

An Analysis of Nursing Students' EMP Needs

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Abstract

This study investigated needs of students majoring in nursing to guide the development of an English for Medical Purposes (EMP) curriculum for them. Participants were 60 nursing students who were enrolled in the mandatory English reading and writing course. They were divided into basic and advanced groups to examine the relationship between English proficiency levels and perceived EMP needs. Data were collected through a needs analysis questionnaire and semi-structured interviews. Findings showed that more than half of these students studied English for domestic employment. Regarding their perception of EMP, students showed a high level of need for EMP and stated a preference for bilingual instruction in EMP courses. Regarding language skills, they rated speaking as the most needed skill and mentioned that fluency in work-related conversations was the primary objective in EMP courses. In addition, proficiency level was significantly related to perceived need for EMP and preferred medium of instruction. Advanced level students showed a higher need for EMP course than basic level students. When English-only and Korean-only media were compared, advanced level students favored the former while basic level students preferred the latter. Implications for English language educators and curriculum developers for the nursing field are discussed.

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INTRODUCTION

According to Nunan (1988), the process of obtaining data for syllabus design is called needs analysis, a crucial step in making decisions on the content and overall direction of a curriculum. It helps teachers and curriculum developers create courses appropriate for target fields and learners. Needs analysis is necessary for courses on English for Specific Purposes (ESP) because both teachers and textbooks must accommodate the demands of ESP students. That is, ESP is predicated on the unique needs of learners, and ESP needs analysis not only provides information about such learners but also helps educators set the objectives of an ESP course.

In Korean institutions, numerous initiatives have been implemented to examine the curricular needs of ESP learners. For instance, research involving needs analysis has been conducted to determine the demand for ESP courses in the fields of tourism (e.g., K. Choi, 2006; Kim & Park, 2019), airline services (K. Choi, 2019; Han, 2019), engineering (e.g., Ha, 2013; Park, 2006) and nursing (e.g., Kim, 2008; Kim & Park, 2019; Son et al., 2011).

English is now the language used not only in prestigious medical journals and international conferences but also in international communication. It is therefore imperative to support medical professionals and students in their English language learning. As such, English for Medical Purposes (EMP) has become an important university course. A subcategory of ESP, EMP is designed to help learners in medicine, health, and nursing acquire the discipline-specific English language skills they need to participate fully in the discourse communities of their respective fields (L. J. Choi, 2021; Jeon, 2015). EMP courses are becoming increasingly popular in medical education, given the growing number of medical professionals working in international and multicultural contexts. For nursing students, English language proficiency is important because English is widely used in both domestic and international settings.

EMP research has mainly involved nurses in countries where English is the official or second language. Few studies have been conducted in countries where English is taught as a foreign language. For healthcare professionals, crucial tasks include reading professional journals published in English, attending international conferences, and communicating with English-speaking patients. In this respect, EMP courses are also critical for nurses and nursing students in EFL countries (Bosher & Stocker, 2015; Finch, 2014; Lu, 2018).

In Korea, EMP has been steadily gaining popularity for several reasons (L. J. Choi, 2021; Soh, 2004; Yoo et al., 2016). First, the number of healthcare professionals searching for work in other countries is increasing, making a certain level of proficiency in English important, particularly in the context of relocation or migration. Second, an increasing number of international patients travel to Korea for medical treatment. To serve a diverse patient community, nurses must be proficient communicators in both Korean and English. Aside from speaking directly to patients, nurses also do some translation work to provide them with the information they need. As the demand for well-designed English programs for nursing students is becoming increasingly important, the present study is a timely investigation of their needs.

Recent studies have revealed that EMP courses intended for nurses and nursing students in Korea play an important role in improving English language skills that are needed in the workplace (L. J. Choi, 2021; Shin & Cho, 2014). Registered nurses in S.-J. Shim's (2015) survey reported that they needed English the most when they encountered foreign patients at hospitals in Korea. Nurses, for instance, schedule telephone appointments, hospital admission and treatment, consultations, follow-up care, and other services for international patients. Thus, one of the main objectives of the EMP course can be to prepare students to handle foreign patients in Korean hospitals or other healthcare settings. Furthermore, the content of the EMP course may include topics that meet the objectives of nursing students, such as medical terminology, patterns of nurse-patient contact, and creating care records (S.-J. Shim, 2015). According to Shin and Cho (2014), EMP courses not only help them to read and report healthcare information written in English, but also to communicate better with patients and other healthcare professionals. Past studies on EMP courses in Korea have shown that nursing students have a high need for nursing EMP. However, there are few if any existing studies on the relationship between nursing students' needs for an EMP course and their English proficiency. Even among nursing students, the desired EMP content and EMP teaching method may differ depending on English proficiency, so the present study investigated the needs of nursing students by English proficiency level. The findings of this study will help to better understand the specificity of the nursing students' EMP needs and guide the development of the nursing EMP curriculum.

LITERATURE REVIEW

Studies on ESP Needs Analysis

In *The Handbook of English for Specific Purposes*, Paltridge and Starfield (2013) defined ESP as “a second or foreign language where the goal of the learners is to use English in a particular domain” (p. 2). They stated that an ESP course is distinguished by materials and objectives tailored to learners' unique needs. For this reason, ESP courses concentrate on the language, skills, and genres relevant to the particular English-language tasks that learners must complete in their specific disciplines. In other words, ESP courses are created based on learners' needs.

According to Brown (1995), needs analysis involves gathering all the relevant information on students' language learning requirements within the specific context of their discipline. Hyland (2006) offers a comprehensive and multifaceted definition of needs analysis:

Needs analysis refers to the techniques for collecting and assessing information relevant to course design: it is the means of establishing the how and what of a course. It is a continuous process, since we modify our teaching as we come to learn more about our students, and in this way, it actually shades into evaluation—the means of establishing the

effectiveness of a course. Needs is actually an umbrella term that embraces many aspects, incorporating learners' goals and backgrounds, their language proficiencies, their reasons for taking the course, their teaching and learning preferences, and the situations they will need to communicate in. Needs can involve what learners know, don't know, or want to know, and can be collected and analyzed in a variety of ways. (p. 73)

Needs analysis in ESP is constantly evolving and undergoing redefinition (Flowerdew, 2013). Its goal is to know as much as possible about the learners to set realistic and acceptable targets for ESP courses. Flowerdew (2013) stated that the development of an ESP course begins with needs analysis and proceeds through the stages of curriculum design, materials selection, methodology, assessment, and evaluation.

As for methodology, Long (2005) noted that participant observation, interviews, surveys, questionnaires, and analysis of participants' diaries and journals can be employed in needs analysis. Moreover, validity and reliability in needs analysis procedures can be achieved in three main ways: triangulation, prolonged engagement, and participant verification.

EMP for Nursing Students

Previous studies on designing EMP courses for nurses emphasized the necessity of conducting a needs analysis, which can lead to practical and focused courses. Boshier and Stocker (2015) explored the current use of English in nursing by collecting and analyzing qualitative data from 19 graduate nursing students enrolled in a comprehensive three-year master's program in nursing science at a Taiwanese university. The students were first required to write three one-page projects outlining their experiences using English in their field-related reading, writing, speaking, and listening activities. Concerning the skill they needed to learn the most in an EMP course, they emphasized professional reading, while some cited speaking, as per other past studies (Lee, 1998; Yang & Su, 2003). According to Boshier and Stocker, given the participants' specific and unique status (e.g., full-time students, practicing nurses) and institutional expectations (e.g., clinics, local hospitals, large hospitals, etc.), the EMP skills they need will vary across different studies.

Lu (2018) conducted a qualitative study interviewing and observing 10 nurses working in a large hospital with an international care center in Taiwan. The results revealed that the nurses were satisfied with their EMP courses, which they took some years ago in college. However, they continued to have difficulty speaking in English in the hospital due to limited vocabulary, pronunciation problems, unfamiliar accents, and passive coping strategies. Lu claimed that EMP instructors need to construct programs that focus on developing nurses' speaking skills in English and building their confidence through practice.

Previous studies have identified the specific needs of EFL learners with medical backgrounds in Korea (e.g., L. J. Choi, 2021; Jeon, 2015; Kim, 2008; Shin & Cho, 2014; Soh, 2004). Their findings indicated that EFL learners in medical fields perceive English-language competency as the most crucial competency to obtain. To this insight, Yoo et al. (2016) added that the perceptions regarding English study among undergraduates pursuing various health science majors remarkably vary. More specifically, compared with other students (dental hygiene, physical therapy, dental technology, radiological technology, and health administration), nursing students exhibited greater interest and satisfaction in studying English. The reason for this is that nurses should be capable of scheduling telephone appointments, hospital admissions and treatments, consultations, and follow-up care for international patients, among other tasks. Furthermore, they should be capable of reading and reporting healthcare information published in English. The least satisfied and interested students in EMP were those pursuing dental technology. According to Yoo et al., this result is because the employment environment of the dental hygiene department is characterized by a low level of service communication situations such as patient response, and thus there is a tendency not to perceive a great need for English learning.

Many studies on EMP for nurses have shown that, for learners, speaking is the most crucial skill to learn (Chung, 2021; Soh, 2004; Son et al., 2011). Past studies have revealed that nurses are required to communicate with doctors, patients, and other nurses, thus they must be knowledgeable about medicine. Furthermore, it is critical that nurses be proficient in English communication given the increasing diversity of our society. One such study is Soh's (2004), which administered a needs analysis survey to 27 nurses enrolled in an English language program for registered nurses and 5 full-time nursing professors in graduate school. The results indicated that most of the nurses study English because it is part of the curriculum (77.8%). By contrast, most of the professors (80%) study English for personal development. Regarding the skills, the nurses were interested in speaking and listening but less interested in reading and writing. Conversely, the professors regarded speaking, listening, and reading as equally important.

While Soh (2004) studied registered nurses and professors, Chung (2021) examined nursing students. Chung administered a needs analysis questionnaire among 233 nursing students to determine their satisfaction level with their current general English courses and their needs for an EMP course for nurses. The results showed that the students were "somewhat satisfied"

with their current general English class, and approximately 60% expressed a strong need for an EMP course. In terms of their reasons for studying English, most of the participants mentioned employment as their purpose. Moreover, in taking an EMP course for nurses, the participants wanted to improve their speaking the most, followed by reading, listening, and writing. Regarding the language used for instruction, 85% preferred English and Korean for their EMP course.

While the aforementioned studies focused on the EMP needs of specific learners, L. J. Choi's (2021) study examined whether a current EMP course in Korea meets a group of students' specific pragmatic or learning needs. L. J. Choi conducted a needs analysis through questionnaires and interviews among 66 nursing students taking the course. The survey and interview data reflected that 80% of the students perceived that EMP courses are necessary. However, 60% believed the current EMP course falls short of their expectations. One reason for their dissatisfaction with it was its English-only classroom policy, hindering their ability to fully understand medical terminology and content. According to L. J. Choi, students who struggle with comprehension are less likely to engage in class and are less motivated to study English in general. Another reason for their dissatisfaction is that the current textbook does not fully reflect their needs. Based on the analysis, L. J. Choi asserted that developing authentic and localized EMP materials is crucial, necessitating the cooperation of specialists in English-language education and experts in the medical field.

The use of English in an EFL setting may not be as extensive as that in an ESL setting; thus, EMP course designers must examine the learners' English proficiency, their specific needs, and the surrounding English settings. Among many student variables, however, there are only few studies that considered English proficiency.

S.-J. Shim (2015) conducted needs analyses to students and professors at a healthcare college in Korea and suggested that considering the students' entry level of English proficiency, contents, majors and instructor's roles are needed in developing tailored EMP course. In particular, the students and professors at a healthcare college in Korea wanted the EMP course takers to be allotted by English proficiency level.

Kim et al. (2009) examined university students' satisfaction of EMI and it was revealed that the preference of EMI classes had association with English proficiency level and was not dependent on their majors. Kim et al. suggest that in order to offer more effective EMI classes, offering classes based on the students' English ability is crucial.

To provide university EFL program developers with more useful insights into the planning and implementation of possible EMP courses, further research on the perceived needs of students is necessary. In addition, since healthcare workplaces consistently change and evolve, highlighting the importance of continuous needs analysis is to fully comprehend nursing students' current needs and create appropriate courses for them. These needs have been investigated in previous studies involving nursing students in Korean universities (L. J. Choi, 2021; Kim & Park, 2019; Soh, 2004; Yoo et al., 2016). According to past studies, the intended EMP contents and demands, as well as the method of delivering EMP classes, may change due to variations in English skill levels. However, the association between English proficiency level and perceived nursing EMP demands in Korea has not yet been thoroughly investigated by scholars.

To address this gap, the present study examines the EMP needs of nursing students at E University in Korea and the different needs of students by English proficiency levels, if any.

The following research questions guide the investigation:

1. What are nursing students' perceptions of learning English?
2. What are their EMP needs?
3. What are the differences in the EMP needs of students with varying English proficiency levels?

This study's findings will reveal the perceived needs of nursing students in Korea. Furthermore, the result of this study may help language educators and researchers design more specialized EMP courses for nursing students.

METHODS

To investigate nursing students' wants and needs as regards a more specialized English curriculum, this study administered a needs analysis questionnaire and conducted semi-structured interviews with the participants. The form of the questionnaire was chosen, as it is conducive to generating participants' honest opinions and ideas (Basturkmen, 2010). The interviews were intended to triangulate the data from the questionnaire. A semi-structured format was used to gain in-depth information on the participants' questionnaire responses and ascertain their expectations for an EMP course.

Participants

This study was conducted at E University, located on the outskirts of Seoul, Korea. The university offers the course *English Reading and Writing*¹ in three levels. A student's level is determined by a reading test conducted at the beginning of the semester. The top 25% are assigned to the advanced class, the bottom 25%, to the basic class, and the middle 50%, to the intermediate class. The course is mandatory for freshmen students, and the class meets once a week for two hours.

The participants were recruited from the basic and advanced classes of 2023. Intermediate level students were deliberately excluded to determine differences more clearly between proficiency levels. A total of 60 students participated in this study and they were divided into basic and advanced proficiency groups ($n = 30$ per group). The average age of the participants was 19.5 years. There were significantly more female participants ($n = 54, 90%$) than male participants ($n = 6, 10%$). As the number of male participants was relatively too small compared to the female participants, gender was excluded as a variable in this study. None of them had experience studying in an English-speaking country.

Data Collection

Both the quantitative questionnaire and qualitative interviews were conducted for data triangulation. A modified version of Soh's (2004) needs analysis questionnaire was used. While Soh distributed the questionnaires to registered nurses and nursing professors, the current study focused on the EMP needs of nursing students by administering the questionnaire to them. Two professionals in the field of EFL education evaluated the questionnaire to ensure the validity of its content. The questionnaire was administered to the participants in class, in the 15th week of the fall semester, during which they were already accustomed to the various instructional strategies and exercises used in their class. The questionnaire consisted of 10 questions, which took an average of 30 minutes to answer (see Appendix A).

The questionnaire contained personal information questions, binary questions, multiple choice questions, and five-point Likert scale questions, with 5 representing the positive end of the response spectrum. The questionnaire centered on three themes: (1) personal background, (2) perceptions of learning English and current college English courses, and (3) perceived needs related to an EMP course.

The preliminary results from the questionnaire guided the construction of the semi-structured interview. While the interview questions included contents from the questionnaire, it also sought to flesh out further the participants' reasons for their responses to the questionnaire.

After administering the questionnaire, 26 participants who provided consent were interviewed individually on the 16th week. The interviews took place in the classroom, were conducted in Korean, and were audio-recorded, with each lasting for 10-15 minutes. The statements made by the participants were transcribed into English and are presented in italics in this paper (see Appendix B for the interview questions).

Data Analysis

To determine the students' perceptions and needs related to an EMP course for nursing, chi-square was directed toward the questionnaire data. Semi-structured interviews were used to gain in-depth information on their questionnaire responses and to ascertain their expectations for an EMP course. The English-language transcripts of the interviews were reviewed by a native English speaker who works as an English instructor in college. All the participants were informed that the questionnaire and interviews were voluntary, with no bearing on their grades.

RESULTS

The questionnaires and semi-structured interviews reflected students' perceived needs concerning what should be taught in an English course and how it should be taught, as well as their learning styles and preferences.

¹ The course *English Reading and Writing* is designed as an Integrated English Reading and Writing (IERW) class and the textbook was developed by instructors at E University. The textbook consists of vocabulary previews, reading, reading comprehension exercises, grammar builders, and follow-up activities. The English level of the textbook is different, but its contents are the same.

Perceptions of Learning English

Table 1 shows the students' reasons for studying English. Both basic and advanced level students indicated that their main purpose for learning English is "domestic employment." Basic level students cited "requirement" ($n = 11$, 37%) as their second strongest driver for learning English, followed by "overseas employment" ($n = 3$, 10%) and "personal development" ($n = 1$, 3%). By contrast, advanced level students cited "overseas employment" ($n = 27$, 8%) as their second purpose for learning English, followed by "personal development" ($n = 3$, 10%) and "requirement" ($n = 2$, 6%). Table 1 summarizes the participants' reasons for studying English.

TABLE 1
Reasons for Studying English

Reasons	Basic ($n = 30$)	Advanced ($n = 30$)
Domestic employment	$n = 15$ (50%)	$n = 17$ (57%)
Overseas employment	$n = 3$ (10%)	$n = 8$ (27%)
Requirement (credits for mandatory English course)	$n = 11$ (37%)	$n = 2$ (6%)
Personal development (enhancing general basic English proficiency)	$n = 1$ (3%)	$n = 3$ (10%)

As they commented in the interviews, studying English is important for their career advancement, and their skills in English are likely to provide them with more opportunities in the workplace.

"I am planning to go to graduate school and get a job in the US. Therefore, I study English to study abroad and to be a nurse in the US." (Student # 36, advanced level)

"I study English to get a job. I heard that even though English is not a prerequisite to get a job, it is still needed to get a promotion. I think it is crucial to study English for employment." (Student #1, basic level)

When asked whether they study independently outside of class, more than half (90%) indicated that they do not engage in self-study outside the classroom setting (Table 2).

TABLE 2
Studying English Outside Class

	Yes	No	p
Basic ($n = 30$)	2 (7%)	28 (93%)	0.389
Advanced ($n = 30$)	4 (13%)	26 (87%)	
Total ($n = 60$)	6 (10%)	54 (90%)	

Note. Chi-square test significant at $*p < .05$.

Among the basic level students, only 7% self-study outside class, with the remaining 93% checking "no." Of the advanced level students, only 13% self-study, with the remaining 87% checking "no." These findings show most students do not self-study outside class and therefore highlight the importance of effective English learning in the classroom. As Table 2 shows, no statistical relationship exists between studying English outside class and level of English proficiency.

In the interviews, most participants said they do not self-study because they have no time left after studying and completing the assignments for their major subjects. Following is a related excerpt:

"Some of my major textbooks are in English, and I have a hard time translating those English to Korean. To understand better, I must study English more outside of class. However, since I have many assignments in my major class, I don't have enough time to study English outside of it. I wish there are some EMP courses that focus on reading English medical materials and medical terminology." (Student #2, basic level)

It is difficult to find a private educational institution that offers specialized English classes related to nursing, in contrast to other general English courses like English conversation, writing, TOEIC, etc. However, it would not be difficult to find a homogeneous group with particular needs and interests inside a university. Moreover, the group's particular English course could focus on the English competencies that are required for their specific career fields (S.-J. Shim, 2015). EMP courses can also integrate language and subject-specific information, giving students the opportunity to study English in a relevant context that is directly related to them. In addition, since most of the participants said that they do not study outside the class, the EMP courses in university can better serve the requirements and goals of learners while saving time simultaneously.

Perceptions of the Need for EMP

Table 3 summarizes the participants' perceptions of the necessity of an EMP course. The need for an EMP course was statistically significantly related to the level of English proficiency. Advanced level students showed a higher need for EMP courses (97%) than basic level students (70%).

TABLE 3
Need for EMP

	Yes	No	<i>p</i>
Basic (<i>n</i> = 30)	<i>n</i> = 21 (70%)	<i>n</i> = 9 (30%)	
Advanced (<i>n</i> = 30)	<i>n</i> = 29 (97%)	<i>n</i> = 1 (3%)	0.006*
Total (<i>n</i> = 60)	<i>n</i> = 50 (83%)	<i>n</i> = 10 (17%)	

Note. Chi-square test significant at * $p < .05$.

Several relevant interview excerpts are reproduced below:

"I feel that major-related courses are more important than general college English courses. But if we have an EMP course, I will definitely enroll in it. I think the EMP courses' contents would be more interesting and useful." (Student #33, advanced level)

"In addition to the current general English course, I want to take an EMP class. I want EMP courses to have a variety of objectives, such as hospital conversations, English medical terms, etc. I want to take an EMP class whose topics match the workplace." (Student #34, advanced level)

"The textbook of the current general English course does not have any content about nursing or health care. Not only are the articles unrelated to my major, but also the writing part is not related. I think it would be more useful to have an EMP class directly related to my future work field." (Student # 4, basic level)

Of the total sample, 17% deemed EMP unnecessary. The interviews uncovered that some of the students hold this view because they were under considerable pressure from obligatory discipline-specific subjects:

"I don't think this kind of English course for nursing is necessary. I think I will be busy preparing for the national licensing test." (Student #3, basic level)

In terms of needed language skills, both basic and advanced level students regarded speaking as the language skill they need to improve the most in an EMP course (Figure 1 and Table 4). Figure 1 shows the means for the needed language skills of the two groups taken together. This finding indicates that the participants lack the most competency in speaking, among the four language skills (listening, speaking, reading, and writing). After speaking ($M = 5$), the rank in importance of the other three skills for both groups taken together is as follows: reading ($M = 4.1$), writing ($M = 3.7$), and listening ($M = 3.2$).

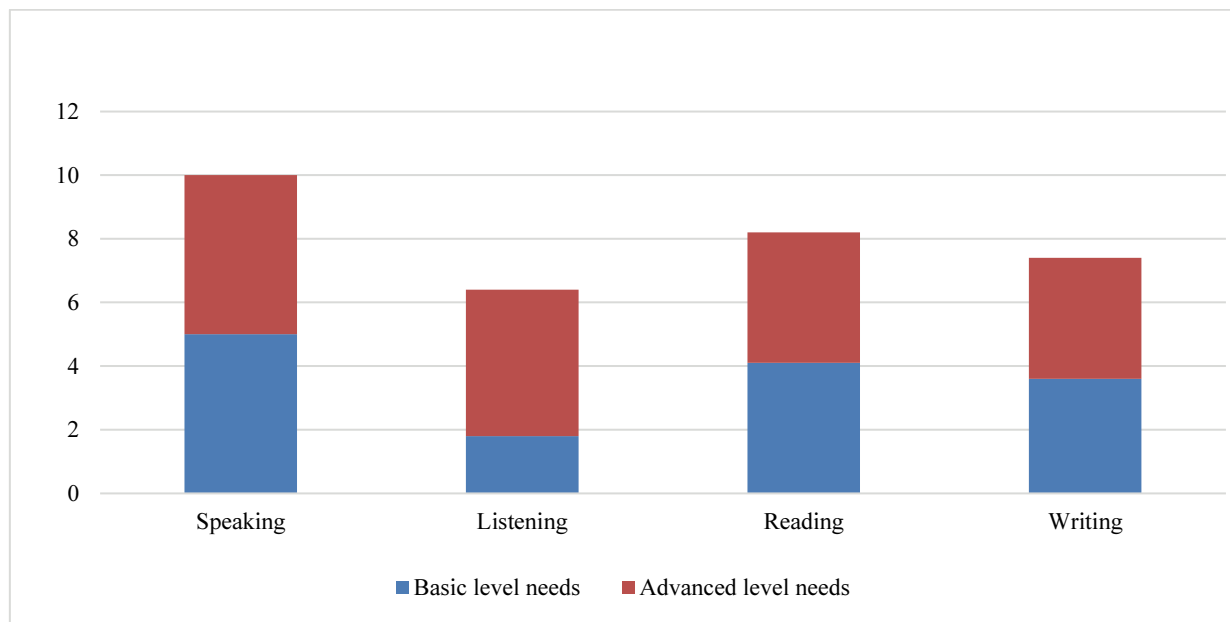


Figure 1
Needed Language Skills in EMP

However, taking the two groups separately, they differed in their ranking of listening skills, with the basic group ranking it last ($M = 1.8$) and the advanced group ranking it second ($M = 4.6$). Table 4 shows the comparisons.

TABLE 4
Needed Language Skills in EMP

	Skills				
	Speaking	Listening	Reading	Writing	<i>p</i>
Basic level needs (<i>M</i>)	5	1.8	4.1	3.6	0.811
Advanced level needs (<i>M</i>)	5	4.6	4.1	3.8	

Note. 1 = least needed, 5 = most needed.

Chi-square test significant at $*p < .05$.

As Table 4 shows, no statistical relationship existed between the participants' level of English proficiency and the specific English skills they want to improve in an EMP course. Below are some relevant interview excerpts:

"Among speaking, listening, reading, and writing skills, I think I need to improve my speaking skills the most. I haven't had enough opportunity to speak in English. I believe there will be times when I have to speak in English in my future workplace. I want to work at a hospital in Korea. Even though I work in Korea, I believe there will be times when I have to speak in English with foreign patients. I want to speak English well, so I can give good-quality nursing care to foreigners who can't speak Korean." (Student #4, basic level)

"I believe reading skills are important among speaking, listening, reading, and writing skills in EMP. Because most international articles and research in medical fields are written in English. I want to take an EMP course to improve my reading skills by reading English medical articles in class. This way, not only do I improve my English reading skills, but I also familiarize myself with English medical terminologies." (Student #36, advanced level)

This result corresponds to the findings of Chung (2021) in that students perceive speaking skills to be the most needed skill to improve. However, in terms of listening skills, the advanced level ranked it as second while basic group the last. Some of

the relevant interview excerpts are given below.

“I checked the importance of speaking and listening the same. I think listening is as important as speaking because we have to be able to understand the symptoms/conditions of patients who are from other countries. I want to take an EMP course that focuses on hospital conversations so I can improve my speaking and listening skills.” (Student #35, advanced level)

“I have seen many international patients in the hospital these days. I believe that effective communication cannot exist without listening to the patients’ symptoms. Lack of listening skill may lead to the risk of malpractice, which I am afraid of. Instead of general English listening skill, I want to improve my listening skills, focusing on nursing situation, through EMP course.” (Student #39, advanced level)

Through semi-structured interviews, it was found that the advanced students perceive both speaking and listening skills as a priority because verbal communication is required for interaction with patients. In the hospital framework, the burden is put on the nurse to understand the symptoms of the patients and to make sure patients are informed.

With regard to the medium of instruction in an EMP course (Table 5), using both English and Korean was the most preferred medium in both the basic and advanced level groups. More than half of them preferred instructors who can teach in both English and Korean and who can modify the medium of instruction to suit the demands of the class and subject content. The preferred medium of instruction for EMP courses has a statistically significant relationship with the level of English proficiency. The advanced level preferred English medium instruction more than basic level students. On the other hand, basic level students preferred Korean more than advanced level students. This result agrees with Kim et al. (2009) in that students who are more proficient in English tend to favor English as a medium more than who are less proficient in English.

TABLE 5
Preferred Medium of Instruction in an EMP Course for Nursing

	English	Korean	Both English and Korean	<i>p</i>
Basic (<i>n</i> = 30)	<i>n</i> = 0 (0%)	<i>n</i> = 10 (33%)	<i>n</i> = 20 (67%)	0.026*
Advanced (<i>n</i> = 30)	<i>n</i> = 5 (17%)	<i>n</i> = 0 (100%)	<i>n</i> = 25 (83%)	

Note. Chi-square test significant at **p* < .05.

Among the basic level students, 33% preferred Korean as the sole medium of instruction, whereas 67% preferred both English and Korean. None of the basic level students preferred an English-only classroom. By contrast, none of the advanced students favored a Korean-only classroom. Only 17% of them preferred English, whereas 83% preferred both English and Korean. The following interview excerpts reflect the suitability and effectiveness of teaching medical English using only the English language, as perceived by the respondents:

“There are lots of difficult medical terms to memorize, and learning them in an English-only classroom makes it more difficult to fully understand them. Therefore, I want the EMP course to be taught in Korean.” (Student #5, basic level)

“Since medical English itself is already difficult, if the class is taught only in English, I won’t be able to understand it at all. I prefer the Korean instruction to be used in EMP class.” (Student #6, basic level)

“I tend to get nervous when I see foreigners, but I want to lower the language barrier by talking to native speakers in class. If the class is using English as a medium, which gives us more chances to use English, I think it will be the best way to learn EMP. Because in that way I can learn medical English and lower my language barrier at the same time. Eventually, it will make me easy to talk to foreign patient in the future.” (Student #37, advanced level)

“I want the EMP class to be delivered both in Korean and English. So, the instructor can explain some difficult medical contents in Korean when students have hard time in understanding. Except those hard parts of medical terms and contents, I want the medium of the class to be in English so I can improve my English listening and speaking skills.” (Student #38, advanced level)

Students who advocated bilingual instruction pointed out that studying in Korean will help them understand complex medical terms and contents in English. In addition, they commented that Korean–English bilingual instruction will also encourage more active participation in class, since the lack of comprehension discourages engagement. The basic level students preferred Korean as the second medium of instruction, whereas advanced level students preferred English. This difference implies that the medium of instruction should be selected based on students' proficiency level, which can be determined through a needs analysis.

Concerning the participants' expected educational objectives from an EMP course (Table 6), the most desired objective was fluency in field-related conversations ($M = 5$). As Table 6 shows, the students' expected educational objectives from an EMP course did not have a statistically significant relationship with level of English proficiency.

TABLE 6
Students' Expected Educational Objectives from an EMP Course

	Basic needs (M)	Advanced needs (M)	Total Needs (M)	P
Fluency in field-related conversations	5	5	5	
Responding to job interview questions	2.4	4.6	3.5	
Reading English-language textbooks, articles, and reports	4.3	3.5	3.9	0.949
Writing English-language emails, medical reports, and documents	3	3.2	3.1	
Fluency in the use of English medical terminology	4	4	4	

Note. 1 = least needed, 5 = most needed.

Chi-square test significant at $*p < .05$.

Both basic and advanced level students showed the most interest in field-related conversations, corresponding to the language skill they want to improve the most: speaking. Following are supporting interview excerpts:

"In my opinion, learning English is essential for communicating with patients in an emergency. Being able to talk to the patient is the most important thing, especially in hospital emergencies than in general situations. So I want to improve my field-related conversation skill through EMP class." (Student #4, basic level)

"I want to communicate with nurses and patients of any nationality. Therefore, I think being able to speak in English is necessary. I would enroll in an EMP course focusing on speaking skills. In addition, I prefer an EMP course to deal with conversations about workplace situations." (Student #38, advanced level)

In the interviews, most participants recommended that the EMP content be relevant to students' work environments:

"The textbooks used should be tailored to the needs of Korean nursing students. I think using authentic materials is the most important thing to consider in EMP." (Student #39, advanced level)

"I would like various kinds of learning materials, such as reading and writing charts, medical reports in English. Having authentic contents, such as charts used in the hospital, would also make me motivated to get involved in EMP class." (Student #7, basic level)

"I want our course textbooks to contain recent articles about healthcare and medicine rather than general news articles. This way, we can increase our motivation to study English." (Student #8, basic level)

Although these interview excerpts do not represent the opinions of all nursing students, they suggest that diverse EMP courses are more effective than standardized EMP classes.

The statistically significant differences in needs by English proficiency level were the necessity of EMP class and the medium of EMP courses. Advanced level students showed a higher tendency to take nursing EMP courses than basic level students. In addition, when the preferred medium was compared only between English-only and Korean-only medium, advanced level students preferred English-only medium. On the other hand, basic level students showed a preference for Korean-only medium. This finding demonstrates that the medium of the EMP courses should be decided by students' English proficiency. Overall, the results of the present study show that the instructional contents must be specially designed for the various objectives of the EMP courses (e.g., preparation for jobs in Korea or overseas, hospital conversation, reading medical charts in English, writing medical reports, English medical terminology).

CONCLUSION

This study investigated the EMP needs of nursing students. To investigate the relationship between English proficiency level and EMP needs, the participants were divided into two groups. The findings highlight the importance of conducting needs analysis to satisfy the unique learning objectives of students specializing in nursing. They further underscored the importance of EMP in nursing, with most of the participants (85%) expressing a considerable desire to participate in EMP courses for nurses. In addition, English proficiency level has a statistically significant relationship with their intention to take EMP classes for nurses. Advanced level students perceived a considerable need for an EMP course, whereas their basic level counterparts perceived a relatively low need.

Concerning their reasons for learning English, both basic and advanced level students cited “domestic employment” as their main purpose, which is in line with the findings of Chung (2021), Kim and Park (2019), E. Shim (2010), and S.-J. Shim (2015). Furthermore, 90% of the participants in the present study said that they do not engage in independent study outside class, which is consistent with the findings of Kim and Park (2019), who attributed this to the year level of their participants—first- and second-year students—for whom employment was not an immediate requirement. The results of the present study also show that the participants perceive speaking to be the most important skill for improvement via EMP learning, which is in line with other studies (Chung, 2021; S.-J. Shim, 2015; Soh, 2004; Lai, 2016; Yang & Su, 2003).

Regarding the medium of instruction, most of the participants preferred bilingual instruction, which aligns with previous studies (L. J. Choi, 2021; Chung, 2021; S.-J. Shim, 2015). Recent research indicates that bilingual instruction improves students' comprehension of and engagement with higher-education content knowledge more than English-only instruction (Barnard & McLellan, 2014; Macaro et al., 2019). In addition, the present study showed that preference for the medium of instruction has a statistically significant association with English proficiency level. Of the basic level students, 33% asserted that EMP should be taught only in Korean, whereas none of the advanced students preferred this. Of the advanced students, 17% believed that EMP should be taught only in English, whereas none of the basic level students favored an English-only class. This result implies that any decision related to the medium of instruction should be based on proficiency level and through needs analysis. Concerning EMP objectives, most participants mentioned fluency in work-related conversations as the primary objective, followed by fluency in the use of English medical terms.

Several limitations encumber this study. Given its small number of participants, the generalizability of its findings in other institutional or educational contexts is limited. Further studies involving a larger sample size and other educational contexts should be conducted. Another drawback is that the research data were gathered in a short period; a longitudinal method would be more suitable. A follow-up study on developing an EMP course for nursing based on the present study's results is necessary. The designed course should then be implemented; observing actual teaching and interactions in such a course will provide a thorough description of the actual EMP classroom.

Despite this drawback, this study can shed light on the perceived needs of nursing students for a more specialized English curriculum that can assist their professional development. EMP courses intended for nursing students will help them to obtain up-to-date health care information written in English. In terms of patients' wants and requirements, nurses play a crucial role in communicating with them (Kim, 2008). Nurses, for instance, explain to patients about procedures, medications, and any potential side effects, etc. Through healthcare-related EMP courses, they will improve communication skills with other healthcare providers and international patients (L. J. Choi, 2021; Shin & Cho, 2014).

The study's findings further highlight the importance of needs analysis in designing and implementing EMP courses. First, instead of teaching general English language courses to nursing students, developing an EMP course for them based on needs analysis is crucial. The interviews conducted in this study show that nursing students want to study medical English, rather than general college English, as the former can help them in actual healthcare work. However, there has been little cooperation between medical educators and ESL experts in relation to the development of an EMP course (Bosher, 2012),

and many English language courses in Korean universities today continue to be created without such collaboration (L. J. Choi, 2021; Jeon, 2015). The absence of agreed-upon viewpoints on EMP programs between medical educators and ESL experts may result in failure, as students' demands remain unsatisfied (Lu, 2018).

It's possible that students' course schedules won't allow for much flexibility in adding more EMP courses. For that situation, one potential resolution is using a curriculum that accounts for the needs of students based on their specialization (in this case, nursing) and proficiency level. For example, including medical terminology, job interviews in healthcare, etc. in the existing college English curriculum is one way of meeting the demands of the students. In designing a practical course, most methodologies can be applied in various ways and in such a way that they complement one another (S.-J. Shim, 2015). Examples include enhancing speaking skills through work-related conversations and learning English medical terms through teacher-centered lectures.

Second, concerning the medium of instruction, most students feel that bilingual instruction in EMP is ideal. As Basturkmen (2019) states, ESP instructors should have background knowledge of medical English. However, finding an instructor with a high proficiency in English and medical knowledge can be difficult. Similarly, it is not easy to find a native English-speaking instructor proficient in Korean and with experience in the medical field. This problem can be solved through teacher-training programs that hone instructors specifically for EMP courses. Such programs will help instructors understand the language of medicine and design and implement EMP courses. Through such programs, more language instructors would be able to teach EMP courses, making such courses more effective at the same time.

Future studies can contribute to finding more specific needs of nursing students, through using more detailed EMP-related questions in the questionnaire and interview. In addition, since the present study analyzed only nursing students, future studies should examine full-time nurses' needs to address the gap between English instruction in the classroom and actual English usage in the workplace, if there is any. A different view from registered nurses will make a more effective curriculum for nursing students.

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Appendix A

Questionnaire

This questionnaire is designed to find out your purpose and needs in learning English. The results of the survey will be reflected in the teaching of the course. Your cooperation is highly appreciated.

<Personal Information>

Section A. Personal Background Information

1. My major is _____.
2. My gender is _____.
3. I am in _____ 1st/2nd/3rd/4th _____ grade.
4. I have stayed abroad in an English-speaking country for _____.
a. none b. less than 6 months c. 6 months to 1 year d. more than 1 year

<Students' English Learning >

5. What is your purpose for studying English?
 (a) Domestic employment
 (b) Overseas employment
 (c) Requirement (credits for mandatory English course)
 (d) Personal development (to enhance general basic English proficiency)
6. Outside the class, do you study English on your own?
 Yes No

<Perceptions regarding the Need for EMP>

Unlike the existing general English course, an EMP, or English for Medical Purposes, course is specifically designed for students pursuing a career in medicine and healthcare.

7. Do you think an EMP class is necessary?
 Yes No
8. Which skill do you want to improve the most in an EMP course? Circle the number that applies.
 (5 = very much; 4 = much; 3 = so, so; 2 = not much; 1 = not at all)

(a) Speaking	5	4	3	2	1
(b) Listening	5	4	3	2	1
(c) Reading	5	4	3	2	1
(d) Writing	5	4	3	2	1
9. Which language/s would be an effective medium of instruction in an EMP class?
 (a) English only (b) Korean only (c) Both English and Korean

10. What do you expect to learn from an EMP class?

(5 = very much; 4 = much; 3 = so, so; 2 = not much; 1 = not at all)

Ⓐ Fluency in work-related conversations	5	4	3	2	1
Ⓑ Responding to job interview questions	5	4	3	2	1
Ⓒ Reading English-language textbooks, articles, and reports	5	4	3	2	1
Ⓓ Writing English-language emails, medical reports, and documents	5	4	3	2	1
Ⓔ Fluency in the use of medical terminology in English	5	4	3	2	1

Appendix B

Semi-structured Interview Questions

1. What is your purpose for studying English?
2. Do you study outside class? Why or why not?
3. Do you think an EMP class is necessary? Why or why not?
4. Which skill do you need to study or improve the most? Why?
5. Which language/s do you think would be effective as the medium of instruction? Why?
6. What do you expect to learn or improve from an EMP class?
7. What activities or contents do you think should be included in an EMP course?
8. Do you have any other suggestions for an EMP course?