

Teacher's Perceptions of Medical Students' linguistic Needs: Qualitative Analysis

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Abstract

This paper aims at investigating teachers' perceptions of medical students' linguistic needs. It also tries to examine if the needs of medical students are perceived differently by stakeholders in medical sciences. For so doing, a structured interview was developed and distributed to 30 teachers, teaching English for medical purposes (EMP) at colleges of medicine in Iraq. The collected data were qualitatively analyzed based on the teachers replies to the questions raised in the interview. The findings revealed that medical students are required to be sufficiently competent in all four language skills, considering the demanding nature of their profession in the future. They ranked the importance of language skills: reading, writing, speaking, and listening, respectively. **Key words:** Teacher's perceptions, medical students, linguistic needs, skills, EMP

1. Introduction

ESP has garnered attention due to the predominance of medical and health-related research originating from English-speaking regions. A specific linguistic and rhetorical system has gradually developed to guide target discourse communities in the teaching and learning of medical English. The study of ESP discourse has evolved from a purely linguistic focus to incorporate a linguistic-rhetorical approach. Since the 1980s, research in English for Medical Purposes (EMP) has increasingly emphasized rhetorical and register analysis. Medical research articles are recognized as a significant sub-register of medical English and have garnered increased attention. The needs of English for medical students are not only for studying their subject matters but also for pursuing their careers in the future (Niazi, 2012).

In the context of EFL in Iraq, medical English is primarily utilized for the publication of research articles in international medical journals and for presentations at international medical conferences. The capacity to read and write medical research articles is a fundamental language skill for many Iraq learners of English for Medical Purposes, including College of Medicine at the University of Baghdad.

However, it has been noticed that many medical students possess an insufficient level of English proficiency and complain about having to do something to meet their English language needs. This problem is further noticed when they get involved with academia and research, or when they decide to study or work abroad. They usually struggle to find proper courses that can satisfy their English needs. Furthermore, medical students in EFL context are most likely facing problems in dealing with their medical subjects and that can be attributed partially to the English language barrier. Clearly, English language used in such a context includes special terms and linguistic structures the students may have never encountered before.

3. Objectives

The paper aims at

1. Investigating medical students, linguistic needs at the College of Medicine, University of Baghdad,
2. Identifying challenges, they encountered and suggesting remedial solutions, and
3. Specifying materials and instruments employed to teach medical students.

4. Research Questions

1. What teaching materials are required for EMP?
2. What challenges are encountered in the instruction of EMP?

5. EMP

Before embarking on EMP, it is important to give some introduction to the term ESP from which the term EMP is derived. ESP is a kind of English teaching which must be tailor-made to the existing and precise students' needs. It is commonly "based on needs and oriented towards tasks" (Ramirez, 2015, p. 27). It is a broad and diverse field of English Language Teaching. It is a term which is used to found language programmes intended for certain groups or a group of persons who are supposed to learn with a recognizable goal and obviously definite needs (Johnson & Johnson, 1999, p.105).

In this sense, ESP is identified as a subfield which seeks to serve the language needs of learners who need language in order to carry out specific roles, and who need to acquire content and real-world skills of a second and foreign language rather than to master its grammar and pronunciation (i.e., language for its own sake) (Richard and Roger, 2001, p. 207).

Focusing on the procedures and practicality of ESP, it was initiated to account for the processes and applied results, this is due to the fact that it has been in the frontline of the advances in ELT, "moving from grammatical, functional and notional syllabuses to a more eclectic and task-based approach." (Nagy, 2014, p. 262). In the last five years, the discipline of EMP has lived powerfully in international countries, simply because English became the "premier research language" among the language of medicine (Swales, 2004). Today, most of the medical journals are in English and paramount contributions in medicine and science are published in English. It is often known that medical English is highly technical and contextually based; in workplace doctors use technical and academic language, and use jargons and common language. However, they are noticed to hardly produce proper sentence structures. Specifically, Medical English is a somehow advanced English which cannot be taught as the same method of fundamental English language teaching. Health professionals and students of health department of a university or college are the EMP learners. Hence, the aim of EMP learning is not to learn primary grammar and structure but to learn how to use language for social and career purposes (Niazi, 2012, p.51). English is the language of medical textbooks and journals so it becomes highly necessary to study English in medical colleges.

Moreover, Kang (2004) expounds that it is important for medical professionals to study English, as all medical knowledge is accessible to medical professionals in English; articles and journals are accessible in the English-speaking language for medical professionals. All seminars, conferences and review publications are proceeded through English. In brief, EMP is essential for medical students' current state and future.

In this respect, Lee (1998) described EMP as a specialized English course for students or for those working in nursing and medical areas. EMP may include job-related English skills such as medical terminology, abbreviations and conversations used in performing daily medical tasks. EMP is a form of English as an L2 education that clearly emphasizes medical English according to the needs of one's job such as writing progress notes and charting, interviewing and assessing patients and reporting. In this paper, EMP is concerned with the need analysis and course design strategy for identifying doctors and medical practitioners' communication needs.

5. Needs analysis

In discovering students' needs, needs analysis is regarded as an integral part of decision-making processes before designing a course. Dudley-Evans & St. John (1998) think that needs analysis is a continuous and dynamic process. Only through demand analysis can we determine course contents and teaching methods. More precisely, Jarvis (1983) points out that demand analysis is the need to investigate language learners. In this sense, needs analysis is a crucial phase in the development of EMP materials (Belcher, 2006; Nalini Arumugam, 2011; Astika, 2015; Alqurashi, 2016; Aniqoh, 2018). Given the significance of needs analysis for EMP students, multiple studies have been conducted, yielding various findings within the context of English as a foreign language. Practically, needs analysis examines the tasks that students must perform in their workplace or within a specific academic or professional domain.

Relationally, Robinson (1991, p.11) posits that the information obtained from a needs analysis is typically aligned with the teaching and learning approach, as well as the subsequent syllabus design. If the teacher or planner prioritizes a pedagogical approach centered on linguistic forms and their precise reproduction, needs analysis will likely include an examination of the students' understanding of linguistic forms and a linguistic analysis of tasks at the target level. Students' needs can be articulated through specific language items that must subsequently be taught. Thus, needs analysis process aims to address questions concerning the timing, location, and rationale behind language learners' requirements for the target language (Basturkmen, 2010).

According to Dudley-Evans and St John (1998), "initially obtained data on needs analysis allow researchers to set course objectives and determine a scientific approach to teaching" (p.121). Ongoing needs analysis allows teachers to revise objectives and to modify teaching techniques and materials. In ongoing needs analysis, the conclusions drawn in the initial analysis have to be constantly checked and re-assessed.

6. English at College of Medicine

Medical students at college of medicines have several reasons to learn English at their colleges. They need English in their academic and occupational settings to cope with various tasks (e.g., understanding class lectures, reading books, magazine, journals, research, speaking to teachers, foreigners, presenting at seminars, to make use of expanding and increasingly important database available on Internet and reading original texts). English has attained an indubitable status in Iraqi medical settings. There are several motives for Iraqi medical learners to learn medical English due to the key position of English language as global lingua franca. It becomes essential for medical students to have sufficient competence in EMP. As there are strong needs and motivation for them to learn EMP. However, there are no effective and satisfactory courses established in Iraqi medical colleges to enhance the English language proficiency of medical students, specifically those aimed at meeting their certain medical needs. Moreover, there are no well-equipped EMP teachers available in Iraq who have been trained for this specific purpose.

7. Previous Studies

Some related studies are essential to be given here to reveal points of relatedness between them and the current study. In one way or another, they can provide a certain grounding for the initiation of this present study. Firstly, Vahdany and Gerivani (2016) tried to identify the language needs of medical students and general practitioners (110 students, 40 general practitioners, 3 EFL instructors, and 12 subject-matter instructors) at Guilan University of Medical Sciences. The findings revealed that the participants ranked reading as the most important skill followed by writing, listening, and speaking skills respectively.

Secondly, Chia et al. (1998) examined the perception of 394 medical college students and 20 faculty members toward the English language needs of medical students in Taiwan. The participants' opinions were asked about the significance of the English language in students' studies and their future careers, basic English language skills needed in the freshman English course, and suggestions for developing an English language curriculum. The findings showed that the participants believed that the English language is an important need for academic life and future career of medical students. They further affirmed that listening skill must be emphasized as the primary important language skill, and they suggested an additional year for studying English language.

Thirdly, in the context of Saudi Arabia, based on multiple methods for data collection (such as questionnaires, interviews, and observation), Javid (2011) tried to explore the linguistic needs of undergraduate students studying at the College of Medicine and Medical Sciences of Taif University. The findings disclosed that the students did not have the required English language proficiency, and among the language skills, they needed reading and speaking more.

Finally, Budianto (2004) conducted a study on 36 students of the medical faculty of Muhammadiyah University of Malang, Indonesia, about the use of English. The finding indicated that 18 respondents (50%) confirmed that they used speaking skills most. Another 18 respondents (50%) asserted that they used reading skills too. Interestingly, none of them claimed that they would use English for writing and listening. In short, this finding stresses the importance of English speaking and reading skills for medical students.

To sum up the above studies, it is important to cope with, Chang's (2007) statement

"We noticed that attention to learners' needs is a key element in any definition of ESP. Therefore, EMP is intended to help a medical student who is planning to study medicine in English. It is assumed that this medical student will have some knowledge of general English but limited experience of studying works in medical English" (p.2).

8. Methodology

Mythological procedures often involve three components: sample, instrument, data collection and method followed for collecting and analyzing data. *The sample* of this paper consists of 30 teachers teaching English language in the medical colleges in Iraq. *An interview* is the main instrument utilized to gather information regarding the status of EMP for the students of college of medicine. Generally, interviews provide a comprehensive approach to data collection, enabling researchers to acquire a nuanced grasp of respondents' viewpoints and requirements. The interview with open-ended questions is essential as these questions prompt respondents to provide more information and personal perspectives. Particularly, the aim of this interview is

to gather teachers' perspectives on students' immediate language needs and to obtain information regarding the course material.

A qualitative procedure is followed to gather and analyze the data drawn from the ten open-ended questions of the interview. Data collection is based on the answers of the thirty Iraqi teachers of English at the colleges of medicine in Iraq. These questions were directed to the teachers to elicit their opinions concerning students' linguistic needs. The subsequent steps involve sequencing and organizing the questions, followed by the preparation of a draft for the interview guide.

Question 1 concerns preferring type of English to teach (EAP, EOP or EMP) and the reason for selecting one of them.

Question 2 intends to know teachers' opinions about the existing syllabus for EMP.

Question 3 investigates the teachers' need for teaching materials to EMP.

Question 4 examines the challenges encountered in teaching EMP.

Question 5 inspects the teachers' weekly teaching time to teach EMP.

Question 6 intends to identify the atmosphere of teaching EMP.

Question 7 intends to specify teachers' views on the weaknesses of the prescribed course.

Question 8 aims to identify the reasons behind students' poor performance.

Question 9 gives suggestions to improve the course.

Question 10 inquiries if the teachers want to add any remarks or comments.

9. Findings

Interviewing EMP teachers seems to be crucial in detecting points of difficulty both teachers and students face in teaching and learning EMP. The researcher can gain more about teachers' teaching style, their lesson planning and class organization and management. In brief, he can get more about the healthy environment for teaching students of medicine. Further, he can identify how teachers shape the manner by which medical students learn, develop and perceive the world surrounding them. The outcome of interviewing teachers can help them to tailor their students' acquiring and learning English in terms of the latter's linguistic requirements. However, the teachers' replies to the open-ended questions of the interview are the following:

1. Which type of English do you prefer to teach (EAP, EOP or EMP)? Why?

In relying, teachers seem to prefer EMP as it focuses on teaching medical issues and subjects, simply because both teachers and students of medicine want to improve their EMP. Teachers find that EAP and EOP are not so useful and helpful for their students who are concerned with medical issues. Some of their comments are: *"I am not well-satisfied with the existing English; it does not give priority to medical topics and materials."*, *"It is true that students of medicine need general English to use it in their everyday life, yet EMP seems to be more important for their future careers as medical physician."* and *"All types of English are necessary but the most needed and important one is EMP."*

Particularly, EMP aims to determine the level of the medical students in terms of language skills through the student's study of medical subjects which require a higher level of language performance through communication skills and the four language skills: listening, writing, reading and speaking skills. English is essential for medical students as EMP is useful for them in their current study and future jobs to write reports, communicate with others and pursue scientific and medical development in the field of medicine.

2. What is your opinion of the existing syllabus for EMP?

An effective syllabus based on what really students of medicine need can lead to a successful teaching and learning EMP. The current curriculum represents the elementary level of English and does not meet the linguistic needs of medical students, as it represents most of the subjects studied in high school before being enrolled in college of medicine. With regard to the basic language skills of reading, writing and listening, it is clear that the current syllabus lacks focus on current skills in addition to oral communication skills, as they are among the basics of the language. This syllabus does not meet the necessary linguistic needs of students during their study of medicine, nor does it meet their future professional needs in terms of language use. The interviewed teachers contend that *"The existing syllabus is neither sufficient nor successful in a way that students often complain of learning EMP."* *"I myself see that the current syllabus must be replaced by one which more representative and more beneficial; it must fit students' linguistic needs."* and *"A good syllable must enable students of medicine to perform the four basic skills more easily and more freely."*

In their replies, teachers remark that they are not convinced with the existing syllabus as it not well-qualified to meet their students' needs neither the teachers' needs. It does not take into account all language skills

(reading, writing, listening, speaking). More precisely, it neglects communicative skills students need to communicate and interact with one another and with their teachers. Put differently, the existing syllabus lacks the basic linguistic structures students of medicine need in their present state and future careers.

3. What are the teaching materials you need to EMP?

Teachers remarked that the available materials do not fit real needs of their students. They add that EMP teaching materials require studying the linguistic needs of students, as their studies take all medical subjects in English, in addition to the linguistic needs the students benefit from them in their future profession. Teachers of EMP argue that *“Teaching materials must be prepared in a way that students of medicine can make benefit of them in the current state and future jobs.”* *“Materials provided for students of medicine are not well-designed; they do not take into account the for basic skills students need to improve their general English”* and *“Materials must be replaced or modified to fit the students’ linguistic requirements.”* EMP Teachers recommend the following:

For speaking skills medical students should be equipped with materials encouraging and enhancing their speaking abilities. For reading skills, the materials proposed to the medical students must include reading passage with go parallel with their actual linguistic needs. In order to develop their writing abilities, it is obligatory to equip students of medicine with materials that help and encourage them to correctly and appropriately perform writing skill. Listening skill is somehow neglected in medical classes; therefore, teachers suggest students must highly focus on lectures given in English; they are required to quickly write and spell the word heard correctly. Above all most students do not get acquainted with this activity which is completely neglected in secondary schools in Iraq. Students also need communicative skills as it is one of the basic means of answering the teacher's questions, participating in class activities, or getting into discussions. Teachers of EMP argue that basics of the use of language by medical students must be added to materials that meet the students’ linguistic needs in addition to oral communication skills that meet their needs for their current studies and also for their future studies.

4. What are the challenges you face in teaching EMP?

Teachers of EMP surely face certain problems or challenges in teaching EMP. The challenges faced by EMP teachers encompass linguistic difficulties, as medical terminology which predominantly originates from Latin or Greek. These linguistic challenges arise from the varied applications of English words in a medical context. One of the challenges facing EMP teachers is the pronunciation of the medical terms, unfamiliarity of the teachers with medical terminology, the unfamiliarity with the medical procedures practical side of the medical procedures such as ROM (the range of movement) and NGT (Naso-gastric tube).

In other words, unfamiliarity with the English meaning of Latin-originated words in the medical context and difficulties in identifying the meaning of the English words in the medical context are the main challenges that teachers face. For instance, the word *“delivery”* in the English language means to deliver something to someone, but in the medical context, it refers to giving birth. In addition, possessing knowledge of the objectives of the medical program seems to be an important aspect in teachers’ careers. They must be acquainted with the objectives of the medicine program to execute their practice effectively, which can be facilitated through instruction in medical English. They should know how to get students involved in learning the medical field. Therefore, some teachers suggest that new teachers must get enrolled in programs providing them with the main objectives of EMP. They contend that *“I face a lot of problems, among which are students’ standard in English, lack of healthy circumstances for teaching and number of students in the class which exceeds 100 students.”*, *“I see that teachers must attain programs helping them to get acquainted with the main objectives of teaching EMP.”* and *“Terminologies, particularly those taken from Latin seem to be difficult to be understood by students.”*

5. How many hours do you need per week to teach EMP?

EMP Teachers suggest that the number of hours required for teaching English for medical purposes for medical students must be three to four hours per week instead of two hours a week. They are supposed to cover the basic language skills and oral communication skills. Teachers complain that one or two hours a week are not sufficient for covering the basic language skills: *“One hour or two hour per week for teaching EMP seem to be not enough for helping students understand medical issues.”*, *“We need more time to teach students of medicine, perhaps 3 or 4 hours a week.”* and *“To improve students’ standards in English we need more than two hours a week to help them grasp the information in English language.”* Teachers feel that more time reserved for teaching EMP would give their students more opportunity to experience all the language skills

and oral communicative skills. They realize that all subjects of College of Medicine are offered in English, therefore students surely need more time get acquainted with English vocabulary and structures.

6. How is the atmosphere of teaching EMP?

The atmosphere for teaching English is not satisfactory and healthy for teaching EMP. Healthy settings are not available and teachers often complain of facing difficulties in teaching EMP. Teachers are required to know the level of the students in identifying their strengths and weaknesses in terms of language skills and communication skills, as well as motivating students with some skills and the time factor between explaining the topics of the current curriculum that lack meeting the needs of the students. Teachers of EMP argue that *“atmosphere is not always encouraging; students feel uneasy to take lectures.”*, *“We face sometimes noisy classes because of the large number of the students.”* and *“Students must be taught that English is a natural language which can be acquired naturally not in academic settings; therefore, we suggest that we must build natural settings, similar to everyday life situations.”*

It becomes clear that the atmosphere for teaching English for medical purposes is challenging due to factors including the current curriculum and the level of the newly registered student in the first stage and the availability of facilities and equipment required for teaching EMP.

7. What are the weaknesses of the prescribed course?

Language courses must be well-planned to meet the needs of both teachers and students. The current curriculum reveals a weakness in providing the linguistic needs of medical students, as its content does not meet what the students' needs at the present time for their studies, nor does it meet what they need in the future for their profession. The other part that medical students are in dire need of is oral communication skills, due to its importance for the student to explain and simplify the study materials. The current curriculum did not provide students with this important part in the language. Some teachers' comments include *“the existing curriculum does not cope with the students' willingness nor their real requirements.”*, *“Curriculum, instruments, materials and ways of teaching students are the weakest points in teaching students of medicine EMP.”* and *“The prescribed course requires suitable curriculum, good planning, effective methods of teaching and practical training ... etc.”*

8. What are the reasons behind the students' poor performance?

There are many reasons behind the poor performance of students that can be identified in the following points. First, students who registered in the first stage of the Faculty of Medicine were not accustomed to having all their lectures in English only and felt difficulty in understanding topics in English. Second, the current curriculum and its components had no connection to the one given in the preparatory schools, so no tangible improvement can be expected at college level. Third, acquiring English language skills varies from student to student due to the individual differences among students. Not all students have the same level of development in English; some are fluent and others are somehow average. Fourth, medical terminology is another difficulty for them that requires students having knowledge of the word structure and origin. Fifth, communication skills must be performed in a way that students are encouraged and motivated by their teachers to do so. In addition, there are multiple reasons associated with materials, ways of teaching, teachers' style ... etc. which cause the student's weaknesses. Reason of the cause of students' weak performance are many, among which are *“Students are not well-prepared to take medical English, as they get used to general English, they face new terminology, new concepts”*, *“Perhaps, the ways of teaching English is not the proper one, this leads to weak in performance”* and *“Oral skills are the most important ones, yet students mostly cannot use language properly more than one minute. This means they need practice.”*

9. What suggestions can you offer to improve the course?

In most cases, teachers state that they require the upcoming activities. Firstly, teachers confirm that adding activities related to the basic skills of the English language for first-year students is very important, simply because these activities are influential in terms of the students' linguistic performance and contribute to developing their linguistic skills in the future. They focus on activities that can develop students' abilities in solving problems related to four language skills (speaking, listening, reading and writing). One teacher comments *“Activities must be added to support teaching English actively as they can develop their four basic skills: reading, writing, speaking and listening.”*

Secondly, for speaking skill, they suggest that activities linked to communicative activities must be included in the course syllabus to improve the students' speaking abilities through discussions between students based on medical and scientific topics, through which students can discover their weaknesses to express themselves

among themselves or with the teacher. One teacher argues that ***“The focus of teaching students of medicine must be on communicative activities which help them to communicate and interact with one another and with teachers.”***

Thirdly, for reading skill, they suggest that activities encouraging reading comprehension must be added to the existing syllabus in order to help, motivate and urge students of medicine to get into reading. They recommend that students must be encouraged to read various scientific and medical themes in English. With such activities, teachers are able to detect students' weaknesses and what are points of difficulty they suffer from. One teacher's comment is ***“Reading is an activity which must be given due consideration, it develops students' abilities to grasp scientific and medical subjects.”***

Fourthly, for writing skill, teachers suggest that students must resort to update communicative strategies rather than pursuing traditional methods. Writing is a hard task which require students to use their mental abilities to attain success. In this sense, they recommend that students must practice various types of writing, such as medical topics, medical reports, scientific subjects ... etc. That is, they are given topics which are fully understood by the students, such topics are associated with their interests. In certain cases, students are asked to discuss the main points about the topic before embarking on writing about it. A teacher in this respect comments that ***“Writing must be given more emphasis; it is the most needed skill for students of medicine particularly in their future jobs.”***

Finally, for listening skill, most teachers contend that it is completely neglected in all stages of learning English in Iraq; one comment is ***“listening is a very important skill as it trains ears to perceive sounds properly, yet no due attention is given in colleges of medicine for this skill.”***

Teachers' suggestions are real practical steps, simply because they are drawn from people who are mainly concerned with teaching students English. Those interviewed teachers are all of good experience in teaching English; they have been chosen on the basis of their teaching experience (5 and more years of experience in teaching EMP). Noticeably, they transfer their sufferings and needs and their students' linguistic sufferings and requirements.

10. What else do you want to add?

Teachers reply that a focus must be placed on allocating topics that include oral communication activities during the lecture-time. These activities must be performed in terms of multiple questions that help students better grasp the lecture. The purpose of adding this activity is to prepare the student in the future to be able to participate in local and international conferences and workshops whose language is English. This, in return, constitutes a development in the student's linguistic level, which motivates them more to learn. It should also be taken into consideration that oral communication as an activity is very important, as through it, students can identify the linguistic obstacles that he may face while speaking in front of the class, particularly in front of a large number of students. One teacher's commentary is ***“Oral communicative activities must be added and encouraged in classes to assist students to better understand English.”***

Teachers proceed to say that the existing syllabus in particular and curriculum in general must be revised and modified to imply all updates methods of teaching, updated topics, fresh instrument, ... etc. They emphasize on the idea that a designed curriculum must be dynamic not static. It must not be based on conventional/traditional materials, methods, rather it must cope with the recent development in the field of language teaching and learning. Another teacher comments ***“The existing curriculum must be revised and replaced; it does not effectively help them grasp English.”***

Furthermore, teachers assert that students must be given more time to practice language activities and participate in class tasks. Curriculum must give part of the lecture-time to students' involvement in class interaction. One benefit of interaction is that it enables students to identify their own mistakes and others. Students in turn can make benefit of their mistakes in correcting their linguistic performance. Repetition and revision are also emphasized by teachers as they ensure the students' learnability. One teacher argues that ***“teachers must ask their students to repeat and reread their assignments more and more to ensure learning English better.”***

To sum up, teachers constitute a very important factor in predicting medical students' linguistic needs, language skills they require to use language communicatively. Replies to the open-ended questions reveal that teachers are not convinced with the current syllabus and curriculum intended for the medical students. Teachers show that the four main skills are not well-equipped to the students, and this is one of the causes of their failure in learning EMP. They expressed their points of view on what those students need at the present time for their

studies and also what they need in their future profession by providing a curriculum that meets their basic language needs and also adding communication skills to the curriculum. Furthermore, teachers affirmed the importance of adding activities that support the student's self-confidence through discussions on academic topics and focusing on each language skill by adding a special activity for each skill.

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