

AN ANALYSIS OF PHARMACY STUDENTS' ENGLISH LANGUAGE NEEDS

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Abstract: This study investigated the English needs of Pharmacy Diploma students to identify the gaps in language learning and then create a new curriculum, learning strategies, methods, and English class syllabus for special needs (ESP). Needs analysis is crucial to ensure that the learning design implemented meets the student's needs with the hope of being able to help students academically and professionally. The method used in this study was descriptive qualitative. The total respondents were 61 (40 active students of pharmacy diploma at STIKes Banyuwangi, 15 alumni of pharmacy diploma who had already worked, and 6 diploma pharmacy lecturers). The research instruments were a questionnaire and an interview. The research result showed speaking was the most challenging skill for students. The students believed that speaking is one of the essential skills they need. The students need English related to the Pharmacy diploma major to support their careers because 76% of students stated that they learn English to keep their future careers. There were 13 materials in English for the Pharmacy that must be taught to students. This research results will be a reference for developing English in pharmacy syllabus and English textbooks for pharmacy diploma students.

Keywords: *Needs Analysis, Pharmacy Students, English Language Needs.*

1. INTRODUCTION

The challenges of global competition, as exemplified by the implementation of the ASEAN Economic Community (AEC) in 2015 and the World Trade Organization (WTO) 2020, necessitate workers who are not only knowledgeable in their fields of expertise but also fluent in English communication. The dominance of English is unavoidable in this globalization era. English, as the world's global language, has been used to drive transmission in various fields such as diplomacy, tourism, science, international communication,

education, business, and so on. English allows people from all over the world with diverse linguistic and cultural backgrounds to communicate freely so that it is accepted as the official language because it has been used in global interactions (Ngatu & Basikin, 2019). The demands of today's global industrial world and the development of information technology, the economy, and other aspects of life positively impact English learners to become more factual. They need to realize that the mastery of science fields and professions they are involved in professionally must be balanced with the ability to speak English. English skills become an added value for someone working in

public and private institutions in national and multi-national industrial companies. As said (Handayani, 2016), people proficient in English will be highly valued in the workplace.

English is a general subject that is categorized as mandatory in all universities in Indonesia because English is the primary need to support education and career. English is needed by students of the English department and non-English departments, including pharmacy students. English for Specific Purposes (ESP) is a part of practical English learning that prepares students or language learners to improve their English communicative skills (Kirkgöz & Dikilitaş, 2018). The basic idea behind ESP is the learners' needs vary greatly depending on their future academic or occupational goals, which is why ESP has gained such traction in universities worldwide in recent years. The English students learn in school rarely prepares them for what they will need in the workplace (Chowdhury & Haider, 2012).

Learning English is an asset for vocational students as they prepare to face challenges in their professional lives. Every graduate needs more skills because the job market is getting more competitive (Hayati, 2018). Hard and soft skills are mandatory fields that students must have. Students can expand their skills by learning to speak English as a complex skill and communicating in English as a soft skill. A needs analysis for proper English is necessary to determine the students' adequate need for English to support their future skills when they enter the workforce.

Mastery of English is needed to deal with global changes in the health care system. In this case, the

teaching of pharmaceutical sciences must always be adapted to the current conditions in society. During the global Covid-19 pandemic, pharmacists are at the forefront of fighting the virus and supporting patients regardless of their background and origin (Wang & Tang, 2020). The lack of mastery of the English language will significantly affect their ability to provide services to their patients because most of the language written on drug labels is in English. It is also possible that the patients being treated are native English speakers. In light of the above situation, a particular area of English learning should be appropriately organized for pharmacy students.

Based on the author's experience as the English language teaching staff for particular courses in the pharmacy diploma study program presented several challenges. The educational background of lecturers who graduated with English education master's degree and did not have pharmaceutical or scientific experience is the main obstacle in choosing a suitable material for pharmacy students. As a result, lecturers must not only deal with a wide range of content knowledge but also with students' varying English abilities. Another issue with course syllabuses is that not all institutions provide a complete syllabus with learning materials and assessment criteria. Some institutions even allow lecturers to arrange all syllabuses, methods, and evaluations, especially for compulsory general subjects. This practice will eventually lead to issues since institutions cannot monitor expected student learning outcomes. Based on these circumstances, an evaluation of the course should be carried out. Of course, we as English lecturers need to innovate to perfect the existing syllabus to be more effective in achieving the teaching

goals at this Institute. Even though the current syllabus has already discussed some pharmaceutical sciences according to the needs of students, several lecturers, students, and alumni of the pharmacy study program have some missed materials that really need to be taught to support their careers when working later. Therefore, it is essential to improve the syllabus so that a lack of conformity between the student's needs and the material being taught can be avoided (Sewang and Aswad 2021). Both lecturers and students can work together towards a mutual goal.

Ideally, learning English in universities must be English for Specific Purposes (ESP) according to the student's scientific field so that it can help them in doing the assignments and in the future, it will help them when they are in the world of work. The characteristics of ESP are goal-oriented learning activities, the course content is established and developed based on an analysis of student needs, and it is proposed exclusively for adult learners. ESP emphasizes language in context over grammar and language structure. The critical point of ESP is that English is not taught separately from the students' daily lives but is integrated into their learning (Rahman, 2015). Following the purpose of teaching ESP, a lecturer must prepare a syllabus and teaching materials by considering the needs of students according to their targets. The purpose of needs analysis and identification is to answer who, what, when, and where questions. Who the target is, who needs English, what needs to be taught, and the context when and where the teaching of ESP needs to be carried out.

The scope of material in ESP (English for Specific Purposes) will differ from general English because ESP learning must be students' goal-oriented. Its material should be able to help students communicate their thoughts and feelings when faced with the world of work. Due to all content and teaching methods in ESP must be student goal-oriented, the lecturers must design all learning materials according to the student's goals in learning English. They should provide teaching materials with the substance that is designed and developed based on the student's needs analysis to align teaching materials and methods with student needs. In this case, the students are always involved in determining learning materials and methods according to their needs. Needs analysis is the first step to identifying students' needs so lecturers can design appropriate curricula or learning materials. (Li, 2014) stated that needs analysis is the first step in curriculum design because it provides validity and relevance.

Previous studies on the needs analysis of English language learning among pharmacy diploma students were done (Semartini, 2022). The result showed that pharmacy diploma students need English related to their job to educate the general public about health and drugs. The study conducted (Hidayati & Haryati, 2018) stated that it is impossible to deny the importance of working on a need analysis to understand what students truly want and prefer to achieve the best results during the teaching-learning process. By conducting a needs analysis, the lecturers can find out what students already know and what they want to learn. Simultaneously, needs analysis is required to evaluate and categorize students' abilities. The lecturers can construct instructional materials

and activities based on the students' needs analysis. Another study on students' needs to learn English for Pharmacy was conducted (Solihati & Rahayu, 2020). The result showed that it is necessary to develop an appropriate ESP syllabus for pharmacy students to effectively communicate with foreign patients and avoid misunderstandings that may occur when interacting with foreign patients.

This study aimed to determine the student's needs (necessities), lacks, and wants in the ESP course in the D3 of the Pharmacy study program. Needs analysis is needed so that the learning design implemented is relevant to the needs of students so that it can help students academically and professionally in the future. (Yulientinah et al., 2020) Mention some purposes of a needs analysis are to find out what language skills are needed by learners in carrying out an activity, assist in determining whether a program has met the learners' needs, determine which learners need additional practice in a skill, identify changing goals, identify gaps between things that learners have mastered and what they need to be mastered, and identify problems that learners may experience. (Chowdhury & Haider, 2012) stated that need analysis is essential to the EAP approach in designing courses and teaching. It leads to the specification of course objectives, types, and content range to be covered and the evaluation of available resources. It also assists in identifying what should be considered to maximize the effectiveness of the curriculum and methodology. This study investigated the English needs of Pharmacy Diploma students to identify the gaps in language learning and then design a new curriculum, syllabus, learning strategy, and methods that meet their needs.

2. METHOD

This research was conducted at Sekolah Tinggi Ilmu Kesehatan (STIKES Banyuwangi) with three different groups of research subjects. The first group was the students who were still studying for a pharmacy diploma, as many as 40 students. The second group was the graduates of pharmacy diploma students who had already worked in various fields, as many as 15 people. The third group was the lecturers teaching pharmacy diplomas with graduate backgrounds in Pharmacy, with as many as 6 lecturers. In this study, researchers used the descriptive qualitative method. Qualitative research is natural research in which all data obtained through words or sentences is described or depicted to reach conclusions, and the data is then analyzed inductively (Febriyanti, 2018). The data analysis technique used was descriptive analysis using numbers and percentages.

The data collection technique was carried out by distributing a questionnaire because it was considered the most appropriate tool for collecting data regarding the needs of ESP students. In this study, the Google Document questionnaire was used, a web-based questionnaire that was primarily chosen based on its convenience to respondents and researchers. The Google form was implemented and adopted to represent questions in a closed questionnaire and through a Likert scale option (Strongly Agree, Agree, Slightly Agree, Disagree, and Strongly Disagree). The Google Form facility has an analysis in the form of bar graphs or pie charts, so it makes the researchers easier to explain and determine the response phenomena (Prasetya,

2021). The questions led to necessities, wants, lacks, and regarding the respondents' current English proficiency. They were translated into Indonesian so that the respondents could more easily understand in answering the questions. Besides, the interview was also conducted with several respondents to dig for more profound information about learning materials or topics that pharmacy diploma students in the classroom need.

Respondents' answers about their need and desire to learn English were treated as data. The data, in the form of answer choices from the available options, is converted into percentages. The percentage results were then analyzed and explained in detail. This research result is expected to be a reference for the following research: syllabus arrangement and the development of ESP teaching materials in the pharmacy diploma class.

3. FINDINGS AND DISCUSSION

Finding from Questionnaire

The vision of the pharmacy diploma study program is to become a vocational education provider that produces pharmaceutical staff who is globally competitive based on faith and excel in the field of pharmaceutical services in 2025. To support the realization of the pharmaceutical team, who are globally competitive, students need English. English in the pharmacy diploma study program is provided in the odd semester with two credits, including theoretical and practical lectures. This general introductory course aimed to complement students' English skills, emphasizing the introduction of pharmaceutical terms. In class, English was taught

by integrating several aspects, namely vocabulary, grammar, listening, reading, writing, and speaking comprehensively, due to an increase in students' skills.

Most students of the pharmacy diploma study program at STIKes Banyuwangi are still at the beginner level in mastering English. This is shown in the survey results below:

Table 1 Students' Mastery Level in English

Language Skill	Very Poor	Poor	Average	Good	Excellent
Listening	8 (14%)	31 (57%)	4 (7%)	7 (12%)	5 (10%)
Speaking	9 (17%)	37 (68%)	3 (5%)	2 (4%)	4 (7%)
Reading	2 (4%)	5 (9%)	30 (54%)	14 (25%)	4 (8%)
Writing	10 (18%)	33 (61%)	4 (7%)	6 (11%)	2 (3%)

From the result above, most students were poor at speaking. 9 (17%) students were very poor, and 37 (68%) students were deficient in speaking because they rarely use English in their daily conversations with friends and their surroundings, even though they have been learning English for years. The second skill considered difficult was writing, 61% of students were poor, and 18% students were poor in writing skill. For the listening, as many as 8 students were very poor, 31 were poor, 4 were average, 7 were good, and 5 were excellent. From the four language skills, students mastered reading more because there is currently Google Translate assistance to help them understand reading texts. It is in line with the research result conducted by (Semartini, 2022), which showed that reading was the most commonly mastered skill among Diploma Pharmacy students at a college in Surakarta.

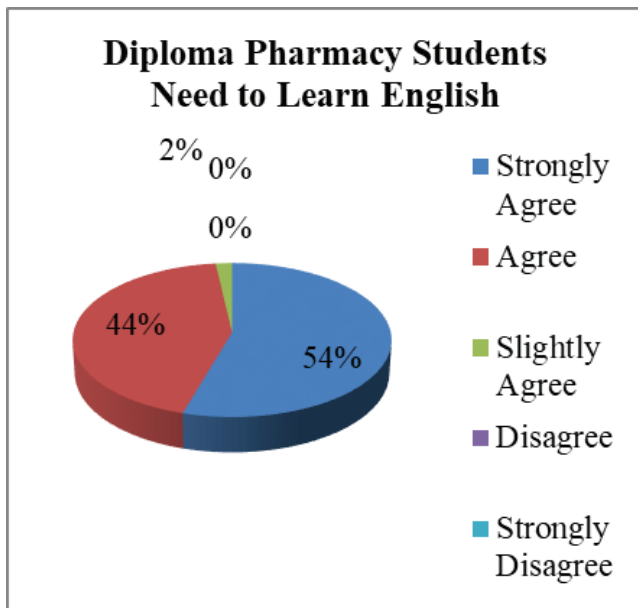


Diagram1. Pharmacy diploma Need to Learn English

Regarding the need for an English pharmacy diploma, students stated that they need it, as evidenced by the questionnaire results, which showed 54% (30 students) strongly agree, 44% (24 students) agree, and 2% (1 student) slightly agree.

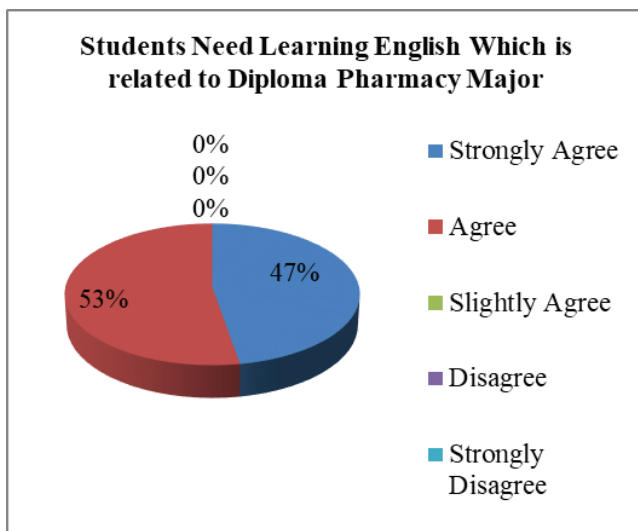


Diagram 2. Students Need Learning English which is related to a Pharmacy diploma Major

Diagram 2 above shows that all respondents

need English related to their major to support their career, there were 29 students (53%) agree, and 26 (47%) strongly agree.

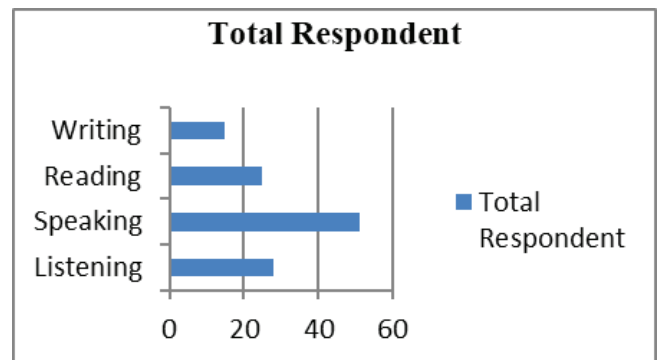


Figure 3. Language Skills that are considered important in learning English

Based on figure 3 above, the most language skill students need is Speaking. As many as 51 students showed it (93%) stated that speaking is essential to learn because they need English to communicate with their clients/patients and colleagues, especially if they are foreigners. It is in line with the research finding (Srinawati, 2019) that speaking was the skill most needed by students in the health sector. It cannot be separated from their work which requires them to deal with and communicates with patients. 28 students (52%) stated that they also need listening material, 25 students (45%) need reading, and 15 students (25%) need writing. Based on this result, it can be concluded that students need all four language skills.

Table 2. Language Components that need to be taught in every topic of learning English

Language Component	Strongly Disagree	Disagree	Slightly Agree	Agree	Strongly Agree
Grammar	0 (0%)	0 (0%)	2 (4%)	32 (58%)	21 (38%)

Language Component	Strongly Disagree	Disagree	Slightly Agree	Agree	Strongly Agree
Vocabulary	0 (0%)	0 (0%)	0 (0%)	33 (60%)	22 (40%)
Pronunciation	0 (0%)	2 (4%)	7 (13%)	29 (53%)	16 (30%)

Besides the four language skills, some language components must be taught in English, such as grammar, vocabulary, and pronunciation. This research result showed that the students required those three language components. The need for grammar showed that 21 students strongly agreed, 32 agreed, and 2 slightly agreed. The need for vocabulary led 22 students strongly agree and 33 students to agree. Then the need for pronunciation showed that 16 students strongly agreed, 29 agreed, and 7 slightly agreed.

Table 3. The students' Problems in learning English:

No	Problems	Total Students	Percentage
1	Do not have the confidence to speak English	43	78%
2	Difficulty in understanding someone who speaks	21	38%
3	Difficulty in pronouncing the English words	40	73%
4	Difficulty constructing sentences in English	31	56%
5	Difficulty understanding structure or grammatical in English	35	64%
6	Limited vocabulary	38	69%
7	Unfamiliar with the English text	24	44%
8	Have no friends to practice English	27	49%
9	Limited time available for learning English in class	32	58%
10	Others	13	24%

Pharmacy diploma students faced some problems when they were learning English. The biggest problem was the students were not confident in speaking English, and it can be seen from the percentage in the table above was 78%. It is caused by the limited vocabulary they have and the difficulty in pronouncing the words in English. So they felt shy to utter their opinion and practice English with their friends or lecturers. They were afraid of making mistakes/errors. The student's inability to pronounce or recognize the pronunciation of words/sentences in English is also one of the triggers for not being able to understand someone speaking English. This questionnaire result available in table 3 above is in line with research findings conducted by (Nashir et al., 2022). They stated that students' difficulties in learning English include a lack of vocabulary and grammatical knowledge, difficulty memorizing vocabulary and pronunciation because it differs significantly from Indonesian, a lack of confidence, a fear of making mistakes, and being laughed at by friends.

Table 4. The student's purpose in learning English:

No	Purpose	Total Students	Percentage
1	To support my future career.	42	76%
2	To get a brighter job.	26	48%
3	To communicate with patients/clients, colleagues, and foreigners	34	62%
4	To understand scientific and journal articles	34	62%
5	To travel around the world	15	28%
6	To work abroad	12	24%

7	To continue study.	19	35%
8	To educate patients/ customers	18	33%
9	To operate computer	17	31%
10	To the success of current education	32	59%
11	Others	6	11%

The purposes of students learning English vary widely. Most pharmacy diploma students learn English to support their future careers (76%), to communicate with patients/clients, colleagues, and foreigners (62%), to understand scientific and journal articles (62%), to succeed in current education (59%), to get a brighter job (48%), to continue study (35%), to educate patients/ customers (33%), to operate computer (31%), to work abroad (24%), and other reasons such as to get scholarship quickly and to get a foreign husband (11%).

Table 5. The materials needed by pharmacy diploma students to support their future careers:

No	Materials	Total Students	Percentage
1	Pharmacist vs. Pharmacist Technician	42	76%
2	Part of Body & Kind of Disease	29	52%
3	Laboratory Equipments	30	54%
4	Generic & Brand Names of Drugs	35	63%
5	Pharmaceutical Preparations	37	67%
6	Types of Medicine	36	65%
7	Dosage	32	59%
8	Prescription	36	66%
9	Pharmaceutical Services	43	79%
10	Drug Administration	38	69%

No	Materials	Total Students	Percentage
11	Medical Plants (Herbs) Names	31	57%
12	Self Medication(Non-Prescription Drug Service)	37	68%
13	Complementary & Alternative Medicine	30	54%

Regarding selecting the material appropriate for the pharmacy diploma students' major, the data in table 5 above indicated that all materials related to and following the pharmacy diploma field they considered essential to be learned. It was proven by the percentage of all materials offered was more than 50%. These materials will be highly beneficial in preparing students for job competition and getting a brighter job. (Kosasih, 2017) stated that the students' need profile became the criterion for analyzing and determining whether the curriculum and materials were relevant to their needs. The contribution of this study is as study material for revitalizing the English course curriculum to prepare pharmacy students to be better prepared to face the job market.

Finding from Interview

According to the current situation analysis, students' Speaking mastery was at the lowest level. It showed that speaking was the most insufficient ability of other skills. In contrast, the students believed that speaking is one of the essential skills they need. In other words, pharmacy diploma students must significantly improve their speaking abilities. (Leong & Ahmadi, 2017) Stated Speaking is the most crucial skill to develop but also the most challenging skill to master. Most people believe they cannot effectively express their ideas and opinions

in English because they cannot always find the appropriate vocabulary. Besides, short English vocabulary and too much focus on language structure (grammar) make them not confident in speaking English. The second skill considered difficult was writing. Writing is considered difficult by students because they have difficulty constructing sentences, structures, and grammar. Besides, the main problem lies in finding or selecting ideas. They are often confused about what they will write. Listening was also considered difficult due to the different accents and speeds of native speakers when speaking English, making it hard for students to catch the point. Then it was also found that Reading skill is regarded as necessary because it pertains to pharmacy technicians who must read English materials, instructions, and procedures.

Another problem faced by students in learning English was a lack of vocabulary. They did not have the sufficient vocabulary, particularly on the specific terminologist related to health and pharmacy sciences. (Lily, 2019) claimed that students must have good vocabulary mastery to have good Listening, Speaking, Reading, and Writing because there was a correlation between vocabulary mastery and student comprehension of English for Specific Purposes texts. In this case, the lecturers should include health and pharmacy terms and vocabulary in the curriculum and syllabus to help students improve their English.

From the interview results with Pharmacy Diploma students at STIKes Banyuwangi, there are several methods they hope to apply when learning English, namely discussion with themes according to their study program to practice their speaking skills

and train their confidence in speaking English. In addition, group work is also preferred by students so they can share and discuss with their group if they find difficulties in learning English. The conversation practice will also make it easier to learn English. Conversation can be carried out in pairs or groups with the appropriate theme given by the lecturers related to their major. The interview results also showed that the student's needs in learning English are to be able to read prescriptions, procedures, and indications on drug labels. Then understand and be able to translate reference articles in the pharmaceutical sector to support learning in class because some reference books and articles used by lecturers in teaching pharmacy diploma students already use English. So the English learning activities in class can include reading journal articles related to pharmaceutical science and reading prescription. Besides, they also need English for presentation purposes in the course so that they can present in English fluently. Competition in the current world of workforces graduates to have more skills than in their scientific fields. The ability to speak English is one of the skills graduates need to enter the world of work (Saifuddin & Ardiansyah, 2021).

The determination of learning materials/ topics in table 5 above resulted from interviews with 6 pharmacy diploma lecturers with a pharmacy scientific background. According to them, the 13 topics above are needed by students, especially when they graduate. So they can serve foreign patients/ clients well, compete globally, and not be left behind by other countries. They benefit those who want to work in international standard companies/ hospitals or abroad that require qualified English

skills. The interview results in terms of the English use by graduates at work, especially those working in international companies or abroad, showed that they often speak English with their superiors and co-workers. They also communicate in English through Email and occasionally speak in English with native speakers of English on the Phone.

4. CONCLUSION

It is essential for lecturers to develop learning materials and curricula that emphasize the needs of language learners. For example, pharmacy students need to learn special terms, especially those related to health and Pharmacy. English lecturers should develop methods and strategies to help students gain speaking confidence. Institutions also should provide training for English lecturers so that they can master English for Pharmacy because the majority of English lecturers did not study Pharmacy during their college studies. Furthermore, as knowledge grows continuously, it is recommended to conduct continuous evaluation or needs analysis periodically in relation to the method, curriculum, and teaching materials developed as a result of this analysis.

5. SUGGESTION

With many limitations, this research is expected to be a reasonable starting basis for improving English learning, especially for Pharmacy Diploma students. A similar needs analysis can be carried out in other institutions to strengthen the foundation for compiling a curriculum that conforms to national standards, the student's needs, and various elements of higher education stakeholders. It is also hoped that there will be a collaboration between pharmacy

diploma lecturers and English lecturers regarding English materials, especially related to terms in the field of Pharmacy.

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