

Need Analysis of English for Nursing Students and the Relevance to Learning Material

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ABSTRACT

To provide learning material there are some considerations in selecting, adapting and evaluating the content which can be done by arranging need analysis. Through need analysis, it shows the preference and appropriate learning materials to support students in improving language skill based on their working ground. Learning materials are expected to be suitable with the target need especially occupational needs. Language learning resources will help students in understanding and using language skill when they get into job field. This study is purposely conducted to find out the learning material to be relevant used for nursing students. Whereas, the data source is obtained from the professional nurses who work in medical institution. The technique of collecting the data is done by handing the questionnaire and document analysis. The questionnaire is contained of English subskills need to be expanded to support students' proficiency at work. The document analysis is be described by answering several questions adopted from Hutchinson and Waters. The study uses descriptive qualitative method. The findings describe the need of occupational needs in work field and its the relevance to learning materials used for nursing students. The result shows that language skills occasionally used are speaking and reading. Whereas, the learning material used in the classroom is not really sufficient and meet the occupational English in work field. The results are substantial for teacher and designers to review and redesign the materials to learn English related to work field. It is suggested that the learning materials provided by lecturers are supposed to be relevant to occupation field in order to meet target and students' needs.

Keywords: Need Analysis, Learning Materials, English for Nursing

1. INTRODUCTION

English for nursing in university level takes role as one of courses which is provided in order to improve language skill fir students. Even though it is not limited, however some institutions arrange the syllabus and course based on general standard from government. Thus, it is allowed to custom and adapt the syllabus to meet the need of students' need and target need. Suhendi (2005) investigated that English lecturers proposed teaching syllabus according to their knowledge and experience since there was no specific curriculum set for English course provided by the university. Otherwise, learners expect the lesson material consists of topics to be used in real work situation. Yoestara (2017) found out from an interview she conducted that Indonesian students complained that the learning material is not relevant to their area of study, meanwhile the lesson is mostly focused on grammar. In other case, the objective of the curriculum somehow does not fit proportionally implementation. Previous studies in Taiwan done by Lu (2018) found that the nurses considered their ESP courses ineffective because the content failed to meet their language needs and challenges. Based on those studies, there might be a no need analysis conducted before the class. Meanwhile, it is important to define the learning material before teaching in order to deliver the suitable lesson which are fit into students' need in real work – field. Eventually, it leads to the expectation that formal institution could prepare nursing students to overcome challenges in actual work-field situation.

2. METHOD

The research was conducted by using descriptive design in order to describe the target need in occupational situation of the professional nurses. The research was done by doing the survey and administering questionnaire supported, thus, the results were analyzed through descriptive statics. Furthermore, to support the data, content analysis was done by investigating the document used for learning source.

This research applied descriptive design since the factors that descriptive study is used to get certain information about certain phenomenon that happen when a research conducted. This study analysis was done to figure out the need of nursing student and the relevant learning material in English for Nursing Purpose. The data for this research will be from questionnaire and document analysis. The source of data for the research were professional nurses and nursing syllabus as the document source. The questionnaire was distributed to nurses who work in hospital in order to find out the need of English used in working environment. The document of learning material will be analyzed to investigate the relevance between students' needs and targets' needs.

According to the previous studies in particular aspect of nursing English leraning conducted by Hutchinson and Waters (1987), Saragih (2014), Susandi and Krishnawati (2016), Nurindah, Lelly and Nggawu (2019), Ratmanida et.al (2019), and Suramto, Susmini and Episiasi (2021), the questionnaire was adapted as the instrument of the research. The questionnaire will be close-ended which are constructed in Likert items.

There were 3 parts of questionnaire contains of 4-8 items was addressed to find out nurses' personal information, relevance of learning material, preference situation and material in studying English for Nursing. Thus, for each item consists of 2-8 sub items will be described to occupational learning needs.

Document analysis was done in this research to investigate the learning material used for the nursing student. Thus, the content provided in the learning material will be listed and analyzed to see whether it is relevant to students and target needs. The indicators of learning materials content for nursing students stated by Hutchinson and Waters (1987) based on the subjective analysis and objective analysis.

To investigate the stance of material used for nursing students, the document was analyzed by answering

To analysis the relevance of subjective and objective needs, these following steps will be used to check the list:

- 1) Categorize the requirement by answering questions in unit A (Subjective Analysis). Thus, this information used as the background to determine the materials offered in learning language or as the input to the step of evaluating materials.
- 2) Analyze the selected materials by answering the B questions (Objective Analysis).
- 3) Compare the result and finding from A (Subjective) and B (Objective). Giving score is allowed to calculate the range of relevance.
 - 0 = does not match the desired feature
 - 1 = partly matches the desired feature
 - 2 = closely matches the desired feature

The formula used to define the relevance is:

3. FINDINGS AND DISCUSSION

The findings of this study was arranged to find the need of learning material used in occupation place and its relevance to provided material. It shows the nurses' preferences of learning material in each of English skill.

3.1 The Need of Learning Materials 3.1.1 The Need of English Skill

There are seven English language skills categorized in this study to find the most important language skill needed for nurses in work field. To estimate the number of percentages, they were characterized as very important to least important. Thus, from the table below, Speaking and Reading skill is the most important while Grammar is in the smallest consideration.

Table 1. The Need of Important English Skill in Occupational Place

No	English Skill	Percentage
1.	Grammar	0,7 %
2.	Vocabularies	21,4 %
3.	Pronunciation	2,3 %
4.	Speaking	28,5 %
5.	Listening	14,2 %
6.	Reading	28,5 %
7.	Writing	4,4 %

The percentage illustrated that Speaking and Reading are the skills highly demanded in work place where they took 28,5 % each. The second highly expected was Vocabulary with the percentage as 21,4 %. Thus, the third likely skill used was Listening as it showed 14,2 %. Meanwhile the least skill to be expected in nursing work situation were Grammar (0,7 %) and Writing (4,4 %) in which the percentage was less than 5 %. It can be said that the three most used skill in nursing situation at work are Speaking, Reading and Vocabularies.

3.1.2 The Need of Listening Material

Listening is recognized as one of skills to learn in learning language. The materials provided for leaning skill can be covered in; talking about illness (listening to the conversation and narrative), comprehend about description and explanation of illness, listening comprehension about human body system, medical English (listening to a conversation between doctor and nurse), listening comprehension to various situation of ordering, arguing and complaining from patient in clinical situation, listening to native speaker, listening to lecturer's instruction in classroom. Table below shows the percentage of each listening material used in work situation.

Work Situation		
No	Listening Material	Percentage
1.	Talking about illness	30,7 %
2.	Comprehension: Diarrhea	15,3 %
3.	Comprehension: Human body system	15,3 %
4.	Medical English; Doctors and Nurses conversation	23 %
5.	Understanding any kinds of ordering, arguing and complaining in clinical setting	13,4 %
6.	Listening to native speakers	1,2 %
7.	Listening to teacher's instruction in the classroom	1,1 %

Table 2. The Important Listening Material Used in Work Situation

From the table it presents the most important listening skill to use was Talking about Illness gained 30,7 %, the second highly demanded was the conversation between doctors and nurses in medical english, followed by comprehension; diarrhea and comprehension: human body system with the same result was 15,3 %. thus, understanding any kinds of ordering, arguing and complaining in clinical setting was 13,4 %. Otherwise, listening to native speaker (1,2%) and teacher's instructions (1,1%) were likely to be involved.

3.1.3 The Need of Speaking Material.

Speaking is considered as one of the most expected skill to learn in nursing department. In the questionnaire, the suggested material for speaking skill was described as practicing to ask WH questions, asking and answering patient, telephoning, classroom conversation, medical situation conversation, communicating patient's condition, treatment and therapy. Based on the questionnaire, the result was calculated in percentage as below.

Table 3. The Important Speaking Material Used in Work Situation

No	Speaking Material	Percentage
1.	WH Question practice	9.8 %
2.	Asking and answering patient	18,6 %
3.	Telephoning conversation practice	0,5 %
4.	Conversation to classmates and lecturers	11 %
5.	Conducting conversation to doctors, nurses and medical personnel	33,3 %
6.	Communicating and explaining patients' condition and treatment	9,6 %

7.	Communication to the therapy of patients	17,2 %
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The table represents the percentage of the learning material for speaking skill needed. Conducting conversation to doctors, nurses and medical personnel gained the highest ratio (33,3%), thus followed by asking and answering patient (18,6%), communication to the therapy of patient (17,2%), conversation to classmates and lecturer (11%), WH question practice (9,8%), communication to the therapy of patient (9,6%), and telephoning conversation practice (0,5%). It can be stated that the most interested learning material based on the need was engaging conversation between doctors and hospital staffs, the least interesting was conversation through telephone.

3.1.4 The Need of Reading Material

In nursing work situation, reading skill is one of the most used skill in line with speaking. The materials proposed include types of medicine, reading comprehension related to the prescription, patient's report, the direction in nursing environment, health facilities, vital signs description, physical vital sign, composition of nutritious foods and vitamins. Furthermore, the description of the need of reading material is described as following table.

Table 4. The Important Reading Material Used in Work Situation

No	Reading Material	Percentage
1.	Types of Medicine	30 %
2.	Comprehend the prescription	12 %
3.	Comprehend the report of patient	18 %
4.	Comprehend the direction of nursing	18 %
5.	Comprehend the topic in health facilities	5,1 %
6.	Comprehend the vital signs description	6 %
7.	Comprehend the physical examination	5,4 %
8.	Comprehend the nutritious food ingredients and vitamins for patient	4.6 %

According to the table, it is drown from table that the highest percentage for the reading material nurses need was the types of medicine (30%), followed by comprehend the report of patient and comprehend the direction of nursing share the same proportion (18%),comprehend the prescription (12%),comprehend the vital signs description (6%), physical examination (5,4%), comprehend the comprehend the topic in health facilities (5,1%), and

comprehend the nutritious food ingredients and vitamins for patient (4,6%). Nurses were interested in having more knowledge in types of medicine, otherwise they less attracted to comprehend the nutrition food.

3.1.5 The Need of Writing Materials

The result of the questionnaire was drawn by distributing these following options for writing material, explicitly the guide to write academically and scientifically, fill out the form, reporting accident, take a note of appointment, prepare the symptom report, summarize the death report, and prepare to report the respiration rate. The result for each materials is determined as below.

Table 5. The Important Writing Material Used in Work Situation

No	Writing Material	Percentage
1.	How to write academic and scientific	30,7 %
2.	How to prepare and help patient to fill out form	19,4 %
3.	How to prepare the accident and emergencies report	20,6 %
4.	How to taking notes the appointment to doctor	0 %
5.	How to prepare a symptom report	29,3 %
6.	How to prepare a summary of death report	0 %
7.	How to prepare a respiration rate report	0 %

The table above shows that the nurses preferred to have the material on how to write academic and scientific text (30,7%), thus the following preferences were how to prepare a symptom report (29,3%), how to prepare the accident and emergencies report (20,6%), and how to prepare and help patients in filling out medical form (19,4). Meanwhile, the nurses did not put any interest in taking notes for the appointment, arranging note for appointment and preparing the report for respiration rate.

3.1.6 The Need of Grammar

Grammar is the supported skill in learning language. Likewise, in English for nursing, it has it roles even though according to the survey it was the least interesting skill. Through the questionnaire, the following grammar materials display the material nurses assumed to be taught in nursing class.

Table 6. The Important Grammar Material Used in Work Situation

No	Grammar Material	Percentage
1.	Subject, Verb, Adjective and Noun	50 %
2.	Pronoun and Possessive Pronoun	9,8 %
	Sentence (declarative,	2,011
3.	interrogative, imperative,	10,2 %
	exclamatory)	
4.	Conjunction	19,6 %
5.	Preposition	0 %
	Tenses (Simple Present Tense,	
6.	Simple Past Tense, Continuous	2,3 %
	Tense, Present Perfect Tense, etc)	
7.	Phrase in medical terms	8,1 %

The nurses decide that the most important aspect in learning grammar is knowing the subject, verb, adjective and noun (50%), conjunction (19,6%), declarative, interrogative, imperative and exclamatory sentence (10,2%), pronoun and possessive pronoun (9,8%), phrases in medical terms (8,1), tenses (2,3%) while the least important was grammar of preposition (0%).

3.1.7 The Need of Vocabulary Material

To know the vocabularies will support language learner to use language appropriately. However, vocabulary is put after speaking and reading skill needed. The following are the materials preferred by the nurses to be learn during nursing education.

Table 7. The Important Vocabulary Material Used in Work Situation

No	Vocabulary Material	Percentage
1.	Medical vocabularies	30,7 %
2.	Human body system and anatomy	9,4 %
3.	Medical Supplies	15,3 %
4.	Illness and symptom	15,3 %
5.	Doctor's Diagnosis	23 %
6.	Visiting hours and family members	6,3 %
7.	Booking appointment	0 %

Based on the table above, the result shows that learning about medical vocabularies (30,7%) was the highest concern from the nurses, followed by doctor's diagnosis (23%), medical supplies and illness share the same proportion (15,3%), human body system and anatomy (9,4%), visiting hours and family members (6,3%), otherwise none of them put any concern to booking appointment (0%).

3.2 The Relevance of Need and Learning Materials.

To relevance between language need in occupational circumstances and learning material was

drawn by distributed the questionnaire to the nurses. From the questionnaire, the perception of nurses was illustrated in percentage to see the highest to lowest relevance. The result is described in the following table.

Table 8. The Relevance of Material and the Occupational Need at Work

No	Relevance Statement	Percentage
1.	The material does not match the need of nursing in work place	0 %
2.	The material matches the need of nursing in work place	25 %
3.	Th instructor does not have capability in teaching English for Nursing	25 %
4.	The instructor has capability in teaching English for nursing	50 %

Nurses believed that the English skill material they learnt had met they necessity (25%), while more instructors had adequate knowledge in teaching English for Nursing (50%).

A document analysis was done to support the data towards the relevance between the occupational needs and learning material offered for nursing students. The document was analyzed by answering several questions based on Hutchinson and Waters (1987) related to learning material content for nursing students. Kamberi, Dragoescu, and Ameti (2019) stated that the questionnaire contains preliminary result. Thus, through comparative exploratory study indicated some differences as well as similarities between the subjective and objective analysis. Subjective analysis was gained from the result of questionnaire, meanwhile objective analysis was investigated from the learning material offered in the class. Both subjective and objective analysis result will be compared. The subjective and objective analysis can be seen in the table below.

Table 9. The subjective and objective analysis can be seen in the table below.

No	Subjective Analysis	
1.	Listening to talking about illness	
2.	Comprehension: Diarrhea and Human Body	
۷.	System	
3.	listening to medical english; doctors and	
3.	nurses' conversation	
4.	Asking and answering patient	
5.	Conducting conversation to doctors, nurses	
٥.	and medical personnel	
6.	Communication to the therapy of patients	
7.	Reading text: Types of Medicine	
8.	Reading comprehension: report of patient	
	and the direction of nursing	

9.	Academic and scientific writing
٦.	
10.	Prepare and help patient in filling out form
11.	Prepare an accident and emergencies report
12.	Prepare a symptom report
13.	Grammar features: Subject, Verb, Adjective and Noun
14.	Grammar features: Conjunction
15.	Medical vocabularies
16.	Medical supplies
17.	Illness and symptom vocabularies
18.	Doctor's diagnosis

Table 10. Objective Analysis Based on Learning and Teaching Material

No	Learning Material	
1.	Offering service and responding.	
2.	Spoken and written text to deliver news or information (grammar features: vocabulary of illness, accident, good news and bad news.	
3.	Spoken and written text in asking attention (structural feature: asking for direction, possessive pronoun)	
4.	Spoken and written text in applying a job	
5.	Written text / caption on a picture (grammar features: preposition of place)	
6.	Spoken and written text in reporting factual and contextual event	
7.	Descriptive text related to obligation (grammar feature: modals <i>should</i> , <i>ought to</i>	
8.	Written text to ask and convey opinion.	
9.	Text of news item from newspaper, radio or TV	
10.	Conditional situation, followed by command or suggestion (grammar features: Conditional Type 1 and 2)	
11.	Procedure text (grammar features: connective procedure)	
12.	Listening to a simple song	

As it is identified, the material provided by teacher did not meet the need of work field. From 12 learning material on syllabus, there were only 9 items matches to the occupational need. Thus, the score was calculated less than 1 point which indicates that it partly relevant to the need. Analysis from the subject demonstrated the nurses refers to practical and specific English for nursing, for instance comprehension of the report, direction and medical situation, academic and scientific writing, managing communication to patient, reporting accident, symptom an emergencies report, medical vocabularies and supplies, grammatical features in verbal and nominal.

In the other hand, the material provided by the teacher focused on the material general situation without emphasizing on nursing area. It can be seen in

the material of written and spoken of asking for attention, interaction with others exclude hospital situation, creating a caption on a picture, reading text from items news and listening to simple song.

The findings illustrated that almost all the proposed English for Nursing are needed for the professional nurse. However, the need for each language skill have different range and importance. Even though speaking skill is one of the most important skill needs, from 7 items of speaking learning material, there were 4 items reached less than 15% including WH question practice, telephoning conversation practice, conversation to classmates and lecturers, communicating and explaining patients' condition and treatment. Reading skill did not achieved 15% for 5 items out of 8 proportion, they are comprehending the prescription, comprehending the topic in health facilities, comprehending the vital signs description, comprehending the physical examination, comprehending the nutritious food ingredient and vitamins for patient. For other English skills, there were even 0% attention for the professional nurses mentioned in writing skill as to take notes of doctors' appointment, prepare the summary of death report, and prepare a respiration rates report, thus, in grammar as preposition, and in vocabularies as booking appointment.

It is considered that each English language skill is needed in professional working situation. The learning material provided by the lecturer had met partly in some learning material even though general English still dominate the content and objective. The lecturer may redesign learning material by looking through the needs of students and target in professional matter.

4. CONCLUSION

As the part of curriculum development, need analysis is considered to be constructed before English language teaching and learning process. The result of this study can provide knowledge for the needs in professional work place and the material that related to the target expectation. The result can be used as references in designing and deciding the syllabus used for nursing students in university level. Since the result of this study is expected to obtain wider variety of input into content, design and application of English for nursing.

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