Nurses' perceptions of gerontological nurse practitioner programme curricula: A qualitative descriptive study

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Purpose: This study aimed to describe nurses' perceptions of gerontological nurse practitioner (GNP) programme curricula, especially positive and negative aspects of the curricula and suggestions to improve the curricula. **Methods:** Twenty-one certified GNPs attended one or two interviews and the data obtained were analysed using a conventional content analytic method. **Results:** The analysis revealed seven categories and 18 subcategories. The main positive aspects of the GNP programme curricula were "Acquiring knowledge and skills to elder care through the GNP programme" and "Application of gerontological nursing-related knowledge and skills attained from the GNP programme." The negative aspects included "Didactic education insufficient for the development of expertise in gerontological nursing" and "Ineffective and suboptimal operation of clinical practice curriculum." Suggestions to improve the GNP programme curricula were "Enhancement of education in core courses," "Strengthening the contents of gerontological nursing didactic courses," and "Quality improvement of clinical practice." **Conclusion:** The findings indicate that educators, policymakers, and other stakeholders should re-examine the current GNP programme curricula to provide GNP students with quality education and training pertinent to professional healthcare for older adults in various healthcare settings.

Keywords: Nurse practitioners; Advanced practice nursing; Geriatric nursing; Nursing education; Qualitative research

INTRODUCTION

1. Background

South Korea became an aged society in 2018 and is projected to become a super-aged society by 2025 [1]. To manage older adults' health and functions effectively and thereby improve their quality of life, it is imperative for healthcare providers to obtain the appropriate knowledge and skills for elder care through additional education and training. The gerontological nurse practitioner (GNP) is one of the healthcare providers who have advanced education and training in elder care. In South Korea, the GNP refers to an advanced practice nurse (APN) who 'establishes nursing plans, conducts various programmes, and cares for older adults in hospitals, medical welfare institutions, and nursing homes to improve their health and conditions' [2]. Following the legislation of the APN system in 2003, 2,511 registered nurses (RN) received a GNP certificate through certification examination by 2021 [3].

To become a GNP in South Korea, an RN must complete 13-credit core courses, 10-credit gerontological nursing didactic courses, and 10-credit clinical courses on master's-level in an educational institution recognized by the Minister of Health and Welfare and pass the national certification examination [4]. Although each institution operates its GNP programme with some variability, its curriculum is based on the standard

curriculum that the Korean Accreditation Board of Nursing Education presents. The Board requires that the GNP educational programme consists of six core courses (i.e., pathophysiology, pharmacology, advanced health assessment, nursing research, nursing theory, APN roles and related policies), five gerontological nursing didactic courses (i.e., advanced gerontological nursing for healthy aging and health promotion, management of geriatric disorders I and II, management of long-term care I and II), and at least 300-hour gerontological nursing-related clinical courses (i.e., practicum in nursing management of health problems in older adults I and II, practicum of long-term care management I and II) [5].

The GNP educational programme has been evolving since its commencement in 2004. Under the permission of the Ministry of Health and Welfare in August 2003, seven Schools of Nursing launched the GNP educational programme in 2004 [6]. The Korean Accreditation Board of Nursing Education established operational guidelines for APN educational programmes to comply with in 2006 and convened a Curriculum Special Committee in 2014 to derive the core competencies of APNs and review the educational programmes by field. After a long discussion process, the Board confirmed the reorganization of the GNP programme curricula in 2021, and each school has been reorganizing its GNP programme curricula currently [5]. In addition, the Board has made the first revision to APN educational programme operation guidelines in March 2023 after the release of the operation guidelines in 2006 [7].

To improve or maintain the quality of APN education, the Korean Accreditation Board of Nursing Education has audited APN education programmes at each institution annually. However, the evaluation focuses on the status of student enrolment and completion as well as the structure and operation of APN programmes rather than the content and quality of education [8]. In 2014, Shin et al. [9] showed that GNP students faced difficulty in attaining the GNP competence owing to a lack of GNP preceptors who could serve as role models in the clinical setting. In the real-life scenario, staff nurses who are not GNPs and physicians served as preceptors in clinical practice [9].

On 19 April 2022, the Ministry of Health and Welfare revised and promulgated the Rules on Recognition of Qualifications as Professional Nurses, which stipulates the scope of practice for nurse practitioners (NPs) in 13 fields [10]. Furthermore, this revised regulation provides a basis for entrusting the quality management of professional nurse education institutions, which may contribute to the effective development of APNs' clinical roles and capability. Unfortunately, knowledge of the quality of GNP programme curricula from the programme completers' perspectives is limited. Therefore, this study was conducted with an aim to describe positive and negative aspects of the current GNP programme curricula and provide suggestions to promote/improve the programme, from the perspective of RNs who are certified GNPs. The findings of this study may provide a fundamental framework for the development of practical strategies that improve the quality of GNP education and training.

2. Research Purpose

This study was performed to describe nurses' perceptions of the GNP programme curricula with a key focus on identifying the positive and negative aspects of the programme curricula and provide suggestions to improve the curricula.

METHODS

Ethic statement: This study was approved by the Institutional Review Board (IRB) at Chung-Ang University (IRB No. 1041078-202111-HR-330-01), and we obtained written informed consent from participants.

1. Study Design

This study employed a qualitative descriptive approach with semi-structured, individual interviews and conventional content analysis [11].

2. Participants and Recruitment

This study utilized purposeful sampling to recruit RNs with a GNP certification who provide care to older patients in clinical settings. Recruitment for this study was advertised through the website of Korean Association of Advanced Practice Nurses and the nurse community mobile application which was used by over three million nurses to manage and share their work schedules. Individuals who fulfilled the inclusion criteria and were interested in participating could directly contact the principal investigator (PI) or submit their name and contact information through the online link that was provided. The PI

explained the study's purpose and methods again and received written informed consent which was submitted online. Each potential participant who was interviewed was asked about other potential participants, and this additional snowball sampling approach facilitated the recruitment process. The recruitment continued until no new information related to the experiences of GNP programme curricula emerged. A total of 21 participants were recruited.

3. Data Collection

Prior to data collection, the authors developed an interview guide based on a review of the relevant literature and a consultation with a nursing professor with expertise in gerontological nursing, and pilot-tested the interview guide on three RNs who were certified GNPs. The main interview questions were: "Please tell me how the GNP programme that you were enrolled has helped you with your clinical practice"; "Could you tell some good things about the GNP programme that you had enrolled in?"; "Tell me about something that you think is unsatisfactory or problematic in the GNP programme"; and "Please tell me any suggestion to improve the quality of the GNP programme curricula."

The PI collected data through semi-structured individual interviews with the participants from 2 February to 8 March 2022. After obtaining permission from the participants for audio-recording an interview, the PI conducted interviews in person (n=2) or by telephone (n=19) based on the participant's convenience, at their desired time, and in places (a meeting room at a hospital and separate area in cafe) where privacy could be protected. The PI started interviews by asking about the participants' general characteristics (e.g., age, sex, degree of education, marital status, religion, years of GNP certification, total clinical experience, and position) and indicated their answers in the questionnaire. Prior to the main interviews, the PI obtained permission from the participants once again to audio-record the interviews. Each participant participated in one to two interviews; the first interview lasted 30~60 minutes whereas the second interview, which was conducted to ask additional questions or clarify unclear information, lasted, on average, 10 minutes. During the interview, questions were asked flexibly according to the flow of the participant's story, and the PI maintained a sympathetic attitude as much as possible to create a comfortable atmosphere. Moreover, the PI documented the non-verbal expressions of the participants during the interviews and the reflection notes at the end of each interview (interview atmosphere, subject attitude, researcher's feelings, summary of the interview, etc.). The audio-recorded interviews were transcribed verbatim, and the PI compared the transcripts with audio-recordings to confirm their accuracy.

4. Data Analysis

The general characteristics of the participants were analysed using descriptive statistical analysis in the IBM SPSS 27 program (IBM Corp.). We managed and analysed interview data using NVIVO 13 (QSR International), a qualitative research and analysis software. To describe nurses' perceptions of the GNP programme curricula and provide suggestions to improve the curricula, the interview data were analysed using the conventional content analysis with an inductive coding method [12]. Two authors repeatedly read transcripts to familiarise themselves with the content of the interviews, and independently open-coded the first three transcribed interview data, compared the results, and reconciled any differences through discussion. Thereafter, the PI coded the rest of the transcripts and grouped similar or relevant codes into subcategories and categories; the second author reviewed and confirmed the codes, subcategories, and categories at weekly meetings. Moreover, two authors selected representative quotes from the interviews to present the findings, and the quotes were translated into English by the bilingual second author.

5. Researcher Preparation and Trustworthiness

The PI received education and training on qualitative research by availing nursing research courses in the master's programme, reviewing the literature on qualitative methodologies, participating in qualitative research as an interviewer, and meeting with nursing professors who were qualitative research experts. Furthermore, the PI had more than 10 years' experience in caring for older adults in the internal medicine and surgical wards and outpatient departments of tertiary general hospitals, which helped to not only establish relationships with the participants but also understand the contents of the interviews.

To secure the trustworthiness of the study's findings, Lincoln and Guba's four criteria were considered [13,14]. To ascertain credibility, which establishes whether the collected data and the analysed results are reliable, the PI conducted interviews

with sufficient margin to allow the participants to fully express their experiences. During the interview, the participants' ambiguous statements were clarified until the PI fully understood the statements. Furthermore, when the PI found a lack of content or an incomprehensible section during the analysis, she contacted the participants to schedule additional interviews. The reliability of analysis and interpretation could be increased through discussion with the second author about the research results. Transferability means to evaluate whether the analytical results can be extrapolated to a similar situation. The PI tried to increase the transferability by describing the participants' vivid and specific expressions. Dependability, a criterion for evaluating whether a study has been conducted in a consistent and traceable manner, was maintained by recording all processes of data collection and analysis and verifying the documentation with the second author who has rich experience in qualitative research. To determine the confirmability, a criterion for evaluating what efforts have been made to minimise researcher bias or influence, the PI tried to maintain neutrality by setting aside her personal bias and reflecting the experience and thoughts of the participants as much as possible.

6. Ethical Considerations

This study was approved by the IRB at Chung-Ang University (IRB No. 1041078-202111-HR-330-01). The PI informed the participants about the purpose of the research, methods, benefits and risks, the need for audio-recording of the interview, the anonymity of the data, the guarantee of privacy and confidentiality, the incentive for participating in the research, and the right to refuse to participate in the research. Then, the PI obtained written informed consent online from the participants.

RESULTS

1. General Characteristics of the Participants

Table 1 shows the general characteristics of the 21 participants (age: 38.1 ± 7.7 years, all females); the majority of participants were married (n = 12, 57.1%), religious (n = 11, 52.4%), had 10~20 years of professional experience (n = 10, 47.6%), and most frequently worked in tertiary general hospitals (n = 10, 47.6%), followed by secondary general hospitals (n = 5, 23.8%), long-term care hospitals (n = 3, 14.3%), and nursing

Table 1. General Characteristics of Participants (*N*=21)

Characteristic	Category	Value
Age (year)		38.1±7.7 (28~56)
Sex	Female	21 (100)
Marital status	Single	9 (42.9)
	Married	12 (57.1)
Religion	No religion	10 (47.6)
	Christian	6 (28.6)
	Buddhism	3 (14.3)
	Catholic	2 (9.5)
Locations of educational institutions	Seoul (7 institutions)	18 (85.7)
	Gyeonggi-do (1 institution)	1 (4.8)
	Others (2 institutions)	2 (9.5)
Period since certification (year)	<1	8 (38.1)
	1 to <5	8 (38.1)
	5 to <10	1 (4.8)
	≥10	4 (19.0)
Total clinical experience (year)	5 to <10	5 (23.8)
	10 to <20	10 (47.6)
	≥20	6 (28.6)
Clinical experience in current position (year)	<1	5 (23.8)
	1 to <5	8 (38.1)
	5 to <10	1 (4.8)
	10 to <20	7 (33.3)
Current workplace	Tertiary hospital	10 (47.6)
	General hospital	5 (23.8)
	Long-term care hospital	3 (14.3)
	Nursing home	3 (14.3)
Current position	GNP	4 (19.0)
	Other APN	3 (14.3)
	Coordinator or educational nurse	2 (9.5)
	General nurse	9 (42.9)
	Head nurse	3 (14.3)

Values are presented as mean±standard deviation (range) or number (%). APN=Advanced practice nurse; GNP=Gerontological nurse practitioner.

homes (n = 3, 14.3%). The period from the GNP certification was mostly less than 5 years (n = 16, 76.2%). The participants' current positions were a gerontological APN (n = 4, 19.0%), other APNs (n = 3, 14.3%), coordinator or educational nurse (n = 2, 9.5%), general nurses (n = 9, 42.9%), or managers (n = 3, 14.3%). Twenty-one participants in this study completed their education at ten different educational institutions.

2. Nurses' Perceptions of the GNP Programme Curricula

From the data analysis, seven categories and 18 subcategories emerged regarding three domains: (a) positive aspects of GNP programme curricula; (b) negative aspects of GNP pro-

gramme curricula; and (c) suggestions to improve the curricula (Table 2).

1) Positive Aspects of the GNP Programme Curricula

The positive aspects of the GNP programmes that the participants had enrolled in included being able to acquire knowledge and skills specific to elder care and apply them to their clinical practice. This domain comprises two categories and four subcategories.

(1) Acquiring knowledge and skills to elder care through the GNP programme

Through the GNP programme curricula, participants articulated that they were able to descriptively and intensively learn about aging-related physical, cognitive, psychological, and social changes, the characteristics of older adults' health problems, and how to manage the health problems. The most helpful content included non-specific signs and symptoms of older adults' health problems, types and management of dementia, and the latest management guidelines for various diseases that are common in older adults. Through their acquisition of knowledge about older adults' aging-related normal changes and common health problems, the participants were able to cultivate an inclusive attitude toward older adults and their health problems.

We learned a lot of knowledge and skills related to older adults. This knowledge and skill helps to understand not only the physical part of older adults, but also the social and psychological parts. It really helped me a lot in caring for older patients, and I came to understand them more comprehensively.

(2) Application of gerontological nursing-related knowledge and skills attained from the GNP programme

By learning advanced health assessment, pharmacology, and communication methods, the participants were able to apply

Table 2. Participants' Perceptions of GNP Programme Curricula

Domain	Category	Subcategory
Positive aspects of the GNP programme curricula	Acquiring knowledge and skills to elder care through the GNP programme	Intensive learning about health issues of older adults
		Cultivating a broad understanding and inclusive attitude towards older adults
	Application of gerontological nursing–related knowledge and skills attained from the GNP programme	Applying expert knowledge of gerontological nursing to patient care
		Educating patients and families based on professional knowledge and skills learned from the programme curricula
Negative aspects of the GNP programme curricula	Didactic education insufficient for developing expertise in gerontological nursing	Didactic education not focused on health care for older adults
		Didactic education lacking clinical reflection
		Insufficient content on the role of GNPs in health care for older adults
	Ineffective and suboptimal operation of the clinical practice curriculum	Lack of quality clinical practice guidance
		Suboptimal practice settings
		Poor clinical practice operation
Suggestions to improve the curricula	Enhancement of education in core courses	Strengthening education on pathology, pharmacology, and advanced health assessment linked to the characteristics of older adults
		Addition of education to improve administration, planning, and communication skills
		Reflection of actual field expert opinions in training contents
	Strengthening the contents of gerontological nursing didactic courses	Reinforcement of educational contents regarding the management of older adults' health and diseases
		More educational contents related to medical welfare services for older adults
		More educational contents on the latest trends in care for older adults
	Quality improvement of clinical practice education	Assignment of practice sites where the actual roles of GNPs can be observed
		Securing various practice sites

GNP=Gerontological nurse practitioner.

their knowledge and skills to their care of older adults and families in clinical practice. Particularly, some participants stated that education about long-term care insurance for older adults helped them to provide older adults and their families with better education regarding the social welfare services that are available to older adults and families.

While I was in the GNP programme, I learned a lot. First, my knowledge increased a lot, so the application of it also improved a lot. In fact, older adults are different from adults, right? By getting to know those characteristics (of older adults) better, I was able to take care of the older patient's emotional part in a different way.

Besides the acquisition of knowledge and skills specific to elder care, there were a couple of additional comments. One participant liked the content that pertained to GNPs being primary care providers in the United States, and another participant stated that it was good to learn how to begin and operate long-term care businesses and facilities.

2) Negative Aspects of the GNP Programme Curricula

The negative aspects of the GNP programme curricula that participants enrolled in included didactic education that was insufficient for the development of expertise in gerontological nursing and ineffective and suboptimal operation of the clinical practice curriculum. This domain consists of two categories and six subcategories.

(1) Didactic education insufficient for developing expertise in gerontological nursing

Participants stated that the didactic education of the GNP programme curricula was less focused on elder care than they had expected. Though many older adults have multiple chronic conditions, the didactic content was too focused on the management of individual diseases to address the complex and complicated care needs of older adults with multiple chronic conditions. Moreover, some participants pointed out the insufficiency of content on social welfare and long-term care of older adults.

Older adults have a lot of chronic diseases, don't they? …… (In the management of diseases of older adults) I learned about each individual disease, not complex issues derived from multiple chronic conditions. In clinical fields, in fact, older adults have a complex of various geriatric diseases with multiple physical and cognitive declines.

Furthermore, participants reported that the didactic education provided in the GNP programme often barely reflected the latest trends or actual clinical practice; therefore, they felt that the didactic content was disconnected from the current clinical practice. Specifically, the content of advanced health assessment course was considerably general and old-fashioned; thus, participants found it difficult to apply their knowledge and skills for assessing older adults' health and functional status and even found some skills actually useless in clinical practice. In addition, though they believed that GNPs should be able to interpret the results of diagnostic tests that are commonly performed for older adults and understand the pharmacological mechanisms of medications that are commonly prescribed to older adults in clinical practice, the basic science courses were less helpful for the equipment of such practical knowledge than they expected.

What I was dissatisfied with the most was the content of basic medical science. I expected that learning basic medical science would give me the ability to interpret patients' culture results in a clinical setting, but it didn't. What medication should be used based on the results of the culture? What criteria are considered by the infectious department? What does extended-spectrum beta-lactamase or carbapenem-resistant Enterobacteriaceae mean? As an APN, [we should know] …

Furthermore, some participants complained about the insufficient course content on the roles of GNPs in elder care. Though the participants learned how to treat individual health problems of older adults, they were still uncertain about how to contribute to elder care as GNPs.

In the management of diseases in older adults… Though the opinions of physicians are important, I think that nurses also have specialised knowledge necessary to perform direct nursing care when caring for [older] patients in clinical practice. So, I wondered what it would have been like to have lectures about geriatric diseases and their treatments from APN.

(2) Ineffective and suboptimal operation of the clinical practice curriculum

Participants articulated that the GNP programme's clinical practicum was ineffective and suboptimal to develop their professionalism as GNPs. The reasons were the lack of high-quality clinical practice guidance, suboptimal practice settings, and

poor clinical practice operation.

First, in relation to the lack of high-quality clinical practice guidance, it was difficult to learn about the role of a GNP because clinical practice was mainly based on observation, without a GNP preceptor or systematic practice guidance. One participant stated, "*In clinical settings, I didn't have much experience [besides observation]. I didn't even observe how GNPs function in elder care [because there weren't GNPs in clinical settings].*"

Furthermore, some participants indicated suboptimal practice sites, wherein their clinical practice sites included outpatient clinics (often unrelated to elder care), high-end long-term care hospitals, and nursing homes. Often, the clinical sites did not meet the individual learning needs of students, as expressed by one participant: "*To be honest, I don't think there was much I could learn from outpatient clinic practice. We didn't know about [medical histories of] the outpatients who visited, but we just sat there listening to physicians talking to patients.*"

Furthermore, poor operation of clinical practice, characterised by the unsystematic management of student practice and unwelcome atmosphere at the practice sites, contributed to the participants' dissatisfaction with the clinical practice curricula.

When I went to the clinical practice, staff in practice sites often didn't know that GNP students were coming to the practice due to poor communication among the staff within the practice site. In clinical practice at a hospital, physicians mainly guided us with enthusiasm. However, fellow physicians often asked 'who are they?' pointing to us, and then we felt a little intimidated.

Other minor comments about the negative aspects of the GNP programme curricula included questionable usefulness of nursing theory and nursing research courses, different educational contents in educational institutions, and lack of up-to-date information on the GNP certification examination.

3) Suggestions to Improve the Quality of GNP Programme Curricula

The participants proposed three main suggestions to improve the quality of the GNP programme curricula: (a) enhancement of education in core courses; (b) strengthening the contents of gerontological nursing didactic courses; and (c) quality improvement of clinical practice education for geriatric nurses. This domain consists of three categories and eight subcategories.

(1) Enhancement of education in core courses

The participants reported that it would be better for the educational content of certain core courses to be delivered in the context of elder care. To develop and strengthen their clinical capabilities as GNPs, the participants believed that pathophysiology and pharmacology courses should comprise aging-related changes. Particularly, the advanced health assessment course needs to have more intensified and gerontological nursing-related content than the undergraduate health assessment course.

[Rather than separately learning basic science such as pathophysiology and pharmacology] Wouldn't it be helpful to integrate the content of pathophysiology and pharmacology into the Advanced Gerontological Nursing for Healthy Aging course and explain pathophysiology and pharmacology by diseases common in older adults in detail and comprehensively?

Moreover, participants recommended that pathophysiology and pharmacology courses reflect real-life clinical practice. For example, one participant articulated that it would be more practical to review medications that a certain older patient took to manage his/her medical problems, with a focus on their mechanisms, how to prescribe them, and common side effects. Thereby, the participants thought that they might be able to apply the knowledge attained from the basic medical science courses to clinical practice better.

I think drug reviews are important...... The content of pharmacology is currently too general. ......In the pharmacology class, if we review a list of drugs that the patient is actually taking in consideration of the patient's disease state and clinical symptoms, we would be able to learn which drugs should be continued, stopped, or switched to different drugs.

Some participants suggested the inclusion of additional content on professional skills for communication, administration and planning, and education in core courses to strengthen their competence as GNPs. Specifically, effective communication and presentation skills, and the capacity to develop educational programmes for older adults, families, or other professionals were mentioned.

Preparing, planning, or creating an educational programme related to elder care requires a lot of thought and efforts. I must

set up an education schedule, a type of audience, instructors to invite, and a place to increase the effectiveness of education... I think I need some experience [in preparing, planning, or creating educational programmes] to develop my capacity of administration, planning, and education as a GNP.

(2) Strengthening the contents of gerontological nursing didactic courses

Participants stated that, in order to provide better health management for older adults as a GNP, the specialty-related didactic courses should address older adults' common health problems, management approaches, medical welfare services, and the latest elder care trends more comprehensively and intensely. Regarding the older adults' common health problems and management, participants thought that the deep understanding of key features of geriatric diseases and conditions (especially, dementia) and strategies to respond to medical emergencies of older adults are particularly imperative. Thus, they articulated the need of more education on such topics. For instance, one participant expressed, "*Isn't dementia-related education really lacking? I thought a lot about it. So, what if the dementia-related programme curricula was a little longer?*"

With regard to medical welfare services for older adults, participants wanted more content about the medical welfare services that were available for community-dwelling older adults after discharge from hospitals. In addition, some participants suggested more content regarding the establishment of nursing homes and the latest trends in elder care, such as new paradigms, technologies, and products related to gerontological nursing.

In my case, the most frequently asked question is about the affiliated hospitals which patients can go to after discharge because it is hard for older patients to take care of themselves on their own after discharge from a tertiary hospital. In connection with this, many people ask about national benefits, support, and subsidies that older adults can receive, and t other intermediate facilities, but there is little information about them...

(3) Quality improvement of clinical practice education

Participants strongly suggested the need for quality improvement in clinical practice to improve the GNP curriculum. For the quality improvement of clinical practice, most of the participants emphasised the importance of having clinical sites where they could observe the role of GNPs. For instance, one

participant stated, "*Wouldn't it have been more stimulating for me if I could go and see the place where they are playing the role of a GNP? I wish I hadn't felt that way.*"

Participants highlighted that various clinical sites should be available for GNP students to experience various types of elder care. Such clinical sites included geriatric wards in general hospitals, long-term care hospitals, long-term care centres (e.g., day-care centres for older adults), and nursing homes of diverse quality grades. Some participants mentioned that they had observed elder care that was provided in exclusive nursing homes or long-term care hospitals only, and therefore wished to experience elder care in moderate (or general) institutions that are more common.

The nursing home [which I went to for clinical practice] was of a very good standard. It was a nursing home where people with a bit of material freedom reside. It was a bit difficult to feel the inferiority of nursing facilities. I wonder what it would be like to have clinical practice in nursing homes that are common around us or where marginalised older adults reside.

DISCUSSION

As a result of analysing the interviews in this study, four main positive and negative aspects of the current GNP programme curricula emerged. Although the participants were able to obtain the knowledge and skills related to elder care from the GNP curricula and apply them into their practice, the quality of gerontological nursing-related didactic and clinical courses was questionable. As participants stated, it is necessary to enhance education in core courses and gerontological nursing didactic courses (e.g., a strong focus on gerontological nursing), improve the quality of clinical practice, and diversify types of clinical practice sites (e.g., clinical sites where GNP students can observe the role of GNPs). The study findings also indicate that the GNP programme curricula should actively reflect the opinions of educators, policymakers, and GNPs in the clinical fields in order to provide high-quality education and training to students in GNP programmes.

In this study, the GNP programme curricula provided the participants with an opportunity to intensively learn about geriatric diseases and atypical/non-specific responses of older adults to illnesses and cultivate an inclusive attitude towards older adults. This finding is consistent with those of previous studies that greater knowledge of the physical, psychological,

and social features of older adults leads to more positive attitudes of nurses towards older adults [15,16] and that long-term care hospital nurses' knowledge of the older population and their nursing performance improved after the receipt of education on gerontological nursing [17]. Professional knowledge about elder care and an inclusive attitude towards older adults are important for providing professional geriatric care, and the GNP programme curricula contribute to the development of these competencies.

This study presented that one of the main problems of the current GNP programme curricula in general was ineffective and suboptimal operation of clinical practice for GNP students that was characterised by the lack of GNP preceptors or role models for the GNP students, limited clinical sites, and the unwelcome atmosphere in the available clinical sites. Moreover, the participants emphasised the necessity of improving the quality of clinical practice in GNP education by correcting such deficiencies. The lack of systematic guidance due to a lack of GNP preceptors or roles models at clinical sites has been identified previously [9,18]. In a survey of APN students, professors, and nursing administrators in APN programmes regarding the status of preceptors for practical guidance, nurses who were not APNs or physicians at clinical sites were seen to act as preceptors [19]. In the case of physician preceptors, the participants found it difficult to acquire the role of an APN because physician preceptors focused on the content that was necessary to train physicians [19]. In the United States, when the lack of qualified preceptors and limited clinical sites for NPs students became big issues, there were several suggestions to resolve these issues, including a review (evaluation) of existing clinical practice, use of simulation education to maximise the effect of clinical practice, expansion of clinical practice to geriatric hospitals and long-term care facilities, and interprofessional education [20]. In Taiwan, the APN students learned and improved their interpersonal and communication skills by interviewing standardized patients [21]. As Korea experiences a similar shortage of GNP preceptors and clinical sites, simulation, interdisciplinary education, and expansion of clinical practice to long-term care centres and hospitals and dementia centres may prove realistic alternatives. Moreover, for ensuring quality of practice, stringent criteria for clinical preceptors and more discussions and strategies to increase GNP positions in healthcare institutions are necessary.

In this study, the lack of didactic content for cultivating expertise in gerontological nursing as a GNP was considered an area for improvement. This finding is consistent with that of a previous study which found that the GNP programme curricula did not significantly differ from the undergraduate curriculum and did not correspond to an advanced level of knowledge and skills [19]. Particularly, this study showed that despite the presence of the 'Elderly Welfare Nursing' course as one of the major didactic courses, the educational content on social and medical welfare and long-term care services for older adults was insufficient. This finding indicates that though the 'Elderly Welfare Nursing' course aims to provide an understanding of policies that are related to the welfare for older adults and to integrate gerontological nursing and welfare [22], the course does not include the content that nurses actually require in clinical practice. Thus, through periodic evaluations with GNP students, GNPs, RNs, and other professionals who provide elder care in clinical practice, the educators should continually evaluate the content of major didactic courses and address the educational needs of GNPs and nurses in practice. Additionally, utilising electronic learning resources (e.g., podcasts, case studies, educational videos) may be useful in providing self-learning materials to students and improving the quality of lectures [23].

Besides the improvement of gerontological nursing-related didactic and clinical education, the enhancement of the education in core courses (e.g., pharmacology, pathophysiology, advanced health assessment) was one of the suggestions of the participants in this study. To enhance such education, core courses need to reflect aging-related changes and elder care. This suggestion is in line with the opinion of Oh et al. [19] that core courses need to be included in consideration of the APNs' specialty. In the real-world scenario, GNP students often take the core courses with students from other APN programmes as the course contents overlap across specialties. To facilitate students' learning in the core courses while reflecting their specialty, educators need to devise innovative and practical strategies for imparting knowledge. Having group activity sessions wherein GNP students review the medications that are prescribed, the pathophysiology of geriatric diseases diagnosed, and health assessments in specific scenarios involving older patients, while taking core courses with other APN students, may be helpful to meet their educational needs.

This study has several limitations. Although educational institutions follow the standard curriculum that the Korean Accreditation Board of Nursing Education presents, the educational content and programme operation may vary across edu-

cational institutions. This variability may not be revealed in our findings as the sample size is small and not representative of all the GNP programmes. Most participants were working in secondary or tertiary general hospitals, and their perceptions might have differed from those of nurses working at long-term care institutions. As we recruited only nurses who were GNP certified, the programme educators' and other stakeholders' opinions, which are necessary to evaluate the GNP programme curricula comprehensively, were not explored. Despite these limitations, this study was one of the few studies that looked into the quality of GNP education in South Korea.

CONCLUSION

This qualitative descriptive study identified positive and negative aspects of the GNP programme curricula and suggestions to improve the curricula. The findings presented herein may provide a fundamental framework for developing practical strategies to improve the quality of GNP education. Based on the study's findings, we suggest the following: (a) incorporation of the opinions of healthcare providers, including GNPs, nurses, and other relevant professionals, to reorganise the GNP programme curricula and to advance GNP students' knowledge and skills in elder care; (b) evaluation of students' satisfaction with their GNP programmes on a regular basis; (c) surveys that target all GNP educational institutions to systematically describe and examine variability in the educational content and programme operation; and (d) surveys to identify the professional status of GNP programme graduates and the status of GNPs by clinical field type to explore GNPs' roles in clinical settings and to evaluate the efficiency and effectiveness of GNP performance on patient outcomes.

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Authors' contribution

Study conceptualization and methodolohy - JP and HK; Data collection - JP; Data analysis and interpretation - JP and HK; Drafting and critical revisions of the manuscript - JP & HK; Supervision - HK; All authors have read and agreed to the published version of the manuscript.

REFERENCES

1. Statistics Korea. The future population estimates: 2020~2070 [Internet]. Statistics Korea; 2021 Dec 9 [cited 2022 Aug 25]. Available from: https://kostat.go.kr/board. es?mid=a10301020600&bid=207&act=view&list_no= 415453

2. Korean Nurses Association. Becoming an advanced practice nurse [Internet]. Korean Nurses Association; [cited 2021 Nov 10]. Available from: https://www.koreanurse. or.kr/resources/be_specialist.php

3. Ministry of Health and Welfare. Health and welfare statistical year book 2022: Health Care Personnel [Internet]. Ministry of Health and Welfare; 2022 Dec 28 [cited 2023 Jun 28]. Available from: https://www.mohw.go.kr/react/jb/ sjb030301vw.jsp

4. Korean Accreditation Board of Nursing Education. Designation and management of educational institutions for professional nurses [Internet]. Korean Accreditation Board of Nursing Education; 2023 Mar [cited 2021 Nov 20]. Available from: http://www.kabone.or.kr/mainbusin/ nurse03outline.do

5. Council of Gerontological Nurse Practitioner Programme Curricula. Revision of the standard curriculum for the Ge-

rontological Nurse Practitioner. Report for Gerontological Nurse Practitioner Programme Curricula Revision. Council of Gerontological Nurse Practitioner Programme Curricula; 2021 October 12.

6. Lee KJ, Kong ES, Kim NC, Kim JH, Kim CG, Kim HK, et al. Roles and functions of the gerontological nurse practitioner. Journal of Korean Gerontological Nursing. 2004; 6(1):125-33.

7. Korean Accreditation Board of Nursing Education. Notification; 2022 Newsletter [Internet]. Korean Accreditation Board of Nursing Education; 2023 Mar 31 [cited 2023 Jul 20]. Available from: http://www.kabone.or.kr/notice/newsletter.do

8. Korean Accreditation Board of Nursing Education. Quality management of advanced practice nurse education institutions [Internet]. Korean Accreditation Board of Nursing Education; 2022 Mar [cited 2022 Apr 15]. Available from: https://www.kabone.or.kr/mainbusin/nurse03perform.do

9. Shin S, Jung D, Kim H. Students' satisfaction on GNP Educational Program. Journal of Korean Gerontological Nursing. 2014;16(1):1-8. https://doi.org/10.17079/jkgn.2014.16.1.1

10. Korean Law Information Center. Rule of the advanced practice nurses' qualification [Internet]. Ministry of Health and Welfare; 2022 Apr 19 [cited 2022 May 20]. Available from: https://www.law.go.kr/lumLsLinkPop.do?lspttninfSeq=61761&chrClsCd=010202

11. Sandelowski M. Whatever happened to qualitative description? Research in Nursing & Health. 2000;23(4):334-40. https://doi.org/10.1002/1098-240x(200008)23:4<334::aid-nur9>3.0.co;2-g

12. Hsieh HF, Shannon SE. Three approaches to qualitative content analysis. Qualitative Health Research. 2005;15(9): 1277-88. https://doi.org/10.1177/1049732305276687

13. Lincoln YS, Guba EG. Naturalistic inquiry Sage Publications; 1985. p. 289-331.

14. Na J. A review on verification strategies for qualitative research: focusing on member check, peer debrief, and audit trail. Educational Research. 2017;70:233-54. https://doi.org/10.17253/swueri.2017.70..009

15. Kwon Y, Lee HY, Hwang SS. A study on the knowledge, attitude and nursing practice of the nurses-towards the elder-

ly in geriatric hospitals. Journal of the Korea Academia-Industrial Cooperation Society. 2013;14(11):5785-91. https://doi.org/10.5762/kais.2013.14.11.5785

16. Liu YE, Norman IJ, While AE. Nurses' attitudes towards older people: a systematic review. International Journal of Nursing Studies. 2013;50(9):1271-82. https://doi.org/10.1016/j.ijnurstu.2012.11.021

17. Choi KB. The effect of elderly nursing care education programs on nurses' knowledge, attitudes, and nursing performance toward the elderly. The Journal of Korean Academic Society of Nursing Education. 2012;18(3):522-32. https://doi.org/10.5977/jkasne.2012.18.3.522

18. Ryu HS, Oh PJ, Lim JY, Kang HS, Yang SH, Seomun GA, et al. Needs of training programs for practice courses in advanced practice nurse education. Journal of Korean Academy of Nursing Administration. 2007;13(4):553-61.

19. Oh K, Kim KM, Kim KS, Park JW, Sung MS, Oh EG, et al. Educational issues and strategies to improve APN education. Journal of Korean Academy of Nursing. 2007;37(5): 801-9. https://doi.org/10.4040/jkan.2007.37.5.801

20. Drayton-Brooks SM, Gray PA, Turner NP, Newland JA. Building clinical education training capacity in nurse practitioner programs. Journal of Professional Nursing. 2017; 33(6):422-8. https://doi.org/10.1016/j.profnurs.2017.02.002

21. Lin EC, Chen SL, Chao SY, Chen YC. Using standardized patient with immediate feedback and group discussion to teach interpersonal and communication skills to advanced practice nursing students. Nurse Education Today. 2013; 33(6): 677-83. https://doi.org/10.1016/j.nedt.2012.07.002

22. American Nurses Credentialing Center. Adult-Gerontology Primary Care Nurse Practitioner Certification [Internet]. American Nurses Credentialing Center; [cited 2022 Mar 12]. Available from: https://www.nursingworld.org/our-certifications/adult-gerontology-primary-care-nurse-practitioner/

23. Thompson HJ, Belza B, Baker M, Christianson P, Doorenbos A, Nguyen H. Identifying and evaluating electronic learning resources for use in adult-gerontology nurse practitioner education. Journal of Professional Nursing. 2014; 30(2): 155-61. https://doi.org/10.1016/j.profnurs.2013.08.004