



RESEARCH ARTICLE

Navigating Care-Worker Curriculum Evolution in Long-Term Care Settings: Mapping Paths for Enhanced Care Competency

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ARTICLE INFO	ABSTRACT
<p>Received: May 3, 2024 Accepted: Jun 16, 2024</p>	<p>This study aims to comprehensively investigate and analyze the process of revising the care-worker curriculum in South Korea, with a primary focus on enhancing practical competencies. The research involved analyzing the existing 240-hour curriculum, supplemented by a comprehensive literature review. Additionally, Focus Group Interviews were conducted with a cohort of 64 current care workers to effectively identify prevailing needs within the practice field. This study extended the curriculum duration from 240 to 320 hours. Subsequently, pilot courses were implemented, integrating enhanced content related to dementia care, humanity in caregiving, and infectious disease management. These modifications were delivered via webinars to 57 active care workers, chosen due to the constraints imposed by the COVID-19 pandemic. This study utilized a pre-post design to assess the perceptions of older adults and their job skills. Forty-eight female care workers (84.2%) and nine male care workers (15.8%) participated in the study. Several areas showed statistical significance: understanding and managing depression and anxiety (-1.421**), supporting leisure activities (-3.248**), implementing abuse prevention behaviors (-2.958**), creating a safe environment (-2.038**), assisting with mobility (-2.559*), aiding in illness management (-2.402*), transferring responsibilities (-2.497*), reporting cases (-2.559*), and overseeing caregiver health and safety (-2.402*). Conclusion: Based on our findings, we have devised a plan to incorporate the following content within the additional 80 hours. In a broader context, this study contributes to the ongoing discourse on caregiver education and training in South Korea.</p>
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INTRODUCTION

In the current landscape of long-term care services, driven by the aging population and the pursuit of improved quality of life, there is a growing demand for diverse and specialized services (Smith, 2021). Enhancing the expertise and professionalism of frontline care workers is paramount to elevating the quality of care for the elderly (Johnson & Brown, 2020). Recent shifts, such as the rise in dementia cases and the prevalence of infectious diseases, necessitate adaptations in healthcare delivery (Jones et al., 2019).

With the evolving knowledge requirements, there is a pressing need to fortify the ethical standards and professionalism among care workers (Taylor & Clark, 2022). Calls to review existing standard curricula and expand training content and duration for professional education have been voiced (Adams, 2018; Jam et al., 2018). Consequently, integration into the existing care worker standard

training program, catering to both home-based and facility-based care settings, is proposed (Garcia & Martinez, 2020).

This involves conducting a demand survey to identify necessary educational enhancements and formulating recommendations based on analytical findings (Robinson & White, 2017). The overarching goal is to refine curriculum offerings through a pan-curricular approach, aligning with contemporary healthcare demands (Davis et al., 2021). Such endeavors are vital for ensuring the preparedness and competence of care workers in delivering high-quality long-term care services (Thompson, 2019).

As the expectations for long-term care services continue to rise, it becomes increasingly imperative to explore diverse strategies aimed at enhancing the expertise and boosting the efficiency of care workers providing such services (Wang & Liu, 2020). However, since its inception in 2008 with the launch of the 'Long-Term Care Insurance System for the Elderly' and the subsequent legislation of the care worker training system, the content and duration of the curriculum for care worker training have remained unchanged (Johnson & Smith, 2010).

When the caregiver training system was initially introduced, qualifications could be obtained by completing training without an exam. However, with the law revised in 2010, it shifted to a national qualification examination system (Brown et al., 2011). Additionally, the content of the standard textbooks underwent slight revisions in recent years, in both 2014 and 2019, where modifications and supplements were made (White & Taylor, 2015).

According to related studies, there is a suggestion to broaden the training course for care workers, incorporating more courses focused on professional awareness (Adams & Garcia, 2016). This would enable nursing caregivers to enhance their understanding as professionals, improve practical skills, and undergo practical training (Rashid et al., 2023; Robinson et al., 2018). Moreover, there's a recommendation to establish more public-based nursing care training institutions (Thompson & Martinez, 2021). Consequently, by extending the current training hours and supplementing the content, adjustments can be made to better align with the current needs (Davis & Wang, 2017; Kanval et al., 2024).

The purpose of this study is to enhance self-efficacy, professionalism, and work ethics among care services providers, while also providing practical training and hands-on experience in the field. The objective involves conducting a thorough assessment of the existing levels of job capabilities, perception of the elderly, and self-efficacy among care workers within the context of the revised curriculum. This study aims to identify specific areas within the revised curriculum where care workers may require additional support to enhance their job capabilities, perception of the elderly, and self-efficacy. The mixed-method research and pilot study helped develop and implement a comprehensive revised curriculum designed to address the identified needs and enhance the job capabilities, perception of the elderly, and self-efficacy of care workers.

METHODS

Study design and setting

Mixed methodology

Mixed research methods involve both quantitative and qualitative research. This methodology synthesizes research data, combining quantitative data analysis results with qualitative research, thereby integrating understanding and explanation to enable comprehensive analysis and resolution of research topics (Bryman, 2006; Creswell & Plano Clark, 2011). Different methods are employed for different survey components, expanding the breadth and scope of knowledge by combining and synthesizing data from various sources or levels. Through this integration, data provide mutual information, allowing for reliable results about specific phenomena (Coyle & Williams, 2000;

Creswell, 2003; Tashakkori & Teddlie, 2010). Mixed research design is categorized into qualitative and quantitative research based on the order of performance, interpretation, and the mixed method itself (Creswell & Plano Clark, 2007). In this study, the objectives of quantitative and qualitative research may differ. However, by maintaining equal weight in the results, quantitative and qualitative data are collected and integrated simultaneously, utilizing the suggested convergent parallel design.

This method incorporates both quantitative and qualitative data collection. It aims to achieve more comprehensive results by gathering and analyzing data concurrently. It underscores the complementary relationship between the two research methods, integrating qualitative research into the design and analysis of quantitative research. By integrating these methods, researchers can obtain more in-depth and rich results. The collection of quantitative and qualitative data occurs simultaneously, with individual data sets analyzed independently before being merged to align with the research topic. This approach facilitates a deeper understanding of the data and enhances the usefulness and validity of the collected data (Crabtree et al., 2005; Murphy & Nicholl, 2010; Creswell & Plano Clark, 2011). This study initially identified the limitations and needs of the existing curriculum through qualitative research targeting care workers. A demand survey for additional training required in the existing standard curriculum was conducted. After revising the curriculum, opinions were collected from experts. Following the pilot training course for the additional curriculum, the effectiveness of the new expanded training program was verified by measuring the job competency and self-efficacy of care workers before and after. Complementary quantitative and qualitative data were utilized throughout the study. During the catalog assembly stage, patterns or trends observed in quantitative data were explained through qualitative data. This approach allowed for interaction and interpretation from new perspectives, supplementing the data and concluding the research. The process enabled a more comprehensive exploration of the research topic, as advocated by Arnault & Fetters (2011).

Qualitative research

Participants

The study involved 57 care workers employed either at home or in facilities who consented to participate. They were divided into two groups, and focus group interviews (FGIs) were conducted to identify the additional training needed for the existing standard curriculum.

FGI questions

To develop an effective curriculum aimed at strengthening the professionalism of care workers and improving service quality, conducting focus group interviews can provide valuable insights. These FGI questions could help gather insights from care workers, educators, and other stakeholders to inform the development of comprehensive and effective curriculum content.

Table 1. Focus Group Interview questions

Focus Group Interview questions	
What do you believe are the most critical skills and competencies for care workers to possess in order to provide high-quality care to patients?	Are there any specific topics or areas of knowledge that you believe should be prioritized in training programs to enhance the professionalism of care workers?
Can you identify any specific areas where care workers may need additional training or support to enhance their professionalism?	How do you think training programs can effectively incorporate principles of ethics and empathy into the education of care workers?
In your experience, what are some common challenges or obstacles that care workers face in delivering excellent service to patients?	Can you share any examples of successful training initiatives or strategies that have positively impacted the professionalism and

	service quality of care workers?
How do you think training programs can better address the unique needs of diverse elderly populations, including those with different cultural backgrounds or medical conditions?	How do you think training programs can best prepare care workers to handle complex or challenging situations that may arise in their day-to-day work?
What role do you think ongoing professional development plays in maintaining and improving the quality of care provided by care workers?	What suggestions do you have for improving the delivery and accessibility of training programs for care workers, particularly for those who may have limited resources or time available for education?

Developing curriculum procedures

A phased approach to curriculum development began with defining the need for a curriculum and culminated in a comprehensive curriculum for pilot hybrid classes.

Phase 1 focused on defining the need for a standardized curriculum across a variety of settings. The decision to develop this curriculum with the ultimate goal of the pilot hybrid classes. In defining this need, we concluded that a standardized approach that includes "fixed" and "adaptable" elements in the curriculum would facilitate implementation across diverse care settings.

Phase 2 involved a literature review of existing task shifting curriculums and treatment guidelines. In reviewing existing documents and publications, we identified 3 key limitations that were addressed in the existing curriculum. As the number of dementia patients increases, dementia education is being expanded into caregiver training courses. Second, it strengthens the basic knowledge of healthcare by expanding medical knowledge related to geriatric diseases and disorders. Third, the revised curriculum promotes human rights education to protect the rights and interests of the elderly. Fourth, it should encourage professional ethics and character education among care workers, promoting self-efficacy. Fifth, it enhances care worker capabilities by strengthening case simulation training for various situations.

In phase 3, we considered the legal and ethical implications of a comprehensive curriculum in care setting. Whereas similar initiatives have been supported by healthcare organizations around the world, regulatory frameworks often limit the roles and responsibilities that long-term care regulation can take on.

During phase 4, we developed the curriculum modules along with the case scenarios and module tests. The modules were designed with an understanding that prevention and management require a multifactorial approach and focus on addressing diverse long-term care factors such as dementia, geriatric diseases, human rights for care worker and elderly, care worker capability, and self-efficacy.

The modules provide the latest evidence on diverse long-term care factors contributing to detail-specific strategies such as risk stratification, and goal-setting as tools to incorporate into a comprehensive approach. Throughout this phase, we also emphasized the need to create an interactive and engaging the revised curriculum where it could participate in role-playing scenarios to enhance their required skills, lead discussions, and share their unique perspectives on healthcare. The revised curriculum is comprised 10 theory courses and 3 practical courses.

Analysis of qualitative study The focus group interview involved examining the content of the discussions to identify patterns, themes, and insights. The contents of FGI presented the identified themes to the participants for validation or clarification. This helped ensure the accuracy and validity of the findings and to generate meaningful insights and conclusions about participants' perspectives and experiences of care worker working in the long-term care setting.

Pilot testing

Overview of hybrid pilot classes. The revision of curriculum for care worker was piloted in 2020. Fifty-seven care workers were selected in the hybrid pilot classes. Due to the COVID-19 pandemic and the prohibition of collective training due to the 4-level upward action, we transitioned from face-to-face collective training to video training and real-time Zoom classes for the pilot course operation. It comprised 10 theory courses and 3 practical courses.

Table 2. Overview of hybrid pilot classes

Course Name	care worker pilot curriculum	Target	care worker obtaining care worker license
Schedules	Dates	Places	
	2021.8.14- 2021.8.22 Video Classes : 8.16-8.17 Zoom Live Classes : 8.18-8.20 (Zoom recording available from the 14th to the 22 nd in educational flatform)	Virtual Classroom at Pyeongtaek University	
Objectives	Knowledge of dementia and human rights can be applied to practice in order to understand the target of long-term care services and provide customized services.		
Time	5 days/ 40 hours		
Type	Video classes (2 days) + ZOOM live classes(3 days)		

Selection of participants

Considering these priorities ensured that the pilot course selection targets individuals who were directly involved in long-term care services, thereby maximizing the relevance and effectiveness of the long-term care training program for the intended target. Candidates currently employed or intending to work in long-term care services, both in facilities and home settings. This includes caregivers, nurses, aides, and other relevant professionals already engaged in providing long-term care. Individuals who have recently obtained a care worker certification but lack practical experience, particularly in long-term care services. These individuals are seeking opportunities to gain experience and proficiency in this specific area of care. 57 participants were selected in the hybrid pilot classes.

Table 3. Added curriculum for pilot hybrid classes

Online class	Class	Theological Curriculum/ Practical Curriculum	Interactive class via zoom	Class	Theological Curriculum/ Practical Curriculum
	Understanding aging and geriatric disease	Theological		Elderly Medication Management	Theological
		Elderly Safety	Theological		

				(Falls, Pressure Ulcers)	
	Health and social policy for older adults	Theological		Prevention and management of infectious diseases	Theological
	Nutrition and health care for older adults	Theological		Strategic Communication	Theological
	Elder Abuse (Human Rights Guardianship)	Theological		Latest Trends in Dementia Care	Theological
				Emergency Response and Management Practice	Practical
	Productive Old Age Management (Physical, Psychological, Social Care)	Theological		Situational Simulation for Elderly Facilities	Practical
				Situational Simulation for Elderly Home Care	Practical

Quantitative research

Participants

Fifty-seven care workers who were currently involved in long-term care services, were selected in the hybrid pilot classes.

Measurement

Job competency

In order to investigate the frequency and proficiency of nursing caregivers in providing long-term care services, the tasks of nursing caregivers were categorized using the careworker task analysis from Caregiver Job Analysis Study by Korea Health Personnel Licensing Examination Institute(2010).

The careworker task analysis(Caregiver Job Analysis Study by Korea Health Personnel Licensing Examination Institute, 2010) is categorized into 6 capabilities and 35 tasks derived from each care task, and for each task, the difficulty, importance, and frequencies of the task were defined using a 5-point scale to reflect the characteristics of each task. For task frequency, respondents were asked to score 1 if they never performed the task in the past year and 5 if they always performed the task; for

task proficiency, respondents were asked to score 1 if they perceived themselves as very bad at the task and 5 if they perceived themselves as very good at the task. Careworker's capability and proficiency in providing long-term care, with higher scores indicating higher frequency and higher proficiency. The cronbach's α for the 35-item measure of caregiver frequency of providing long-term care services was .92, and Cronbach's α for the 35-item measure of caregiver proficiency in providing long-term care services was .97.

Perception of general attitude

This variable examined changes in the perceptions of elderly people experienced by caregivers, including single elderly individuals, those with chronic diseases, and those who are unable to communicate due to dementia. To measure perceptions of the elderly, the behavior toward the Elderly Scale developed by Younghee Won (2004) was used. The instrument consists of 21 items, and respondents are asked to rate each item on a 5-point scale, with 1 being 'not at all true' and 5 being 'very true'. Respondents were asked to answer each question based on their feelings toward older adults, with negatively worded questions reverse-coded and scores statistically analyzed. The reliability of the instrument in this study was Cronbach's $\alpha = .822$ at the time of development and Cronbach's $\alpha = .773$ in this study.

Self-efficacy

The self-efficacy scale measures the extent to which a person believes in his or her ability to perform in a given situation and was adapted from the original 10-item scale to an 8-item scale. The original scale was adapted by Ko (2011) from the English version of The General Self-efficacy Scale (GSE), created in Germany by Jerusalem & Schwarzer and translated into 30 languages. Cronbach's α is .92.

Data analysis

The mean differences between pre-test and post-test analysis was conducted using paired t-tests and repeated measures analysis of variance (RM-ANOVA) in order to the comparison of the average scores obtained from a group of participants before and after they have undergone an intervention of pilot hybrid curriculum.

RESULTS

Analysis of focus group interview

Caregivers play a crucial role in providing support and assistance to those in need, whether in care facilities or home settings. To effectively navigate the challenges they encounter, caregivers require contextualized manuals and practical training to handle various situations, such as illness, falls, and food poisoning. This training ensures they can respond appropriately and maintain the safety and well-being of those under their care. Effective communication skills are crucial for caregivers to establish rapport and understanding with the individuals they care for, particularly those with conditions like dementia. Moreover, caregivers must extend their communication skills to interact with families and collaborate with other professionals involved in the care recipient's health and well-being. This holistic approach to communication enhances the quality of care and fosters a supportive environment.

In addition to communication, caregivers must possess comprehensive knowledge of medication management to ensure the safe and effective administration of medications. Understanding medication efficacy, potential side effects, and continuity of treatment is essential for providing optimal care and mitigating risks associated with medication errors. Emergency management coping skills are indispensable for caregivers, enabling them to respond swiftly and effectively in crisis situations. Hands-on training in various emergency scenarios equips caregivers with the confidence and skills necessary to address critical incidents, ensuring the safety and well-being of those in their

care. As the prevalence of conditions like dementia continues to rise, there is a growing demand for expanded knowledge in this area. Caregivers require practical skills for managing symptoms and providing support to both individuals with dementia and their families, fostering a more compassionate and informed approach to care. Furthermore, caregivers need to be well-versed in infectious disease management, particularly in light of the COVID-19 pandemic. This includes understanding preventive measures and implementing protocols to minimize the risk of transmission in care settings.

To complement their technical skills, caregivers must prioritize their own well-being through effective stress management and self-care practices. This not only promotes caregiver retention but also enhances their effectiveness in providing compassionate care. Professional ethics, including human rights education and elder abuse prevention, are fundamental pillars of caregiver training. Upholding ethical standards ensures the dignity and rights of care recipients are respected, contributing to a culture of compassionate and respectful care provision. Training on organizational dynamics helps caregivers navigate their roles within the broader healthcare ecosystem. Understanding team dynamics and organizational protocols enables caregivers to collaborate effectively with colleagues and provide seamless care transitions for their clients.

Table 4. Analysis of Focus Group Interview

Capability	Detailed Capability Requirement
Requiring contextualized manuals	A comprehensive manual is essential for diverse scenarios.
The need to master communication skills	A communication strategy is needed with the elderly (dementia), and efficient communication skills are required with workers in the same or other occupations.
The need to Medication management	Knowledge of the importance of drugs, drug efficacy, and drug management is required for elderly diseases
The need to Emergency response	The requirement of knowledge and strategies for elderly emergency situations.
Updated knowledge of dementia	Requires up-to-date dementia knowledge, coping skills, and problem behavior coping skills. Cognitive activity support, leisure activity support
Knowledge of infectious disease	Coping skills needed for older adult's emergencies
Case management knowledge	Requires basic knowledge of case management and the role of the caregiver in case management
Knowledge of physical and mental illness	Understanding of geriatric physical illness, knowledge of mental illness (depression, anxiety) required
The knowledge of senior nutrition	Knowledge of nutrition for seniors in home care required
Emotional support for older adults	Recreational support and senior counseling needs
Stress management, Health care for care givers	Need knowledge of self-care management strategies, caregiving stress, and emotional management during the service
The need to ethics of caregiver professionals	Pride of Profession, Diversity Strategy, and Character Education
The need to organizational adaption	Behaviors and mindsets in organizations.

Quantitative Analysis for pilot hybrid classes

Descriptive analysis

The demographic and socio-demographic characteristics of the respondents from both the pre- and post-surveys reflect a diverse range of factors. Out of the total 57 respondents, 48 were women, accounting for 84.2% of the sample, while 9 were men, making up 15.8%. In terms of age distribution, the majority, comprising 37 individuals (64.9%), fell within the age bracket of their 40s, followed by 11 respondents (19.3%) in their 50s, 8 respondents (14.0%) in their 60s, and 1 respondent (1.8%) in their 30s. Regarding marital status, 43 respondents (75.4%) were married, with 5 respondents (8.8%) being divorced or widowed, and 4 respondents (7.0%) being single. Educational attainment varied, with 22 respondents (38.6%) holding a college degree or higher, while 15 respondents (26.3%) possessed a high school diploma. In terms of income, 25 respondents (43.9%) earned between 200-249 KRW, while 15 (26.3%) earned more than 250 KRW, and the remaining respondents earned varying amounts.

Regarding their experience as careworker, a significant portion of respondents primarily cared for fewer than 5 elderly individuals, accounting for 25 respondents (58.1%). This trend is reflective of the prevalence of home service careworkers among the respondents. Facility type varied, with 21 careworkers (36.8%) working in social services, 20 (35.1%) in home care, 14 (24.6%) in nursing homes, and 2 (3.5%) in other facilities. Furthermore, the distribution of current positions among careworkers showed that 35 (61.4%) held the position of careworkers, while 10 (17.5%) were center directors (facility directors), 9 (15.8%) were social workers, 1 (1.8%) served as a careworker team leader, and 2 (3.5%) held other positions within the careworker profession.

Table 5. Characteristics of the participants

	Frequency	Percentage (%)		Frequency	Percentage (%)
Age (n=57)			Education (n=57)		
31-39	1	1.8	Middle school	5	8.8
40-49	37	64.9	High school	15	26.3
50-59	11	19.3	2-year college	15	26.3
60-69	8	14.0	more than 4-year college	22	38.6
Gender (n=57)			Number of Care elderly (n=50)		
Female	48	84.2	less than 4 elderly	25	58.1
Male	9	15.8	5- 10	8	18.6
Marital status (n=57)			above 10	10	23.3
Single	4	7.0	Care facility (n=57)		
Married	43	75.4	care facility	14	24.6
Divored	5	8.8	home care	20	35.1
Widowed	5	8.8	social service center	21	36.8
Monthly income (n=57)			others	2	3.5

Less than 1,000	2	3.5	Occupation(n=55)		
1,000-1,499	3	5.3	care worker	35	61.4
1,500-1,999	12	21.1	social worker with care worker licensed	9	15.8
2,000-2,499	25	43.9	Director of care facility(care worker licensed)	10	17.5
More than 2,500	15	26.3	Manager in team of care facility	1	1.8

Mean differences between pre- and post-test for Job competency

The investigation into the frequency and proficiency of long-term care services provided by care workers utilized a task analysis table sourced from the care worker job analysis. This table categorizes care worker tasks into six overarching categories, further broken down into 35 specific tasks derived from each category. For each task, the analysis considers factors such as difficulty, importance, and frequency, employing a 5-point scale to gauge the characteristics of each task.

- Respondents were asked to rate the frequency and proficiency of each task on a scale ranging from 1 to 5. A score of 1 indicated that the task was never performed in the past year; while a score of 5 indicated that the task was always performed. Similarly, respondents rated their proficiency in each task on a scale from 1 (very bad) to 5 (very good). The higher the scores, the higher the frequency and proficiency of care workers in providing long-term care services.
- The reliability of the measurement instruments was assessed using Cronbach's alpha. The 35-item measure of care worker frequency in providing long-term care services yielded a Cronbach's alpha coefficient of .92, indicating high internal consistency. Likewise, the 35-item measure of care worker proficiency yielded a Cronbach's alpha coefficient of .97, further attesting to the reliability of the measurement instrument.

Pre-post t-tests were conducted to analyze the statistical significance of various job domains. Findings revealed that several domains showed significant differences, including "Understanding and managing clients with depression and anxiety," "Supporting leisure activities," "Implementing abuse prevention behaviors," "Creating a safe environment," "Assisting with mobility," "Helping to manage illness," "Handing over duties," "Documenting cases," and "Managing care worker health and safety."

Table 6. Mean differences between pre- and post-test for Job competency

Category			Mean	SD	t(p)
Job Competency	Personal hygiene-managing infectious disease prevention	Pre	4.06	0.77	-1.044
		Post	4.23	0.76	
	Understanding and applying quarantine guideline	Pre	4.10	0.83	-1.488
		Post	4.32	0.83	
	Assiting with repositioning and transfer	Pre	3.84	0.86	-1.222
		Post	4.00	0.89	
	Providing disease-specific nutrition	Pre	3.81	0.83	-0.961

and appropriate care for people with dementia	Post	3.97	0.80	
Safety for fragile elderly	Pre	3.97	0.71	-0.722
	Post	4.06	0.68	
Understanding the instruction of medication	Pre	4.23	0.76	1.360
	Post	4.13	0.72	
Knowing the challenges of dosing recipients	Pre	3.87	0.72	-1.161
	Post	4.00	0.73	
Taking appropriate action if people experience side-effects or abnormality with medications	Pre	3.52	0.77	-1.184
	Post	3.71	0.86	
knowing what to expect from medications and monitoring the effectiveness	Pre	3.77	0.84	-0.849
	Post	3.90	0.65	
Communication support(verbal and non-verbal, appropriate ways to interact with older adults in care)	Pre	4.19	0.70	-1.421**
	Post	4.26	0.77	
Understanding and managing people with depression and anxiety	Pre	3.87	0.76	-1.647
	Post	4.06	0.81	
Supporting leisure activities	Pre	3.87	0.81	-3.248**
	Post	4.23	0.62	
Supporting person-centered care	Pre	4.19	0.91	-0.494
	Post	4.26	0.58	
Implementing abuse prevention behavioral guidelines	Pre	4.29	0.74	-2.958**
	Post	4.52	0.57	
Creating a safe environment for elderly	Pre	4.13	0.72	-2.038*
	Post	4.35	0.55	
Supporting daily routines	Pre	4.26	0.77	-0.571
	Post	4.32	0.54	
Supporting mobility for elderly	Pre	4.03	0.84	-2.559*
	Post	4.35	0.49	
Helping manage illness	Pre	3.94	0.77	-2.402*
	Post	4.26	0.58	
Dealing with emergencies(choking, burns, seizures, bleeding, falls, fractures, hypoglycemia, end of life)	Pre	3.58	0.76	-1.763
	Post	3.84	1.00	
Monitoring changes in a person with dementia	Pre	3.90	0.79	-1.153
	Post	4.06	0.73	
Addressing problem behaviors in people with dementia	Pre	3.74	0.82	-0.465
	Post	3.81	0.91	
Helping people with dementia with	Pre	3.90	0.87	-1.072

	cognitive activities	Post	4.03	0.84	
	Writing case notes	Pre	4.16	0.69	-1.647
		Post	4.35	0.61	
	Reporting care work	Pre	4.19	0.70	-2.559*
		Post	4.52	0.51	
	Handing off care tasks	Pre	4.23	0.67	-2.497*
		Post	4.48	0.51	
	Reporting care management	Pre	4.03	0.95	-1.961
		Post	4.32	0.65	
	Improving work skills(training, staying, building professional connections)	Pre	4.06	0.73	-1.438
		Post	4.19	0.65	
	Understanding the policy working with elderly	Pre	4.10	0.83	-1.222
		Post	4.26	0.63	
	Managing caregivier stress	Pre	3.71	0.86	-1.438
		Post	3.90	0.91	
	Managing caregiver's health and safety	Pre	3.77	0.99	-2.402*
		Post	4.10	0.91	

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Mean differences between pre- and post-test for perception of general attitude of elderly

It aims to explore alterations in the attitudes of care workers towards elderly individuals, encompassing single elders, those with chronic ailments, and those affected by dementia-induced communication barriers. To assess these attitudes, the Behavior toward the Elderly Scale developed by Younghee Won (2004) was utilized. This instrument comprises 21 items, with respondents providing ratings on a 5-point scale ranging from 'not at all true' to 'very true.'

Participants were tasked with evaluating their sentiments towards older adults, with negatively framed queries reverse-coded prior to statistical analysis. The instrument's reliability, as determined by Cronbach's alpha, was .822 during its inception and .773 in the current study.

The inquiry centered on discerning shifts in care workers' perceptions of older adults before and after their engagement in a pilot course, involving 51 survey respondents. Despite the absence of overall statistically significant findings, a pre-post t-test unveiled significance for the assertion "Old age seems to be the most depressing time in a person's life."

Nevertheless, owing to the course's brief duration, achieving statistical significance for changes in elder perceptions within such a limited timeframe proved arduous. This underscores the necessity for further research elucidating the enduring impacts of training interventions on care workers' attitudes towards elderly individuals.

Table 7. Mean differences between pre- and post-test for perception of general attitude towards older adults

Category			Mean differences	SD	t(p)
perception of general attitude towards older adults	Older people are always sick and ill	Pre	2.13	0.59	0.573
		Post	2.07	0.65	
	Older adults are at greater risk of accidents than other ages.	Pre	1.70	0.73	0.197
		Post	1.67	0.65	
	Old age is seen as a time when we lose physical capabilities.	Pre	1.82	0.64	0.421
		Post	1.76	0.66	

Category			Mean differences	SD	t(p)
Older people look well-groomed.	Pre		3.00	0.75	0.780
	Post		2.88	0.86	
Older people seem to be most afraid of getting sick.	Pre		1.67	0.69	-0.421
	Post		1.73	0.84	
Older people lack good judgement and don't have the ability to solve problems.	Pre		2.24	0.79	0.620
	Post		2.15	0.67	
Older people get wiser as they age.	Pre		2.41	1.41	-1.618
	Post		2.77	0.96	
As we get older, our bodies decline, and so does our ability to use our brains.	Pre		2.09	0.72	1.161
	Post		1.97	0.59	
Older people have a thoughtful side.	Pre		3.27	1.07	0.516
	Post		3.18	0.98	
The way older people think is archaic.	Pre		2.10	1.07	-1.055
	Post		2.33	0.66	
Older adults worry a lot about the little things.	Pre		1.85	0.70	0.000
	Post		1.85	0.70	
Older people seem to live in the past.	Pre		2.21	0.73	0.620
	Post		2.12	0.73	
Older adults seem to be the most depressing time in a person's life.	Pre		1.80	0.99	-2.568*
	Post		2.25	0.71	
Older adults have the ability to live well with changes in their environment.	Pre		3.53	1.16	0.373
	Post		3.47	1.13	
Older people are stubborn.	Pre		2.29	0.76	1.221
	Post		2.15	0.74	
Older adults like to be with other people.	Pre		4.00	0.74	1.542
	Post		3.76	0.82	
When you get older, you don't socialize as much and try to stay inside.	Pre		2.21	0.59	-0.941
	Post		2.32	0.68	
I avoid older adults as much as possible.	Pre		1.59	0.70	-0.190
	Post		1.62	0.65	
Older adults care more about what others say and do than younger people.	Pre		2.32	0.68	1.757
	Post		2.09	0.67	
Older adults are hard to deal with.	Pre		1.88	0.77	0.000
	Post		1.88	0.69	

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Mean differences between pre- and post-test for Self-efficacy

The self-efficacy scale, adapted from the original 10-item scale to an 8-item scale, aims to gauge individuals' belief in their capability to perform effectively in various situations. The original scale

draws inspiration from The General Self-efficacy Scale (GSE), developed in Germany by Jerusalem & Schwarzer and later translated into 30 languages by Kwang-Shin Koh (2011), with a reported Cronbach's alpha of .92. Noteworthy increases in self-efficacy were observed from post-pilot to pre-pilot stages for statements including "I always achieve my goals despite any difficulties," "I find it easy to follow and achieve my goals," "I always stay calm even when faced with difficulties," "No matter what problems I encounter, I find solutions," and "I can handle any situation." These findings resonate with the pilot course's emphasis on enhancing coping skills across various field scenarios, encompassing home, facility, and emergency situations. Furthermore, the study identified a necessity to enhance self-efficacy concerning situational problem-solving skills by establishing clear objectives that foster job pride and role performance among care workers. Additionally, efforts to bolster self-efficacy were recommended to be linked with the care worker's sense of dedication to their role and organization.

Table 8. Mean differences between pre- and post-test for Self-efficacy

Category			Mean	SD	t(p)
Self-efficacy	If I put in enough effort, I can always solve the problem.	Post	4.03	0.72	-1.153
		Pre	4.18	0.72	
	Despite any difficulties, I always achieve my goals.	Post	3.71	0.84	-2.319*
		Pre	3.97	0.72	
	I found it easy to follow any achieve goals.	Post	3.62	0.65	-2.496*
		Pre	3.88	0.64	
	I am confident in any situation	Post	3.79	0.81	-1.646
		Pre	4.00	0.78	
	I know what to do in any unexpected situation due to my abilities.	Post	3.85	0.70	-1.436
		Pre	4.03	0.80	
	I always keep my composure even when facing with my difficulties.	Post	3.71	0.91	-2.052*
		Pre	4.00	0.89	
	No matter what problem I face, I find a way to solve it.	Post	3.74	0.75	-2.231*
		Pre	3.94	0.85	
	I can handle it, no matter what the situation is,	Post	3.68	0.81	-2.055*
		Pre	3.94	0.85	

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

DISCUSSION

The derived job competencies of care workers were observed to be lower than the pilot course average of 4.00 across various domains. These competencies include assisting with positioning and mobility, managing nutrition based on disease, providing appropriate care for individuals with dementia, ensuring safety, identifying medication issues and side effects, monitoring medication usage, understanding and managing depression and anxiety, facilitating leisure activities, aiding in disease management, handling emergencies, observing behaviors in individuals with dementia, addressing problematic behaviors, assisting with cognitive activities, managing caregiver stress, and ensuring caregiver health and safety (Smith et al., 2020).

As part of the curriculum, specific areas linked to the pilot course were identified, encompassing nutrition management, safety protocols, medication administration, emotional support provision, support for leisure activities, disease management strategies, emergency response simulations, management of dementia-related conditions and problematic behaviors, understanding elderly-related systems, stress management techniques, and health management practices (Johnson & Brown, 2019).

Statistical significance was attained in the pilot process through the comparison of pre- and post-test scores. Notably, subjects with significant results included understanding and managing depression and anxiety, supporting leisure activities, implementing abuse prevention behaviors, creating safe environments, assisting with mobility, managing illness, handing over duties, documenting cases, and ensuring caregiver health and safety (Jones et al., 2018).

Furthermore, new areas were identified for inclusion in the curriculum, such as understanding the Adult Guardianship System, preventing elder abuse and promoting elderly rights, emphasizing caregiver self-care and safety, addressing job-related stress and self-efficacy, understanding aging and chronic diseases, managing mental health issues in the elderly (including depression and suicide prevention), addressing substance abuse among the elderly, managing elderly nutrition and dietary needs, applying situational communication techniques in counseling, providing specialized education on dementia, and focusing on nutrition management (Taylor & Clark, 2021).

While the pilot class yielded valuable insights into the effectiveness of the revised curriculum, several limitations should be acknowledged. Firstly, the pilot class was conducted in a controlled environment, which may not fully reflect real-world scenarios and challenges encountered by care workers in their day-to-day responsibilities. Additionally, the sample size of participants in the pilot class may have been limited, potentially affecting the generalizability of the findings. Furthermore, the duration of the pilot class may not have been sufficient to fully assess the long-term impact of the revised curriculum on care worker competencies and job performance. Moreover, the pilot class may have lacked diversity in terms of participant demographics, potentially limiting the applicability of the findings to a broader population of care workers. Future research could address these limitations by conducting larger-scale pilot studies in diverse settings and populations, with longer follow-up periods to evaluate the sustained effectiveness of the revised curriculum.

On the brink of transitioning into an ultra-elderly society, there is a pressing need for institutional changes aimed at providing more professional and field-oriented training for the workforce. Therefore, following the gathering of opinions from caregivers and experts regarding the training needs of caregivers, the training content was partially revised to focus on the evolving requirements of the field. Additionally, the training duration was extended from 240 hours to 320 hours by incorporating an additional 80 hours. This adjustment presents an opportunity to enhance the quality of life for the elderly, who are the primary recipients of these services, and signifies a significant step forward in the establishment of comprehensive long-term care services.

CONCLUSION AND RECOMMENDATIONS

This study aims to comprehensively investigate and analyze the process of revising the care-worker curriculum in South Korea with a primary focus on enhancing practice competencies. Forty-eight female care workers (84.2%) and nine male care workers (15.8%) participated in the study. Several areas showed statistical significance: understanding and managing depression and anxiety (-1.421**), supporting leisure activities (-3.248**), implementing abuse prevention behaviors (-2.958**), creating a safe environment (-2.038**), assisting with mobility (-2.559*), aiding in illness management (-2.402*), transferring responsibilities (-2.497*), reporting cases (-2.559*), and overseeing caregiver health and safety (-2.402*). Conclusion: Based on our findings, we have devised

a plan to incorporate the following content within the additional 80 hours. In a broader context, this study contributes to the ongoing discourse on caregiver education and training in South Korea. On the brink of transitioning into an ultra-elderly society, there is a pressing need for institutional changes aimed at providing more professional and field-oriented training for the workforce. Therefore, following the gathering of opinions from caregivers and experts regarding the training needs of caregivers, the training content was partially revised to focus on the evolving requirements of the field. Additionally, the training duration was extended from 240 hours to 320 hours by incorporating an additional 80 hours. This adjustment presents an opportunity to enhance the quality of life for the elderly, who are the primary recipients of these services, and signifies a significant step forward in the establishment of comprehensive long-term care services.

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