

THE IMPLEMENTATION OF TEACHING ENGLISH MEDICAL TERMINOLOGIES FOR PHARMACIST ASSISTANS IN VOCATIONAL HIGH SCHOOL

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Abstract

The research focuses on the implementation of teaching English medical terminologies for pharmacist assistants. Medical terminology is used in international language, and it is also necessary for communicating with other medical personnel. Therefore, this study aims to investigate the implementation of teaching English Medical terminologies for pharmacist assistants in Vocational High School. This research is a qualitative study, in which the data were taken from interview, observation, and documents. The teachers' interview was about the implementation of teaching English medical terminologies for pharmacist assistants. The observation was done toward the teachers' strategies and challenges also documents of the teachers involved lesson plans, teachers' books and students' worksheets. To analyse the data, the researcher used descriptive qualitative. The results of the study found that the teachers' strategies in teaching English for pharmacists in SMK NU Sidoarjo used CLT, role play and integrating technology. In addition, the teachers' challenges were teachers' background knowledge and students' behaviour.

Keywords: Medical Terminology, Pharmacist Assistant, Vocational High School, Qualitative Research, Teaching Strategies, Challenges

INTRODUCTION

Nowadays people in Indonesia are very common to vocational high school, and one of the popular vocational high schools is Pharmacy. Pharmacy is classified as a community of institutional pharmacy. Providing direct patient care in the community of institutional pharmacies is considered clinical pharmacy (Thomas, 2018). Some people thought that Pharmacy is always study about how to compose a drug. Some people forget that a pharmacist also should have a good in communication. Communication in medical term is used by medic to make it easier to provide information to patients. In the field of health, medical terminology is use for communicating both verbal and writing. In the area of Pharmacy, pharmacists should understand and be expert in medical terminology to find out the health terms or abbreviations contained in a doctor's prescription, or to know the types of disease

terms in order to know the right medicine that is given to patients. English language as an international language which influences many aspects including education and health. In this modern era, almost all of the professional and academic settings have appeared in non-English speaking countries as English for Specific Purpose (ESP) (Ghanbari & Rasekh, 2012). Widodo (2016) has argued that teaching English in vocational education, particularly in secondary education, should be taken into account as English for Specific Purpose (ESP) program. For this reason, the English instruction applied in ESP teachings should be totally different from general English (GE) instructions which is very general in nature; serving the students with the teaching of all four language skills and stressing them equally (Rahman, 2015). ESP course, on the other hand, are designed to meet the needs of learners and other stakeholders to

communicate for work or study purposes in specific disciplines (Vogt & Kantelinen, 2013). In this sense, they are hardly trained to use English in a specific discipline or a particular communicative context (Liu, Chang, Yang & Sun, 2011). From the above statement, we can know the importance of teaching for Pharmacists assistant is in a vocational high school. 'Teaching English for Pharmacy improve students' skills in the use of English language, especially in the field of medical terminology, to help communicate in the world of health and help students deal with the globalization era which is very close to the use of English language.

The research is focusing on the teaching English for Pharmacy especially in medical

terminology. Medical terminology is used in international language, and it is also necessary for communicating with other medical personnel. It is very important to pharmacist's assistant to be able speak English or at least good in spelling a word. Understanding terminology involves breaking words down into their components of prefixes, suffixes, and root of word and having a good working knowledge of those parts. Therefore, this study aims to investigate the teaching English for Pharmacists assistant in a vocational high school focusing on medical terminology to know how English for Pharmacists assistant taught by the teachers and some challenges.

RELATED LITERATURE

1. English for Specific Purpose in Vocational High School

Vocational High School (VHS) is one of the educational institutions responsible for creating human resources who have the ability, skills, and expertise. So that the graduates can develop performance when engaged in the future career (Suharno & Widiastuti, 2017). English in a vocational high school is categorized as English for Specific Purpose because it has specific materials and goals. ESP courses, on the other hand, are designed to meet the needs of learners to communicate for work or study purpose in specific disciplines (Vogt & Kantelinen, 2013).

According to article 15 of Indonesian Law no.20 of 2003 concerning the National Education System, vocational education (Vocational High School) is a secondary school programmed to prepare students for certain jobs. This means that vocational high school is school where students are given special materials or materials needed to do certain jobs. Those statement has relation to Widodo (2016) he has argued that teaching English in vocational high education, particularly in secondary education, should be taken into account as English for Specific Purpose (ESP) program. For this reason, the English instructions applied in ESP teachings

should be totally different from general English (GE) instructions which is very general in nature, serving the students with the teaching of all four skills and stressing them equally. Materials are chosen to suit the learners' needs. The materials are usually authentic materials chosen from the professional field. This is to given an experience of the kind of language terms used in the chosen field.

Based on Carter (1983), there are different types of English, however the two are main subdivisions are English for academic and occupational purpose. English language is an international language which influences many aspects including education and health. In Indonesia itself, pharmacy is program not only in university but also in vocational high school. Pharmacy as one of programs offered in Indonesia, which aims to provide pharmacy to students. Their discussions are introducing students to the language of science and medication, covering topics such as anatomy, physiology, pathology, diseases, diagnosis, and many more. Another subject is also about medical terminology which discuss terms in the world of health, disease and medicine.

2. Teaching ESP in Pharmacist Assistant

Brown (2001) defines techniques as any of a wide variety of exercises, activities or tasks used in the language classroom for realizing the lesson objectives. Teaching ESP focusing on medical terminology involves some technique.

Caduceus (2019) suggested some techniques to teach ESP focusing on medical terminology in pharmacy.

a) developing chapter pretest, a chapter pretest assesses students' knowledge on a particular subject before they dive into the course material on that subject. Pretest help educators develop a sense for where students are at, so they can more effectively customize the course content, and restructure it if needed. For example, if the majority of students in class perform well on anatomical pretest, it may not need to spend as much time on anatomy as other subject. Chapter pretest help students understand what to expect from the course early on, so there are fewer surprises when the final exam rolls around. At the end of the semester, teacher can review students' pretest scores in comparison to their final exam scores to show the progress.

b) Encouraging students to say the term out loud in the context of medical terms that are difficult to pronounce. Encourage students to practice saying these terms aloud. More than just establishing vocabulary list to study, strengthen your students to use terms as they are in real-world scenario such as explaining diagnoses or procedures.

c) Innovating with technology, multimedia gives students' opportunity to connect with students as a deeper level, through many channels including online course with audio and visuals media help students learn and search information better.

d) Use flashcards to memorize, flashcards are a fun and interactive way for students to memorize complex medical terminology terms.

e) Letting students teach, reverse the script and give your student the opportunity to teach. Divide students into small groups and give each group a glossary to learn and then teach to the whole class. This technique not only encourages students to work together, but also gives students the opportunity to become presenters of the material, learn and present new information in real time.

3. Medical Terminology

Medical language consists of prefixes, root word, and suffixes. It serves to clarify fully the parts of the organic structure, processes, diseases, pharmacological, medicine, and medical procedures. Medical language is employed in medication and in clinical settings. Medical language has a quite regular morphology, identical prefixes and suffixes accustomed to add meanings to totally different roots, the foundation of a term typically refers to associate organ, tissue, or condition as an example, in disorder hypertension, the prefix "hyper" suggest that "high" or "over", and also the root "tension" refers to pressure, therefore the word "hypertension" refers to abnormally high-pressure level (Gordon, 2016). Medical language developed for the most part from Greek and Latin words, numerous terms are often deciphered through associate understanding of the meanings of assorted roots and affixes. This handout illustrates, however roots and affixes square measure accustomed to donate variety or size, direction, colour, anatomical locations, additionally as alternative meanings.

METHODOLOGY

This research was descriptive qualitative. The researcher got the data from interview the teachers, observation to the teachers' learning technique and documents of the teachers, such as: lesson plan, teachers' book and student worksheet. The source of the data are selected teachers in SMK NU Sidoarjo. In data collection, the researcher conducted some steps; 1) Designing research instruments; 2) Interview the teacher and recording; 3) Transcribing the interview; 4) Observation and taking note; 5) Studying the teachers documents, such as worksheet, RPP, and syllabus of the teachers. In the data descriptive analysis, researcher used several steps; 1) Data reduction; 2) Data display; 3) Conclusion drawing. Data triangulation is used for validity that the observation started when the researcher was done the interview to the teachers about teaching English for pharmacists assistant, the second was the

researcher has been observed to the teachers' technique and some of teachers' challenges, last but not the least the researcher was taken the teachers' documents such as teachers' text book, students' worksheet and lesson plan to complete the researcher result.

METHODOLOGY

1. Teachers' Strategies in Teaching English for Pharmacists Assistant

a) CLT (communicative language teaching)

Teachers teaching English for pharmacists' assistant is actually to prepare students in their future career as a pharmacists' assistant as the teacher responded:

My own goal is to refer to prospective pharmaceutical assistants in the world of work so that this knowledge and book can be useful for them. (T1)

In vocational high school, students should know English after their respective majors, however, students did not miss in KI and KD of the government and TOEIC. As what teacher stated about how important English for Pharmacy career.

Important. Because vocational high school students should know English after their majors, however, it still does not lag behind KI and KD of the government also. (T1)

Teachers' statements above had connected to the Widodo (2016) who argued that teaching English in vocational education, particularly in secondary education, should be taken into account as English for Specific Purpose (ESP) program. Another statement about ESP and students' needs was argued by Vogt & kantelinen (2013). ESP course, on the other hand, were designed to meet the needs of learners and other stakeholders to communicate for work or study purposes in specific disciplines.

In this research, the teachers used teaching communicative learning (CLT). Communicative Language

Teaching (CLT) is one of the teaching strategies which mainly focuses on improving the communicative competence in order to develop good communication and effective language use (Christianto, 2019). This statement was similar to teacher' goal who wanted to improve students' communication skill.

Medical terminology taught to help students commutative for daily activity in future career. (T1)

b) Integrating Technology

Today, integrating technology is an important part of student education. Integrating technology into the course curriculum where appropriate has proven beneficial for enhancing and broadening the learning experience for students. The use of computers can stimulate effective learning and improve performance (Zin, 2012). Teaching requires good and interesting media. The media used in teaching and learning activities will make students focus on the teachers, so the classroom will be in the teacher's control. The media used must be effective and attractive. According to Sudiran & Prasetyowati (as cited in Suyanto, 2007), the effective and attractive use of media in teaching can help students understand the topic easily.

According to lesson plan and observation, teacher used several media, such as LCD projectors, worksheets, picture and videos. In another occasion students were excused by the teacher to open the phone. The phone was used in class in case to search some doctor prescription. As long as researcher observed, teacher also showed some pictures about how was the Pharmacy in some countries, just for reference of the students about another countries Pharmacy.

c) Role play

Role playing as an active learning strategy can be used, not only in face-to-

face classrooms, but also in mixed or distance learning. Teachers, who have used this strategy before, can continue to experiment with role playing by thinking up new scenarios for their course (Erturk, 2015). This statement was similar to teacher's goal who wanted to improve students' communication skill. This strategy was used by the teachers (T1 and T2) to improve students' communicative skills and also improve teamwork between pharmacist assistant and other health care provider. The study results demonstrated improvement in oral and written communication skills that may help improve interprofessional teamwork between pharmacists and other health care providers (Luiz, Zeszotarski & Ma, 2015). Another result of research was found that 158 students completed the questionnaire. The majority of students (84%) rated their role-play experience as 'very good' or 'good' and the most common reported advantage was that role-play help them understand and remember ethical issues (Al-aqeel, 2013).

Based on researcher observation, it was in 1st chapter of the book. The topic was about "Telling Doctor Prescription". In this chapter, teacher started to inform students about some medical terms and the definition of some nouns in Pharmacy field in English, such as the definition of pill, definition of ampoule, definition of capsule, and many more. Another material was about ordinary number in English. This material was connected in prescription in telling information about how many should the medicine taken by the patient. As what the teacher responses:

I also discuss and practice role play for ordinary numbers material because it discusses drug information on signa about how many times the drug should be taken by patients. (T1)

2. Teachers' Challenges in Teaching English for Pharmacists Assistant

The data related to the teacher's challenges in teaching English for Pharmacists assistant focusing on medical terminology were taken from conducting interview with the subject and having observation. The presentation of findings, in this part covers kind of challenges that the teacher faced while teaching in the class.

a) Teachers' Background Knowledge

In this case, the teacher's background knowledge that was not from the pharmaceutical field also became its own challenges. In this case, the teacher was required to learn many things about pharmacy and what was needed by prospective pharmaceutical assistants for the future career. In addition to searching many sources and consulting with expert teachers, the teacher also often made observations to students about the feasibility of the material and the validity of a term, especially in terms of medical terminology. It was uncommon for teachers to revise the pronunciation of a medical terminology sentence in Latin by students. The teacher's background study was from the world of education and literature that caused spelling errors of some terms that should be read in Latin but teachers spelt in English. According to the results of the interview, teacher told that:

I sometimes have fear when teaching something to those who are clearly more experts in their fields than me, but in my opinion, this is a challenge so I am fine even though I am often revised about my pronunciation which still often uses English spelling. (T1)

Teachers' fear as what was stated before, it has connected and reasonable based on Ali's (2015) small-scale research undertaken was looking at the ESP teacher education model in Indonesia, and finding several factors that were not met by teachers who applied serious

problems in their pedagogical applications.

b) Students' Behaviour

Students' behaviour is the one of teachers' challenges especially in students' communicative skill. Effective communication is a powerful skill pharmacists need to acquire and master in order for the best patient's outcomes to be achieved. A tool to teach pharmacy students the different types of communication that can happen in their interactions with prescribers was developed (Hasan, 2008). Based on the interview that was done, the teachers said:

The type of pharmacy children really needs to be too focused and serious because they are accustomed to the table, while they should also be drilled in their communication skills because in fact later in the world of work they are also required to support directly with patients, this makes them can be used to check prescriptions available directly not in accordance with the language, so ask for a very simple one. (T1)

This statement is also supported by the other teacher that stated:

Regarding the character of the pharmaceutical children themselves, they do tend to want to be fast and not worry, whereas if we talk about word formation and grammar, it must be in accordance with the rules. (T2).

Those statements by the teachers had connection to Hasan (2008) who stated in her research that the main reasons for pharmacists' difficulties in communicating with other health professionals included struggles for power, poor communication, lack of trust, and an unsatisfactory communication environment.

CONCLUSION

According to the research results that have been discussed before, it can be concluded that strategies of teaching English medical terminologies to pharmacy assistants had

several strategies and challenges. Teachers' strategies in teaching English for pharmacists assistant included three things, CLT (communicative language teaching), role play, and integrating technology.

The CLT method which included role play techniques in order to improve students' communication skills for their future career interests. For integrating technology, teachers used several media such as LCD projectors, pictures, worksheets, picture and laptop. In another occasion, students were excused by the teacher to open the phone. The phone was used in class in case to search some doctor prescription. For the materials, teacher was taken from the teachers' book. The topic of the chapter discussed about "Telling Doctor Prescription". This chapter was included by some definition of nouns in medical terms used in signa and ordinary number.

Furthermore, the teachers' challenges in teaching English for pharmacist assistant were teachers' background knowledge that was not from the pharmaceutical field causing teachers did lot of research on medical terms and vocab in the pharmaceutical world. Besides, that students' behaviour also became another challenge, especially in students' communicative skills.

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