

ORIGINAL ARTICLE

Associations among Gerontological Nursing Knowledge, Attitudes Toward Ageism, and Therapeutic Communication Competency: A Cross-sectional Online Survey among Outpatient Nurses in General Hospitals

Kim, Sunhee¹ · Kim, Heejung²

¹Graduate Student, College of Nursing, Yonsei University · Registered Nurse, Department of Outpatient Nursing, Seoul National University Hospital, Seoul, Korea

²Associate Professor, College of Nursing · Senior Researcher, Mo-Im Kim Nursing Research Institute, Yonsei Evidence Based Nursing Centre of Korea, Institute for Innovation in Digital Healthcare, Yonsei University, Seoul, Korea

Purpose: This study aimed to investigate associations of therapeutic communication competency with gerontological nursing knowledge and attitudes toward ageism among outpatient nurses in general hospitals. **Methods:** A cross-sectional survey of 137 outpatient nurses was conducted from March 29 to April 11, 2024. Participants were recruited via an online flyer posted in a nationwide nursing community. Data were collected using three validated instruments: Knowledge of Older Patients Quiz, Fraboni Scale of Ageism, and Nursing Assessment of Communication Competency Scale. Descriptive statistics, independent t-tests, one-way ANOVA with Scheffé post hoc tests, and multiple linear regression analyses were performed using IBM SPSS Statistics version 29.0. **Results:** Significant differences in therapeutic communication competency were identified based on marital status ($p=.007$), engagement in overtime work ($p=.006$), and longer clinical experience than 10 years ($p=.010$). Lower levels of ageism were significantly associated with higher competency of therapeutic communication ($\beta=-0.27$, $p=.001$), while gerontological nursing knowledge was not. **Conclusion:** Continuous training of anti-ageism attitude may enhance therapeutic communication competency of outpatient nurses with older adults. Leveraging experienced nurses and improving work conditions also support effective communication in outpatient settings.

Key Words: Aged; Nursing care; Knowledge; Ageism; Communication

INTRODUCTION

1. Background

The outpatient clinic serves as the primary care setting to access more general healthcare services. In Korea, a higher proportion of older adults regularly visit outpatient clinics to receive preventive care or chronic disease management in the community. Overall, 77.4% of older adults use various community health services, including hospitals, public health centers, satellite health centers, traditional medicine clinics, and dental clinics to manage chronic

ic diseases [1]. Approximately 30.5% of outpatients in South Korea are older adults, and this group accounts for around 39.0% of total healthcare expenditures [2].

Recently, outpatient services have evolved to meet the diverse care needs arising from recent healthcare policies and societal changes [3]. Under Korean insurance reimbursement policies, healthcare facilities aim to discharge patients as soon as possible to receive sufficient reimbursement from the National Health Insurance Corporation. As a result, minimally invasive surgeries or some medical examinations are increasingly performed in outpatient settings, and then the follow-up and rehabilitation care are

Corresponding author: Kim, Heejung <https://orcid.org/0000-0003-3719-0111>
College of Nursing, Yonsei University, 50-1 Yonsei-ro, Seodaemun-gu, Seoul 03722, Korea.
Tel: +82-2-2228-3273, Fax: +82-2-2227-8303, E-mail: hkim80@yuhs.ac

- This research paper is a part of Sunhee Kim's master's thesis that was not supported by any research funding.

Received: Oct 29, 2024 | Revised: Apr 11, 2025 | Accepted: Jun 12, 2025

This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (<http://creativecommons.org/licenses/by-nc/4.0>) which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

provided at home [4]. It is necessary to increase the number of outpatient nurses and train them in specific competencies, such as providing health education to family caregivers and performing documentation tasks for reimbursement [5].

Outpatient nurses need to communicate closely with older adults and their caregivers to complete multiple tasks under various constraints. Unlike inpatient nurses, outpatient nurses in general hospitals interact with patients for only a short duration and with an extensive amount of information. Previous studies emphasize the growing importance of outpatient nurses' competency in providing health education and counseling to older adults and their families through therapeutic communication skills. For instance, research highlights that effective communication enhances patient understanding and adherence to treatment plans, ultimately improving health outcomes. This underscores the need for enhanced training in therapeutic communication for outpatient nurses, particularly as the demand for patient-centered care continues to rise [6].

Thus, effective communication is crucial in outpatient care settings. However, older patients often encounter difficulties communicating with nurses because they are likely to have sensory impairments, such as hearing loss or reduced visual acuity, their health literacy tends to be relatively low; and their treatment plans are highly complex, involving multiple medications and regimens [7]. Moreover, outpatient nurses manage patients following the Medical Service Act, which equates 12 outpatients to 1 inpatient. As a result, they handle more patients than those in inpatient wards, leading to a work environment that is excessively busy, overcrowded, and noisy, making effective communication with older adults more challenging. Therefore, it is essential to develop strategic approaches for outpatient nurses to enhance effective and therapeutic communication with older adults and overcome these challenges [8]. Developing advanced nursing competencies is essential for providing effective care to older adults with communication disorders and health problems [9].

Therapeutic communication competency is crucial for enhancing nurse-patient interaction and developing therapeutic relationships. Since a significant portion of outpatient nursing services depends on nurse-patient communication [10], these competencies are particularly important for ensuring the delivery of high-quality care [11]. Nurses must identify patients' care needs through effective communication and improve the quality of communication to provide appropriate care. However, more than 80% of nurses report difficulties in nurse-patient communication, indicating the need for continuous education or

job training to enhance communication skills relevant to their professional roles [12]. While most nurses recognize the importance of providing patient-centered care through therapeutic communication during nursing care, effective strategies for developing these competencies are lacking within the demanding workflow and challenging conditions of outpatient settings [13].

Previous studies have emphasized the importance of didactic programs in increasing nurses' knowledge and reducing ageism, as part of developing therapeutic communication competency in caring for older adults [14,15]. Previous studies have explored the relationships among gerontological nursing knowledge, ageism, and therapeutic communication competency among nurses [16,17]. However, most previous studies focused on nurses caring for hospitalized inpatients. Considering the different characteristics of the communication environment, more research should be conducted to target outpatient settings and older adults. While hospital nurses often have extended interactions with patients, outpatient nurses experience significant time constraints, requiring them to communicate effectively within a short time. Additionally, the unique challenges of outpatient settings, such as providing health education and counseling to older adults and their families, remain underestimated. Addressing these gaps is crucial to developing tailored strategies that enhance therapeutic communication competency and ultimately improve patient outcomes in outpatient care. Thus, this study aims to explore the current states of gerontological nursing knowledge, ageism, and therapeutic communication competency among outpatient nurses working in general hospitals to fill the gaps in the literature on the topic and improve the quality of workforce education.

2. Objectives

The purpose of this study is to identify the factors associated with therapeutic communication competency in outpatient nurses during gerontological nursing care in general hospitals, especially focusing on gerontological nursing knowledge and ageism. The specific objectives of the study are as follows:

- To examine the differences in therapeutic communication competency based on the general and occupational characteristics of outpatient nurses;
- To explore the associations among subcomponents of therapeutic communication competency with gerontological nursing knowledge and ageism; and
- To identify the factors associated with the therapeutic communication competency of outpatient nurses.

METHODS

1. Research Design

This study is a cross-sectional and correlational in design using online survey.

2. Research Subjects

The participants in this study were nurses working in outpatient departments at general hospitals, recruited through convenience sampling. Recruitment advertisements were posted via a banner on the online community Nurscape.net. Nurscape.net is an online community for nurses, offering a platform where healthcare professionals can share information and experiences, access educational resources, and stay informed on job-related topics.

Based on the self-reporting, the nurses were included when they met the follow criteria that: (1) their outpatient composition of older adults was greater than at least 30%; and (2) they had at least six months of work experience in outpatient care settings. Exclusion criteria were as follows: (1) nurses not involved in direct patient care (e.g., nurse administrators), (2) advanced practice nurses or specialized nurses, and (3) nurses working in pediatric departments or psychiatry units.

The rationale for setting the inclusion criterion of at least 30% older adult outpatient patients is that approximately 25% of outpatient visits to medical institutions involve older adults according to data from the Health Insurance Review & Assessment Service. Additionally, data from the Health and Medical Big Data Open System's report on 'Hospitalization/Outpatient Claims by Older Adults' indicate that, in 2023, out of a total of 461.826 million outpatient claims, older adults accounted for approximately 25%. These statistics suggest that the proportion of older adults among outpatient visits is approximately 25%. However, depending on hospital characteristics, such as geriatric specialty hospitals or general hospitals, the proportion of older adults may be higher than the average (as evidenced by hospital-specific service records). Therefore, this study set the inclusion criterion at a minimum of 30% older adult outpatients to more accurately assess therapeutic communication competency for older adults. This criterion refers to the percentage of older adults seen among all outpatients during a single day and was applied as a selection criterion for study participants.

The required minimum sample size was determined using G*Power 3.1.9.4 for multiple linear regression analysis. With a two-tailed significance level of .05, a stat-

istical power of .80, an effect size of .15, four predictors, and six expected covariates, the required minimum sample size was 118 participants. Considering a 20% non-response rate, 148 participants were recruited. Data from 137 participants were included in the analysis after excluding responses that did not meet the inclusion criteria (Response rate=92.6%).

3. Instruments

The measurements of this study consisted of structured self-report questionnaires with a total of 122 items. The online survey included 113 items on gerontological nursing knowledge, ageism, job stress, and therapeutic communication competencies. Additionally, it included five items on general characteristics and four items on occupational characteristics.

1) General and occupational characteristics

The general characteristics included participants' age, sex, marital status, educational status, and employment in a full-time position. The occupational characteristics section consisted of four items, such as clinical experience and the completion of courses related to gerontological nursing. It also included overtime work status and the average number of older adults managed per day.

2) Gerontological nursing knowledge

Knowledge about aging and gerontological care was measured using the Knowledge about Older Patients Quiz (KOP-Q). Originally developed by Dikken et al. [18], it was translated into Korean by Kim and Lee [15]. The KOP-Q consists of 30 items, with each item presenting a statement related to knowledge necessary for gerontological nursing. Participants are required to determine whether each statement is true or false. The scoring is binary, meaning that correct answers receive 1 point, while incorrect answers receive no points. The total score ranges from 0 to 30, with higher scores indicating greater knowledge of gerontological nursing. The original study [18] reported a Cronbach's α of .94 for internal consistency, while the Kuder- Richardson 20 (KR-20) reliability coefficient for this study was .67. The KR-20 coefficient for this study was .67, indicating moderate internal consistency. Given that the KOP-Q employs a binary scoring format (true/false), the limited response variability and potential imbalance in item difficulty may have contributed to the relatively lower reliability compared to the original version.

3) Ageism

Ageism was measured using the Fraboni Scale of Ageism (FSA), developed by Fraboni et al. and later adapted into Korean by Kim et al. The Korean version of the FSA was shortened from the original 29 items to 18 items to better reflect cultural contexts in Korea [19]. The scale assesses ageism across three subdomains: emotional avoidance (7 items), discriminatory attitudes toward older adults (5 items), and stereotypes or prejudice against older adults (6 items)[19]. Responses are scored on a 4-point Likert scale, ranging from 'strongly disagree' (1 point) to 'strongly agree' (4 points). Items 14, 15, and 16 are reverse-coded. Higher scores indicate more negative attitudes and stronger prejudice against older adults. The Cronbach's α was .86 in the original study, .82 in Kim et al.'s study [19], and .88 in this study. In the subdomains of ageism, the 7 items assessing emotional avoidance (items 4, 5, 8, 9, 14, 16, and 17) had a Cronbach's α of .88, the 5 items assessing discriminatory attitudes (items 6, 10, 11, 13, and 15) had a Cronbach's α of .69, and the 6 items assessing stereotypes (items 1, 2, 3, 7, 12, and 18) had a Cronbach's α of .67. In this study, the emotional avoidance subdomain demonstrated a high level of internal consistency (Cronbach's α = .88), whereas the discriminatory attitudes and stereotypes subdomains showed relatively lower reliability coefficients (α = .69 and .67, respectively).

4) Therapeutic communication competencies

Therapeutic communication competencies were assessed using the Nursing Assessment Communication Competence Scale, adapted by Kim and Oh [20]. The revised version consists of 20 items tailored to evaluate the communication skills necessary for effective nursing assessment. It includes five subdomains: connection (6 items), rapport building (4 items), communication and information acceptance (4 items), physical assessment (3 items), and understanding the patient's perspective (3 items). Each item is scored on a 5-point Likert scale, ranging from 'strongly disagree' (1 point) to 'strongly agree' (5 points). Total scores range from 20 to 100, with higher scores indicating greater communication competence [20]. The Cronbach's α in the original study [20] was .91, and it was .95 in this study. The Cronbach's α values for the subdomains of therapeutic communication competence were as follows: connection (items 1~6) with 6 items had a Cronbach's α of .87, rapport-building (items 7~10) with 4 items had a Cronbach's α of .86, communication and information acceptance (items 11~14) with 4 items had a Cronbach's α of .81, physical assessment (items 15~17) with 3 items had a Cronbach's α of .84, and understanding the patient's perspective (items 18~20) with 3 items had a Cronbach's α of .85.

4. Procedure of Data Collection

When nurses were interested in participating in the study, they clicked the banner to access the survey URL. They were then provided with information about the study. The first page of the survey included a detailed informed consent form. Participants had to click the consent button at the bottom of the screen to proceed to the eligibility screening. Screening questions for participant eligibility were administered only to those who provided informed consent to participate in the study. This study was based on a self-report survey, in which participants were responsible for determining their eligibility based on the inclusion criteria. The survey program was designed to terminate immediately if participants did not meet the inclusion criteria. Consequently, only individuals who satisfied the eligibility requirements were able to complete the full survey. The survey consisted of 122 items and took approximately 20 to 25 minutes to complete. Upon survey completion, participants were asked to provide their mobile phone numbers to receive a small reward in the form of a mobile beverage coupon. The mobile numbers were immediately deleted after the coupons were sent to ensure privacy protection.

All collected data were coded numerically and de-identified to protect participants' privacy. No personally identifiable information was collected. Participants were informed that they could withdraw from the study at any time without penalty by exiting the survey. To ensure the reliability of the online survey during participant recruitment and data collection, participants were provided with the option to inquire further about the study via email or other means at any time. The data collection status was reviewed daily, and weekly meetings were held with the banner administrator to monitor the survey recruitment progress. Additionally, one case was deleted due to incomplete responses (e.g., all answers marked as "1").

5. Data Analysis

The data collected in this study were analyzed using IBM SPSS Statistics 29.0. The specific methods of data analysis are as follows:

- Descriptive statistics were used to describe general and occupational characteristics and to explore the levels of study variables;
- Independent t-tests and one-way ANOVA followed by Scheffé post-hoc tests were performed to identify differences in therapeutic communication competency based on participants' general and occupational char-

acteristics;

- Pearson's correlation coefficient was used to determine the associations between the study variables; and
- Multiple linear regression analysis was performed to identify factors associated with therapeutic communication competency, with a particular focus on gerontological nursing knowledge and ageism.

To conduct the regression analysis, clinical experience of 10 years or less was set as the reference category. A dummy variable was created by coding clinical experience of 10 years or less as 0 and more than 10 years as 1. Based on this coding, the model fit evaluation results were derived. This study utilized multiple linear regression analysis to identify factors associated with therapeutic communication competency in outpatient nurses. Before constructing the regression model, statistical assumptions regarding multicollinearity were thoroughly examined. The statistical assumptions for multicollinearity were assessed prior to the regression modeling. The Variance Inflation Factor (VIF) for independent variables ranged from 1.08 to 1.50, indicating no significant multicollinearity ($VIF < 10$). However, the condition index was 27.30, suggesting some degree of multicollinearity. Additional analysis revealed a high correlation between marital status and long-term clinical experience (over 10 years). Therefore, marital status was excluded from the final regression model to address concerns about multicollinearity.

6. Ethical Considerations

This study was conducted after obtaining approval from the Institutional Review Board (IRB) of Seoul National University Hospital (IRB No. H-2402-116-1516) to ensure compliance with ethical research standards. All research instruments were used with prior permission. No unnecessary personal information was collected from the study participants. To ensure confidentiality of the collected data and records, all materials were coded with numbers and de-identified. Throughout the study, the principles of informed consent, participant confidentiality, and data privacy were strictly followed to protect participants' rights.

RESULTS

1. Differences in Therapeutic Communication Competency by General and Occupational Characteristics

The general and occupational characteristics of the participants are summarized in Table 1. The average age of the participants was 36.96 ± 7.88 years, with the majority

being female (97.1%) and married (61.3%). Most participants held a Bachelor's degree (67.2%) and were employed in full-time positions (90.5%). Regarding occupational characteristics, the participants had an average clinical experience of 12.21 ± 8.13 years, and their average experience in outpatient nursing was 4.40 ± 3.92 years. Additionally, 65.7% had completed courses related to gerontological care, 73.0% reported working overtime, and the average number of older adult patients managed per day was 34.96 ± 23.42 . Differences in therapeutic communication competency were identified based on nurses' marital status, clinical experience, and overtime work. Married participants reported significantly higher therapeutic communication competency compared to unmarried participants ($t = 2.75, p = .007$). Nurses with more than 10 years of clinical experience reported significantly higher therapeutic communication competency than those with 5 to 10 years of experience ($F = 4.76, p = .010$). In addition, participants who worked overtime had significantly lower therapeutic communication competency compared to those without overtime responsibilities ($t = -2.78, p = .006$).

2. Correlation between Gerontological Nursing Knowledge, Ageism, and Therapeutic Communication Competency

The associations among gerontological nursing knowledge, ageism, and total scores for therapeutic communication competency revealed significant correlations. Specifically, therapeutic communication competency was positively correlated with gerontological nursing knowledge ($r = .18, p = .036$) and negatively correlated with ageism ($r = -.30, p < .001$). Additionally, ageism was negatively correlated with gerontological nursing knowledge ($r = -.21, p = .013$).

Further analysis of the subdomains of ageism, gerontological nursing knowledge, and therapeutic communication competency identified additional associations. Among the subdomains of ageism, discriminatory attitudes showed negative correlations with all subdomains of both gerontological nursing knowledge and therapeutic communication competency ($p < .050$). Moreover, the emotional avoidance subdomain was negatively correlated with all subdomains of therapeutic communication competency except for information delivery and reception. Lastly, gerontological nursing knowledge was found to be significantly associated with all subdomains of therapeutic communication competency, except for connection and understanding the patient's perspective (Table 2).

Table 1. Differences in Therapeutic Communication Competence by General and Occupational Characteristics (N=137)

Variables	Categories	n (%)	M±SD	t or F (p)	Scheffé
Age (year)	20~29	23 (16.8)	3.55±0.56	1.71	(,167)
	30~39	70 (51.1)	3.61±0.60		
	40~49	35 (25.6)	3.81±0.47		
	≥ 50	9 (6.5)	3.44±0.55		
Sex	Female	133 (97.1)	3.63±0.55	-0.35	(,729)
	Male	4 (2.9)	3.74±1.06		
Marital state	Married	84 (61.3)	3.76±0.50	2.75	(,007)
	Single	53 (38.7)	3.48±0.62		
Educational level	Associate degree	16 (11.7)	3.57±0.49	3.06	(,050)
	Bachelor's degree	92 (67.2)	3.59±0.57		
	≥ Graduate school	29 (21.1)	3.87±0.53		
Employment status	Full time	124 (90.5)	3.63±0.56	-0.84	(,404)
	Part time	13 (9.5)	3.77±0.60		
Occupational career (year)	0.5~5 ^a	23 (16.8)	3.49±0.66	4.76	b < c (,010)
	> 5~10 ^b	40 (29.2)	3.48±0.61		
	> 10 ^c	74 (54.0)	3.77±0.47		
Outpatient nursing career (year)	0.5~5	92 (67.2)	3.60±0.59	2.79	(,065)
	> 5~10	32 (23.3)	3.84±0.48		
	> 10	13 (9.5)	3.48±0.50		
Education related to the elderly	Yes	90 (65.7)	3.63±0.61	0.21	(,812)
	No	46 (33.6)	3.65±0.48		
	Others	1 (0.7)	4.00		
Overtime work	Yes	100 (73.0)	3.56±0.57	-2.78	(,006)
	No	37 (27.0)	3.86±0.50		
The number of old adults patients per day	≤ 20	45 (32.8)	3.68±0.51	0.53	(,660)
	21~40	58 (42.3)	3.67±0.55		
	41~60	23 (16.8)	3.53±0.69		
	≥ 61	11 (8.1)	3.64±0.59		

3. Factors Associated with Therapeutic Communication Competency in Outpatient Nurses

The results of the multiple linear regression analysis are presented in Table 3 to illustrate the factors associated with therapeutic communication competency in outpatient nurses. Model 1 included employment status and clinical experience, which affected therapeutic communication competency. This model explained 10.3% of the variance in therapeutic communication competency (adjusted $R^2=.10$, $F=8.83$, $p<.001$). In Model 2, gerontological nursing knowledge and ageism were added to the factors from Model 1. This model explained 17.4% of the variance (adjusted $R^2=.17$, $F=8.18$, $p<.001$).

The most significant factors of therapeutic communication competency were ageism ($\beta=-.27$, $p=.001$), clinical experience over 10 years ($\beta=.25$, $p=.002$), and overtime work ($\beta=-.18$, $p=.022$). These findings suggest that nurses with

lower levels of ageism, more than 10 years of clinical experience, and no overtime work demonstrate higher therapeutic communication competency. Notably, gerontological nursing knowledge did not show a statistically significant relationship with communication competency after controlling for other factors (Table 3).

DISCUSSION

This study was a cross-sectional study investigating the associations among gerontological nursing knowledge, ageism, and therapeutic communication competency among outpatient nurses working in general hospitals. Our study findings show that the significant factors of therapeutic communication competency were ageism toward older adults rather than gerontological nursing knowledge. Additionally, clinical experience of over 10 years and the absence of overtime work were positively

Table 2. Correlations among Sub-scales of Knowledge of Gerontological Nursing Knowledge, Ageism, and Therapeutic Communication Competency (N=137)

Variables	Ageism				Therapeutic communication competence				
	1	2	3	4	5	6	7	8	9
	r (p)	r (p)	r (p)	r (p)	r (p)	r (p)	r (p)	r (p)	r (p)
1. Gerontological nursing knowledge	-								
2. Emotional avoidance	-.07 (.398)	-							
3. Discriminatory attitude	-.32 ($< .001$)	.57 ($< .001$)	-						
4. Stereotype	-.19 (.024)	.53 ($< .001$)	.42 ($< .001$)	-					
5. Connection	.13 (.120)	-.27 (.001)	-.36 ($< .001$)	-.13 (.134)	-				
6. Rapport building	.17 (.045)	-.25 (.003)	-.39 ($< .001$)	-.12 (.171)	.82 ($< .001$)	-			
7. Communicate and accept information	.21 (.013)	-.10 (.252)	-.33 ($< .001$)	-.09 (.277)	.68 ($< .001$)	.74 ($< .001$)	-		
8. Physical assessment	.17 (.042)	-.26 (.002)	-.39 ($< .001$)	.02 (.864)	.62 ($< .001$)	.67 ($< .001$)	.69 ($< .001$)	-	
9. Understanding patient perspective	.10 (.248)	-.26 (.002)	-.25 (.004)	.07 (.388)	.71 ($< .001$)	.71 ($< .001$)	.64 ($< .001$)	.72 ($< .001$)	-

Table 3. Regression Model for Factors Associated with Therapeutic Communication Competency (N=137)

Model	Independent variables			B	β	SE	t	p	
1	(Constant)			4.29		0.43	9.93	$< .001$	Adj. R ² =.10 (F=8.83, $p < .001$)
	Working conditions	Overtime work	No (ref.) Yes	0.23	-.18	0.10	-2.33	.022	
	Clinical career (year)		≤ 10 (ref.) > 10	0.28	.25	0.09	3.17	.002	
2	Gerontological nursing knowledge			0.01	.06	0.02	0.69	.493	Δ Adj. R ² =.07
	Ageism			0.37	-.27	0.11	-3.36	.001	

Adj. R²=.17, F=8.18, $p < .001$

ref.=reference

associated with higher therapeutic communication competency. Our study findings can serve as fundamental information to improve the therapeutic communication skills of outpatient nurses and contribute to the development of competency-based training programs tailored to outpatient nursing practice.

In this study, the most significant factor associated with therapeutic communication competency was ageism toward older adults. Ageism negatively impacts the ability of older adults to receive adequate healthcare and nurs-

ing services [21]. It also hinders the formation of therapeutic trust relationships with older adults, ultimately reducing the quality of healthcare services provided [21]. Nurses who have negative attitudes toward older adults struggle to establish trusting relationships, which can adversely affect patient health outcomes [21]. Specifically, ageism among healthcare providers is negatively associated with therapeutic communication for patient care [21]. Our study findings confirm that preventing ageism toward older adults is essential to enhancing therapeutic

communication in outpatient settings, rather than relying solely on knowledge-based education.

To reduce ageism, developing training programs to promote value changes for better and healthy aging should be prioritized in tertiary settings. For example, prior research has introduced simulation-based education programs to address ageism by allowing nurses and nursing students to experience the challenges of aging through role-play [22,23]. Participants in these programs wore aging simulation suits and participated in communal activities resembling the daily lives of older adults. Through shared experiences and reflection, both nurses and nursing students reported improved understanding, behaviors, and attitudes toward older adults, along with a reduction in discriminatory attitudes [22,23].

To develop the specific contents of an attitude-changing program, our correlational results provide some suggestions. Among the three subdomains of ageism toward older adults, discriminatory attitudes showed significant negative correlations with all subdomains of therapeutic communication competency. Additionally, the emotional avoidance subdomain was negatively correlated with most subdomains of therapeutic communication competency. Discriminatory attitudes reflect a willingness to engage in actions that directly obstruct the rights of older adults [19]. In contrast, emotional avoidance represents prejudice characterized by negative emotions that lead to maintaining distance from older adults [19]. Previous studies have found that factors influencing discriminatory attitudes are commonly associated with negative social interactions with older adults, which shape ageism toward them [24, 25]. Therefore, discriminatory attitudes and emotional avoidance need to be changed to improve outpatient care for older adults.

There are several reasons that may explain the discrepancies among the three subdomains. First, the emotional avoidance items were designed to assess responses to similar emotional situations, thereby likely eliciting more consistent responses across participants. In contrast, the items within the discriminatory attitudes and stereotypes subdomains addressed more abstract and cognitively complex constructs. These may have been subject to varying interpretations among respondents, or influenced by social desirability bias, potentially reducing internal consistency. In addition, the relatively small number of items in these subdomains may have contributed to lower Cronbach's α values, as the coefficient is sensitive to the number of items in a scale. Lastly, cultural and linguistic differences introduced during the Korean translation process may have influenced how the content of certain sub-

domains was interpreted, thereby affecting their internal reliability.

Dissimilar to previous studies [26,27], gerontological nursing knowledge was not a significant factor in therapeutic communication competency after considering other factors. Typically, increasing gerontological nursing knowledge is the first step toward improving gerontological care competency, such as therapeutic communication [27]. Our unexpected finding may result from the indirect effect of knowledge. The previous studies found that enhancing nursing knowledge influences ageism toward older adults, which in turn affects the quality of care in practice [22,23,27]. This suggests that attitude serves as a mediator between knowledge and care, similar to the knowledge-attitude-practice model [28].

Our study also found the significance of other factors, such as overtime work and nurses' clinical experience. First, overtime work is a negative factor that reduces therapeutic communication. Prolonged overtime work contributes to physical, mental, and emotional fatigue, which results in burnout, work overload, and insufficient rest, all of which decrease job satisfaction [29]. Nurses with low job satisfaction experience reduced motivation for patient care, and this leads to diminished enthusiasm and commitment in nurse-patient interactions, ultimately compromising the quality of nursing care [29]. Strategies should focus on workload adjustments, implementing predictable work schedules, and maintaining consistent shift patterns to reduce fatigue and improve working conditions. Second, the therapeutic communication competency of nurses was higher among those with longer clinical experience. Experienced nurses develop communication strategies through hands-on practice with a diverse range of patients. Previous studies also indicate that repeated experience increases confidence when interacting with patients, which in turn enhances communication skills [26, 30]. Experienced nurses can serve as role models for less experienced nurses, offering guidance on communication techniques and strategies for new or less prepared nurses.

This study has several limitations. First, participants were recruited through online advertisements, and eligibility was based on self-identification as registered nurses working in general hospitals. However, this classification relied solely on self-reported data, and no independent verification of the participants' institutional affiliation was conducted. As a result, there is a possibility that some respondents may have misclassified their healthcare setting, leading to classification bias. This may have affected the accuracy of subgroup analyses related to institutional characteristics and limited the generalization of the find-

ings. Future research should include nurses from a broader range of healthcare institutions using more representative sampling strategies. Second, the therapeutic communication competency instrument used in this study was not specifically designed for gerontological care. The limitations of the research instrument may have led to the omission of specific competencies required for interactions with older patients, such as addressing the physical and psychological characteristics associated with aging. Therefore, future research should focus on developing tools that are specifically designed to measure competencies in therapeutic communication with older patients. Applying such tools in studies would contribute to a more accurate understanding of these competencies. Additionally, patterns of communication with older patients may vary depending on the healthcare provider's working environment and cultural context. It is crucial to account for factors such as patient demographics within the hospital, organizational support for geriatric nursing, and resources allocated for elderly care. Incorporating these aspects into future research would provide a more comprehensive framework for understanding and improving therapeutic communication with older adults. Lastly, most instruments in this study were self-reported. There is also a potential for response bias due to varying levels of comprehension of survey items among participants, which may distort the results. Future research should incorporate behavioral observation, structured interviews, and in-depth qualitative methods to supplement self-reported data and address these limitations.

Based on the discussion above, the following clinical implications of the research findings are proposed: First, a structured educational program should be developed to reduce ageism. To implement this, systematic educational programs should be designed, including simulation-based education, aging experience programs (e.g., wearing aging simulation suits), role-playing, and case-based learning. All outpatient nurses should be institutionalized to regularly participate in these programs. Additionally, the changes in ageism attitudes and therapeutic communication competency should be evaluated before and after the education to verify the effectiveness of the program. Survey questionnaires, behavioral observations, and feedback systems should be used to assess attitude changes and promote continuous improvement. Second, a mentoring program utilizing clinical experience should be introduced. Experienced nurses should be paired with novice nurses, with the experienced nurses mentoring the novices and providing practical guidance on effective communication skills and patient relationship building. For ex-

ample, regular case-sharing sessions should be organized, allowing experienced nurses to share successful communication cases and positive interactions with older adults. Third, the work environment should be improved, and overtime should be reduced. Work schedules should be adjusted to reduce overtime and provide predictable schedules to decrease nurses' physical and mental fatigue. Adequate rest areas should be provided within the hospital, and rest periods during shift changes should be strictly ensured. Furthermore, stress management workshops, work environment improvements reflecting nurses' feedback, and activities promoting communication among colleagues should be introduced to enhance job satisfaction.

Finally, measures to accurately measure therapeutic communication competency with older adults should be developed. Based on the evaluation results, educational and practical opportunities should be provided to help nurses improve areas of deficiency. Additionally, patient feedback should be collected from older patients and their families to assess communication satisfaction and incorporate it into practical improvements.

CONCLUSION

This study highlights the importance of fostering a non-ageist attitude to enhance therapeutic communication competency among nurses working in outpatient care settings. The findings suggest that, when caring for older adults, efforts to improve ageism toward aging should be prioritized over knowledge-based gerontological education. Emphasizing the reduction of ageism and promoting awareness can better support nurses in delivering effective care. The results of this study provide a foundational framework for developing gerontological nursing competency programs in outpatient practice. Finally, fostering positive nurse-patient interactions contributes to the delivery of higher-quality care and improves patient outcomes.

ACKNOWLEDGEMENT

We really appreciate contextual advising from Drs. SunAh Kim and JuHee Lee as thesis committee members.

CONFLICTS OF INTEREST

Heejung Kim has been an editorial board member since 2018, but had no role in the decision to publish this article. Except for that, no potential conflict of interest relevant to this article was reported.

AUTHOR CONTRIBUTIONS

Conceptualization or/and Methodology: Kim, S & Kim, H

Data Curation or/and Analysis: Kim, S
 Funding Acquisition: None
 Investigation: Kim, S
 Project administration or/and Supervision: Kim, H
 Resources or/and Software: Kim, S
 Validation: Kim, H
 Visualization: Kim, S
 Writing: original draft or/and review & editing: Kim, S & Kim, H

ORCID

Kim, Sunhee <https://orcid.org/0009-0001-7406-6411>
 Kim, Heejung <https://orcid.org/0000-0003-3719-0111>

REFERENCES

- Jung KH, Oh YH, Kang EN, Kim KR, Lee YK, Oh MA, et al. 2017 National survey of older Koreans. Policy report. Sejong: Ministry of Health and Welfare, Korea Institute for Health and Social Affairs; 2017 November. Report No. Policy report 2017-2053.
- Statistics Korea. 2018 Statistics on the aged. Press Release [Internet]. 2018[cited 2024 July 20]. Available from: https://kostat.go.kr/board.es?mid=a10301060100&bid=10820&tag=&act=view&list_no=370779&ref_bid=
- Olsson M, Larsson LG, Flensner G, Back-Pettersson S. The impact of concordant communication in outpatient care planning-nurses' perspective. *Journal of Nursing Management*. 2012;20:748-757. <https://doi.org/10.1111/j.1365-2834.2012.01479.x>
- Hollenbeck BK, Dunn RL, Suskind AM, Zhang Y, Hollingsworth JM, Birkmeyer JD. Ambulatory surgery centers and outpatient procedure use among Medicare beneficiaries. *Medical Care*. 2014;52(10):926-931. <https://doi.org/10.1097/MLR.0000000000000213>
- Kang BD, Oh EG, Kim S, Jang YS, Choi JY, Konlan KD, et al. Roles and experiences of nurses in primary health care during the COVID-19 pandemic: a scoping review. *BMC Nursing*. 2024;23:740. <https://doi.org/10.1186/s12912-024-02406-w>
- Koch S, Hägglund M, Scandurra I, Moström D. Towards a virtual health record for mobile home care of elderly citizens. *Studies in Health Technology and Informatics*. 2004;107:960-963. <https://doi.org/10.3233/978-1-60750-949-3-960>
- Park EJ, Jung Y. The association of medical service and medication use information literacy with multi-morbidity. *Health and Social Welfare Review*. 2020;40(2):222-243. <https://doi.org/10.15709/hswr.2020.40.2.222>
- Kim YJ, Jang HN, Kwon JH, Hwang JJ. The influence of importance and performance of nursing activities, and professional self-concept on ambulatory care nurses' job satisfaction. *Journal of Korean Academy of Nursing Administration*. 2020;26(3):262-273. <https://doi.org/10.1111/jkana.2020.26.3.262>
- Min MJ, Yu SY. Developing of a tool for ambulatory care nurse competencies. *Korean Academy of Nursing Administration*. 2017;23(1):90-100. <https://doi.org/10.1111/jkana.2017.23.1.90>
- Kwame A, Petruca PM. A literature-based study of patient-centered care and communication in nurse-patient interactions: barriers, facilitators, and the way forward. *BMC Nursing*. 2021;20:158. <https://doi.org/10.1186/s12912-021-00684-2>
- Kim WS, Kim SH. Research trends of language and communication in the elderly. *Journal of Speech-Language & Hearing Disorders*. 2017;26(3):35-48. <https://doi.org/10.15724/jslhd.2017.26.3.004>
- Son YJ, Lee YA, Sim KN, Kong SS, Park YS. Influence of communication competence and burnout on nursing performance of intensive care unit's nurses. *Journal of Korean Academy of Fundamentals of Nursing*. 2013;20(3):278-288. <https://doi.org/10.7739/jkafn.2013.20.3.278>
- Ganley L, Gloster AS. An overview of triage in the emergency department. *Nursing Standard*. 2011;26(12):49-56. <https://doi.org/10.7748/ns2011.11.26.12.49.c8829>
- Alhakami H, Alsubait T, Alhakami W, Alhakami H, Alhakami R, Alhakami M, et al. Advancing sustainable healthcare through enhanced therapeutic communication with elderly patients in the kingdom of Saudi Arabia. *Sustainability*. 2023;15(22):15778. <https://doi.org/10.3390/su152215778>
- Amir N, Widiasturi NRW, Said FFI, Nampo RS. Therapeutic communication in elderly patients: a systematic literature review. *Archives of The Medicine and Case Reports*. 2023;4(4):337-384. <https://doi.org/10.37275/amcr.v4i3.328>
- Kim EJ, Lee KH. Knowledge, attitude, and performance of nurses in a tertiary hospital toward older adults. *Journal of Korean Gerontological Nursing*. 2020;22(2):165-173. <https://doi.org/10.17079/jkgn.2020.22.2.165>
- Derks CTAJ, Hutten-van den Elsen MMGM, Hakvoort LJ, van Mersbergen MPJ, RENurse Consortium, Schuurmans MJ, et al. Hospital nurses' knowledge regarding older patients: a multi-center study. *BMC Nursing*. 2021;20:135. <https://doi.org/10.1186/s12912-021-00604-4>
- Dikken J, Hoogerduijn JG, Klaassen S, Lagerwey MD, Shortridge-Baggett L, Schuurmans MJ. The Knowledge-about-Older-Patients-Quiz (KOP-Q) for nurses: cross-cultural validation between the Netherlands and United States of America. *Nurse Education Today*. 2017;55:26-30. <https://doi.org/10.1016/j.nedt.2017.05.003>
- Kim JY, Kim MH, Min KH. Validation of the Korean version of the Fraboni Ageism Scale (FSA): a study of Korean university students. *Korean Journal of Social and Personality Psychology*. 2012;26(4):89-106. <https://doi.org/10.21193/kjspp.2012.26.4.006>

20. Kim HJ, Oh HY. The validity and reliability of Nursing Assessment Communication-Competence Scale for clinical nurses. *Journal of Korean Academy of Fundamentals of Nursing*. 2023; 30(1):78-89. <https://doi.org/10.7739/jkafn.2023.30.1.78>
21. Banister C. The effect of ageism on older people and implications for nursing practice. *Nursing Older People*. 2018;30(5):34-37. <https://doi.org/10.7748/nop.2018.e1056>
22. Oh HS, Jeong HS. Implementation and evaluation of gerontological nursing education program: consist of knowledge about nursing care for elderly and elderly simulation experience. *Journal of the Korea Academia-Industrial cooperation Society*. 2012;13(4):1654-1664. <https://doi.org/10.5762/KAIS.2012.13.4.1654>
23. Cheng Y, Sun S, Hu Y, Wang J, Chen W, Miao Y, et al. Effects of different geriatric nursing teaching methods on nursing students' knowledge and attitude: systematic review and network meta-analysis. *PLoS One*. 2024;19(5):e0300618. <https://doi.org/10.1371/journal.pone.0300618>
24. Marques S, Mariano J, Mendonça J, De Tavernier W, Hess M, Naegele L, et al. Determinants of ageism against older adults: a systematic review. *International Journal of Environmental Research and Public Health*. 2020;17(7):2560. <https://doi.org/10.3390/ijerph17072560>
25. Yaghoobzadeh A, Navab E, Mirlashari J, Nasrabadi AN, Goudarzian AH, Allenb KA, et al. Factors moderating the influence of intergenerational contact on ageism: a systematic review. *Journal of Psychosocial Nursing and Mental Health Services*. 2020;58(8):48-55. <https://doi.org/10.3928/02793695-20200624-01>
26. Abdu M, Daniel T, Yesuf M. Determinants of nurses' knowledge toward the elderly care, Southwest, Ethiopia. *SAGE Open Nursing*. 2024;10:1-9. <https://doi.org/10.1177/23779608241242889>
27. Sedri N, Zakeri Ma, Zardiny MZ, Tavan A. Evaluation of nurses' knowledge and attitudes towards older adults and associated factors. *The Open Nursing Journal*. 2022;16:e187443462206200. <https://doi.org/10.2174/18744346-v16-e2206200>
28. Kang K, Bagaoisan MAP. Research status of the Knowledge-Attitude-Practice theory model in gastric cancer prevention. *Cureus*. 2024;16(7):e64960. <https://doi.org/10.7759/cureus.64960>
29. Dall'Ora C, Griffiths P, Ball J, Simon M, Aiken LH. Association of 12 h shifts and nurses' job satisfaction, burnout and intention to leave: findings from a cross-sectional study of 12 European countries. *BMJ Open*. 2015;5:e008331. <https://doi.org/10.1136/bmjopen-2015-008331>
30. Amsalu ET, Messele TA, Adane M. Exploring the effect of professional experience on knowledge towards geriatric care among nurses working in adult care units. *BMC Geriatrics*. 2021;21:227. <https://doi.org/10.1186/s12877-021-02156-3>