this study was to assess the level of knowledge and attitudes toward dementia among Korean nursing students who completed dementia partner training, thereby providing baseline data for the development and implementation of dementia prevention education and programs. The participants were 308 nursing students who had completed dementia partner training, and the collected data were analyzed using SPSS 25.0. The subjects' dementia knowledge level was  $9.91 \pm 2.02/15$ , and their dementia attitudes were  $50.42 \pm 4.94/60$ . Dementia attitude scores differed significantly by gender and volunteer experience with dementia patients before the training. Females had significantly higher dementia attitude scores than males ( $t = -3.665$ ,  $p < .001$ ), and those with prior volunteer experience with dementia patients had significantly higher dementia attitude scores than those without ( $t = 2.845$ ,  $p = .005$ ). A positive correlation was found between dementia knowledge and dementia attitudes ( $r = .205$ ,  $p = .001$ ). In conclusion, it is believed that various programs need to be developed, and various national policies need to be implemented to cultivate knowledge and attitudes about dementia.

**Keywords:** Aging, Attitude, Dementia, Knowledge, Nursing students.

### 1. Introduction

The issue of population aging is not only a personal crisis but also a serious problem that affects the nation and society as a whole. Unprepared aging reduces individual quality of life and increases social and economic burdens, negatively impacting national sustainability [1]. According to Statistics Korea [2], the elderly population aged 65 and above accounts for 20.3% of the total population, totaling 10,514,000. This proportion is expected to exceed 30% in 2036, 40% in 2050, and reach 47.7% by 2072 [2].

As the population ages, the number of elderly people with dementia, cerebrovascular disease, and other conditions that make daily life difficult is increasing day by day [3], and as the number of elderly people with chronic diseases also increases, the issue of elderly care and support has become a serious social problem [2]. The problem of rapid aging is emerging not only in Korea but also worldwide, and the prevalence of dementia is also rapidly increasing due to this change. The World Health Organization (WHO) estimated that the number of people experiencing dementia due to brain-related diseases will reach 55 million in 2023, and it is expected that this number will increase by 40% to 78 million in 2030 and to 139 million in 2050 [4].

Dementia is a chronic disease characterized by impaired brain function, resulting in a decline in mental functions such as memory, emotion, language, and judgment, interfering with daily life. Dementia is a serious condition that not only reduces the patient's quality of life and increases mortality but also causes long-term dependence on others, placing a significant psychological, mental, physical, and economic burden on those who care for them, devastating their lives [5].

The concept of dementia partners in Korea is a policy promoted in the 3rd Comprehensive Dementia Management Plan (2016-2020) to promote community-centered dementia prevention and management. Its role is to ensure the dignity and safety of dementia patients and to fill gaps in public

services for their families, acting as community dementia watchdogs and improving community members' understanding and awareness of dementia patients. After completing a two-hour training session on understanding dementia, the role and activities of dementia partners, and how to participate in dementia-fighting campaigns, participants can participate in dementia prevention exercise methods and prevention guidelines education for local seniors, as well as other dementia-related volunteer activities [6].

College students will not only become major players in supporting the elderly in future society but will also directly influence and be influenced by the aging society [7], and the values and attitudes formed during college will serve as the cornerstone for their future social life and life. Therefore, their perspectives on elderly people with dementia are very important [8]. However, due to the phenomenon of nuclear families, there may be a lack of meaningful experiences in learning about and sharing the values and lives of the elderly [9]. Among college students, it was found that most of the experiences came from volunteer work for elderly people with dementia rather than through family [10].

Nursing students are likely to encounter older adults with dementia in clinical settings. Dementia symptoms vary widely across individuals, and a lack of knowledge or information can lead to unexpected situations and inappropriate initial responses, negatively impacting patients and their families [11]. Therefore, it is crucial for nursing students to possess knowledge about dementia to provide comprehensive care to these individuals [8]. Attitudes form the basis of behavior, and these attitudes are influenced by knowledge [12]. This suggests that nursing students' knowledge about dementia can influence their attitudes toward it, with previous studies showing that higher dementia knowledge correlates with more positive attitudes [13-15].

While previous studies have examined college students' knowledge and attitudes toward dementia [10, 11, 13-15], no studies have examined national policies, such as the Dementia Partner Program. Therefore, this study aimed to investigate the knowledge and attitudes toward dementia of nursing students participating in national dementia partner activities and to identify the correlations between these factors, thereby providing basic data for the development of dementia prevention education programs and the implementation of various national policies.

The purpose of this study was to assess the level of knowledge and attitudes toward dementia among nursing students who completed dementia partner training. The specific objectives are as follows:

First, to identify the general characteristics of the participants.

Second, to identify knowledge and attitudes toward dementia based on the participants' general characteristics.

Third, to identify the relationship between knowledge about dementia and attitudes toward dementia.

## 2. Methods

### 2.1. Research Design

This descriptive study aimed to assess knowledge and attitudes toward dementia among first-year nursing students who completed Dementia Partner education.

### 2.2. Participants and Data Collection

The subjects of this study were students enrolled at a university in City W, Province K, Korea. Students who completed dementia partner training understood the purpose of the study and the contents of the questionnaire and voluntarily gave written consent to participate. The number of participants was calculated using the G\*Power 3.1.9.2 program, with a significance level of .05, a power of .95, and an effect size of .30. The required sample size was 134. After completing the dementia partner training, a survey was conducted with 310 participants. After excluding incomplete responses, a total of 308 participants were included. Data were collected via questionnaire from April 9 to 10, 2025. Participants were informed that completing the survey would take approximately 10 to 15 minutes.

before data collection began. Furthermore, it was explained that there would be no disadvantages to students who did not wish to participate.

### 2.3. Instruments

#### 2.3.1. Knowledge about Dementia

The dementia knowledge measurement tool used in this study was the dementia domain knowledge measurement tool [16] developed to investigate the level of dementia knowledge, the measurement tool consists of a total of 15 questions, including 5 questions on the causes of dementia, 3 questions on epidemiology and systems, 4 questions on symptoms and diagnosis, and 3 questions on treatment and prevention. Each question is answered with 'yes', 'no', or 'I don't know'. A correct answer is awarded 1 point, while an incorrect answer or 'I don't know' is awarded 0 points. The score ranges from 0 to 15 points, with a higher score indicating a higher level of knowledge about dementia. The reliability of the dementia knowledge assessment was .730 Jo [16] and .723 in this study.

#### 2.3.2. Attitudes Toward Dementia

The dementia attitude measurement tool developed by Lee [17] was used. It consists of 15 items, with 9 positive and 6 negative items. Scores range from 15 to 60 on a 4-point Likert scale, where 1 indicates "not at all" and 4 indicates "very much." A higher score reflects a more positive attitude toward dementia. Negative items were scored in reverse. The Cronbach's alpha of the tool in Lee [17] was .750, and in this study, it was .806.

### 2.4. Data Analysis

The collected data were analyzed using the SPSS/WIN 25.0 statistical program, as detailed below.

To examine the general characteristics of the participants (gender, age, presence of a family member diagnosed with dementia, and volunteer experience related to dementia patients prior to the dementia partner training), real numbers, percentages, means, and standard deviations were analyzed.

2) To examine differences in the participants' general characteristics, their knowledge, and attitudes toward dementia, t-tests were used.

3) The relationship between the participants' knowledge and attitudes toward dementia was analyzed using Pearson's correlation coefficient.

## 3. Results

### 3.1. General Characteristics of the Subjects

Most of the subjects were female (83.1%), and the average age was 20.37 years. 11.7% had a family member diagnosed with dementia, and 17.2% had volunteer experience with dementia before participating in the dementia partner training (Table 1).

**Table 1.**  
General characteristics of the subjects (N=308).

Variables	Categories	n (%)
Gender	Male	52 (16.9)
	Female	256 (83.1)
Age		20.37 ± 1.36
Family with dementia	Yes	36 (11.7)
	No	272 (88.3)
Volunteer experience prior to training	Yes	53 (17.2)
	No	255 (82.8)

### 3.2. Knowledge and Attitudes About Dementia

The subjects' dementia knowledge score averaged  $9.91 \pm 2.02$  (out of 15), and their attitude score averaged  $50.42 \pm 4.94$  (out of 60) (Table 2).

**Table 2.**  
Degree of knowledge and attitude toward dementia (N=308).

Variables	M ± SD
Knowledge	9.91 ± 2.02
Attitude	50.42 ± 4.94

### 3.3. Knowledge and Attitudes About Dementia by Subject Characteristics

Dementia knowledge scores did not differ significantly by general characteristics (Table 3). Dementia attitude scores differed significantly by gender and volunteer experience with dementia patients prior to the dementia partner training. Specifically, dementia attitude scores were significantly higher for women than for men ( $t=-3.665$ ,  $p<.001$ ), and for those with prior volunteer experience with dementia patients ( $t=2.845$ ,  $p=.005$ ) than for those without (Table 3). There was no difference in scores based on whether a family member had been diagnosed with dementia.

**Table 3.**  
Knowledge and attitudes according to characteristics (N=308).

Variables	Categories	Knowledge		Attitude	
		M±SD	t(p)	M±SD	t(p)
Gender	Male	9.62±2.13	-1.149 (0.251)	48.71±5.53	-3.665 (<0.001)
	Female	9.97±2.00		50.87±4.70	
Family with dementia	Yes	9.83±1.50	-0.306 (0.761)	51.39±5.16	1.260 (0.209)
	No	9.92±2.08		50.29±4.90	
Volunteer experience prior to training	Yes	10.34±2.00	1.709 (0.089)	52.15±4.65	2.845 (0.005)
	No	9.82±2.02		50.06±4.93	

### 3.4. Correlation between Knowledge and Attitudes About Dementia

The correlation between knowledge and attitudes about dementia was positive, with  $r = .205$  ( $p = .001$ ) (Table 4).

**Table 4.**  
Correlations between knowledge and attitudes about dementia (N=308).

Variables	Knowledge	Attitude
	r(p)	r(p)
Knowledge	1	
Attitude	0.205 (<0.01)	1

## 4. Discussion

This study aimed to identify the knowledge and attitudes toward dementia among nursing students who completed dementia partner training. The results were intended to provide baseline data for the development of dementia education programs for nursing students who will provide care to elderly people with dementia in future clinical settings, as well as for various national policies.

In this study, dementia knowledge was found to be slightly above the median, with a score of  $9.91 \pm 2.02$  out of 15. While comparative analysis is difficult due to differences in knowledge measurement tools from previous studies, a study of Korean nursing students [18] found a low score of 15.86 out of 30, barely above the median, while a study of nurses at community dementia support centers [19] showed a high average knowledge level, with an average score of 18.14 out of 20. These high scores were attributed to the participants' participation in specialized dementia nursing education, continuing education, academic training, and specialized geriatric nursing training. These results

highlight the importance of systematic and ongoing dementia education to enhance dementia knowledge.

The subjects' attitudes toward dementia were  $50.42 \pm 4.94$  out of 60. Positive responses included items such as "Dementia prevention education is absolutely necessary for the elderly" and "I think it's important for people to be aware of dementia." Negative responses included items such as "If I had dementia, I would leave home." A study of nursing students [18] showed similar positive responses, and a study of Korean adults [20] showed similar negative responses, such as wanting to hide the fact that they had dementia. These results suggest that while nursing students are interested in dementia and recognize the need for dementia prevention education, they also feel burdened and reluctant to care for patients with dementia due to the behavioral and psychological symptoms associated with dementia.

There were no significant differences in dementia knowledge scores based on the general characteristics of the subjects. Female students and those with volunteer experience with dementia patients prior to the dementia partner training demonstrated more positive attitudes toward dementia. This can be interpreted in the same context as Hwang and Yoon [21] finding that women, who demonstrate a strength in emotional empathy compared to men with a more systematic and analytical brain, exhibit superior empathy. Therefore, considering the results of this study, which demonstrated that empathy influences attitudes toward dementia, it is likely that female students exhibited more positive attitudes toward dementia than male students. Furthermore, volunteering and various activities that increase contact with dementia patients are crucial for improving nursing students' ability to care for dementia patients. Recently, the Korea National Dementia Center has been providing dementia partner education to various age groups, including the public and adolescents, to foster a dementia-friendly culture. This education is crucial for fostering positive attitudes toward dementia.

A positive correlation was observed between dementia knowledge and attitudes toward dementia. Previous studies, Cho [22] and Kwon and Lee [18], have also shown similar positive correlations. These results suggest that acquiring knowledge about dementia patients positively influences attitudes toward them. Therefore, it is crucial to provide accurate information through undergraduate curricula and national dementia education programs. This study is significant in that it evaluated knowledge and attitudes toward dementia by implementing 'college student dementia partner' education, which is one of the measures of the Korean National Dementia Management Comprehensive Plan.

## 5. Conclusion

This study investigated the attitudes and knowledge of nursing students who completed dementia partner training at a university and examined the relationships among variables. It appears that the nursing students in this study developed a more positive attitude toward dementia through dementia partner training, which enhanced their understanding of dementia patients. Based on this study, the following recommendations are offered.

First, to improve attitudes toward dementia patients, it is necessary to create opportunities for direct communication with the elderly through volunteer activities and various dementia-related events. This should foster positive perceptions of dementia patients.

Second, because this study was conducted at a single nursing college, it is difficult to generalize the findings to all nursing students. Therefore, future research with a larger sample size is needed.

## Funding:

This research was supported by Kyungdong University Research Fund, 2025.

## Transparency:

The author confirms that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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