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**An Analysis of Medical Students Needs for English Language
Case of 6th and 7th years in Annaba University**

A dissertation submitted for the fulfillment requirement to get MASTER DEGREE
In science of languages

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DEDICATION

A special feeling of gratitude goes to my loving parents, whose affection, encouragement, and prayers were behind our success, and to my beloved wife and daughter who were all the time by my side, especially when things proved hard. They are the reasons for why I am here and for what I am going to be. So, many thanks to them.

I also dedicate this work to my family, the symbol of love, and to my friends who encouraged and supported me.

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ABSTRACT

The importance role of language is undeniable for most professions, as well for medical sciences and medicine; an effective communication can strongly enhance clinical practicing. For non-English learners, English for medical purposes is an indispensable road to improve language skills. This study throws light on the academic component of EMP: EAP and explore needs analysis for medical students. It aims to answer three questions: (1) What do medical students need English language for? (2) What are the problems related to their needs in learning English for medical purposes? (3) What are the most important skills needed? And how they are needed? Quantitative data were collected by using questionnaires. Medical students (N=30) from sixth and seventh year of medical study at faculty of medicine at Badji Mokhtar university –ANNABA- for 2018-2019 academic year. Participants answered a questionnaire composed of three parts: general information, functional and tasks, and language skills. Results demonstrated that students have a high level of awareness about EMP importance but also a lack in connectivity with the language. Data collected exposed the needs for a variety of tasks and activities related to healthcare in order to improve the four major skills.

Keywords: English for medical purposes; needs analysis; language skills; EAP

LIST OF ABBREVIATIONS

ESP: English for specific

EMP: English for medical purposes

EOP: English for occupational purposes

EAP: English for academic purposes

NA: Need analysis

EFL: English as foreign language

ESL: English as a second language

EST: English for Science and Technology

EBE: English for Business and Economics

ESS: English for Social Studies

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Chapter One

INTRODUCTION TO THE STUDY

Introduction

In ESP, language is learnt not for its own sake or for the sake of gaining a general education, but to smooth the path to entry or greater linguistic efficiency in academic, professional or workplace environments (Basturkmen, 2006). This statement demonstrates that learning a language can be directed toward other goals than general purposes and focus to develop some needed competencies used typically by adult learners who need to acquire a foreign language in their specific field or profession. Medicine like any other field has its own terminology that is needed to be mastered for efficient communication in healthcare environment between different related agents from students passing by practitioners to patients. So inevitably, English for medical purposes emerged; the teaching of English for doctors, nurses and other personnel in the medical profession becomes more orientated toward specific needs of medical learners and focuses topics restricted to medical field.

Statement of the Problem

After the World War II, the use of English language spread all over the world in almost every field: technology, economics, business, and healthcare...etc. then the needs to learn the language increased. English for specific purposes has flourished and gained an important place and the demands of medicine for the English language led to English for Medical Purposes with its two different approaches; teaching students at universities(English for Academic purposes) or teaching practitioner doctors(English for occupational purposes). Of course, for an effective teaching/learning process, ESP is based on certain features that considered as a necessity and pillars of this science that should be profoundly studied; one of

these important features is need analysis (NA) which is simply why the learners need English language. According to Hutchinson and waters (1987), the awareness of the existence of that is what distinguishes ESP from general English.

Aim of the Study

The research work aims to find out English language needs of medical students from their perspective to enhance and improve the English for medical purposes teaching and learning; moving toward a teaching/learning system based on students centered processes in order to prepare them more efficiently to reach their professional objectives and equip them with panoply of skills to keep up with the high-speed pace of world's technology evolution.

Research Question

The present research calls into questions:

First question

What do medical students need English language for?

Second question

What are the problems related to their needs in learning English for medical purposes?

Third question

What are the most important skills needed? And how they are needed?

Those questions were made to make a precise and concise collection of data in order to design EMP courses with very clear goals. The first question focuses to get general ideas about topics to learn/teach, and what students find more difficult and relevant to them. The second would suggest how to help students as future practitioners to guide courses according

to medical tasks and the use of English in everyday activities. The third question is about the pillars of any language (the four skills: reading, writing, listening and speaking) and how they will be used to master the language especially in the case of EMP.

Significance of the Research

The importance of this study is to focus on medical students in Algeria to adapt their needs and preferences, their conditions and situations, and a suitable syllabus and courses for efficient teaching. Moreover, the study will explore the unique English needs and expectations of the students at the faculty of medicine in Annaba. Also, it will dissect their demands for EMP based on multitude of factors that influence the teaching/learning process in the classroom and the productivity on the field of work later on.

Research Methodology

This study used questionnaire to collect data about medical students learning, their different specialism and possible career, their practicing, and the use of academic English. Also, it was used to gather information about relevant topics, different functions in the field, and language skills needed. Participants (N=30) were medical students at Badji Mokhtar university, the sample is composed of two groups (n=15) of randomly selected students between sixth and seventh year. Nineteen students were females and eleven were males, aged between 24 and 26 years old. The research was conducted during March 2018.

Anticipated problem

At university level, English for medical purposes has still been a new experience and even more inexistent in some universities. The teaching is hindered by the limited hours given to the courses and also, there is not much research works conducted about the topic in Algeria or Worldwide.

Conclusion

This study explores academic English language needs of 6th and 7th year medical students who are not attending English courses in order to elaborate more suitable EMP courses. Chapter one granted an overview of this study with statement of the problem and purpose of the research. This is a quantitative research which used a questionnaire to collect data from 30 students from Badji Mokhtar university during 2018-2019. this thesis includes five main chapters: introduction to the study, literature review, research methodology, finding and results, and discussion.

Chapter two

LITERATURE REVIEW

Origins of ESP

Hutchinson and Waters investigated the origins of ESP and they found that it was a phenomenon that grew out of a number of converging trends (p.6). The debut was at the end of the Second World War in 1945 with that huge international expansion of sciences, technology and economic activities, promoted especially by the increasing power of the United States in every domain after the war.

During that period, English outstood other languages and became greatly needed to accomplish greater achievements. Hutchinson and Waters (1987) claimed that English created a new generation of learners who knew specifically why they were learning a language, such as business people who wanted to sell their products, mechanics who had to read instruction manuals, doctors who needed to keep up with developments in their field and a whole range of students whose course of study included textbooks and journals only available in English. All these and many others needed English and, most importantly, they knew why they needed it (p.6).

Also, according to Dudley-Evans and St John (1998) much material was produced as a result of the practitioner engaging with the teaching situation, carrying out a limited text analysis and then writing a handout or a series of handouts.p.20. The new wave of ESP gave a necessity to the emergence of new ideas and a modification of linguistics. However, the new studies shifted attention away from defining the formal features of language usage to

discovering the way in which language is actually used in real communication (Widdowson, 1987).

An important other factor that contributed to the development of ESP is the focus on the learner. In educational psychology, the attitude of the learners toward learning influences greatly the outcome of ESP. As learners have to acquire different skills of the language and use different learning strategies according to their needs and interests.

Consequently, the rising of ESP became an obvious matter; turning to be one the most important field of EFL teaching as it was demonstrated by Anthony (1997): "Its development is reflected in the increasing number of universities offering an MA in ESP (e.g. The University of Birmingham, and Aston University in the UK) and in the number of ESP courses offered to overseas students in English speaking countries. There is now a well-established international journal dedicated to ESP discussion, "English for Specific Purposes: An international journal.

DEFINITION of ESP

English as a foreign language (EFL) also called English as a second language (ESL) is the teaching of English to non-English speakers. Learners have different reasons to acquire and use a language, one subset of ESL as mentioned above is ESP that is globally referred to the teaching of English language to university students or working people according to what they want and focus: technical English, Scientific English, Medical English, or tourism....etc.

Anthony (1997) indicated that a multiple of definitions till nowadays given by community. Yet they did not agreed and debates continue: "Some people described ESP as simply being the teaching of English for any purpose that could be specified. Others, however, were more precise, describing it as the teaching of English used in academic studies or the teaching of English for vocational or professional purposes. "

Mackay and Mountford (1978) point out that ESP is generally used to refer to the teaching of English for a clearly utilitarian purpose.” .p.2 Learners need the language for predetermined goal to achieve professional or educational.

The definition of Robinson (1991) is based on two criteria and two characteristics; the first criterion is “normally goal oriented”, the other is “need analysis”. Her characteristics are the “limited time period” of courses and the “nature of the learners” who were generally homogeneous adult classes.p.3

Hutchinson and Waters tried to give an answers to what is ESP based on its origins and development, they concluded that ESP is an approach more than product which is not a particular kind of language, teaching material or methodology.p.19

Dudley-Evans & St. John (1998) found that all above definitions have their own validity and weaknesses so they based their own on Strevens’ one by modifying absolute and variable characteristics:

Absolute Characteristics

- ✓ ESP is defined to meet specific needs of the learner;
- ✓ ESP makes use of the underlying methodology and activities of the discipline it serves;
- ✓ ESP is centered on the language (grammar, lexis, and register), skills, discourse and genres appropriate to these activities.

Variable Characteristics

- ✓ ESP may be related to or designed for specific disciplines;
- ✓ ESP may use, in specific teaching situations, a different methodology from that of general English;

- ✓ ESP is likely to be designed for adult learners, either at a tertiary level institution or in a professional work situation. It could, however, be for learners at secondary school level;
- ✓ ESP is generally designed for intermediate or advanced students;
- ✓ Most ESP courses assume some basic knowledge of the language system, but it can be used with beginners.

Branches of ESP

Clearly, from the growth and progress that ESP has made, it will emerge multiple branches that will contribute to meet needs of on different levels of the language.

David Carver (1983) identifies three types of ESP:

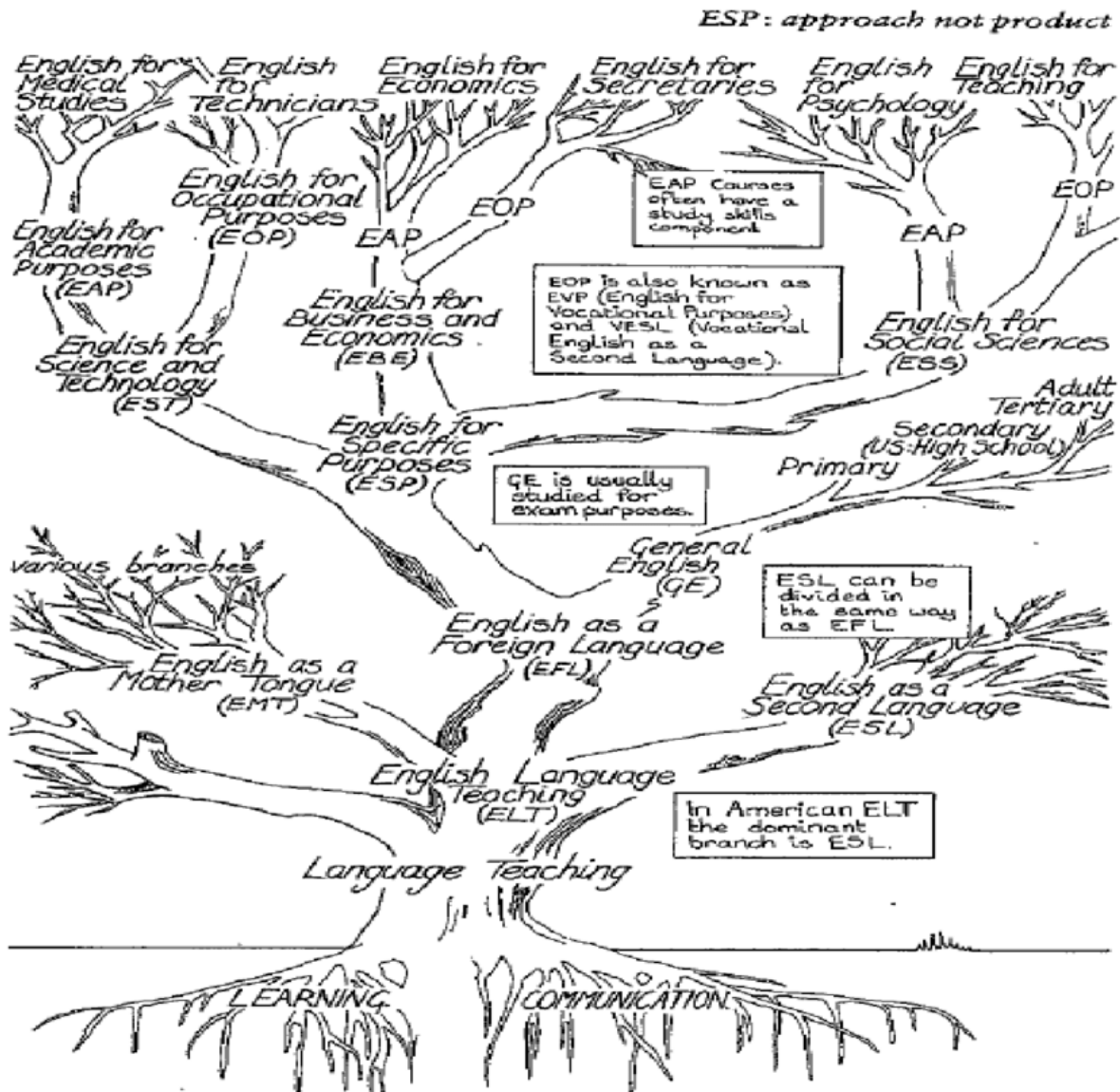
1. English as a restricted language: ESP may not be restricted to language skills to be learned. But can be restricted to a certain domain or specialty as Mackay and Mountford (1978) explained the difference between restricted language and language "... a restricted repertoire of words and expressions selected from the whole language because that restricted repertoire covers every requirement within a well-defined context, task or vocation."p.4

2. English for Academic and Occupational Purposes is the second type of ESP identified by Carter (1983). In the 'Tree of ELT' (Hutchinson & Waters, 1987), ESP is broken down into three branches:

- a) English for Science and Technology (EST),
- b) English for Business and Economics (EBE), and
- c) English for Social Studies (ESS).

Each of these subject areas is further divided into two branches:

- English for Academic Purposes (EAP) and
- English for Occupational Purposes (EOP)



3. *English with specific topics*: The third and final type of ESP identified by Carver (1983) is English with specific topics emphasizing the shift from purpose to topic for the first time.

This type of ESP is uniquely concerned with professionals requiring English for postgraduate

reading studies, attending conferences or working in foreign institutions. In my opinion, this is not a separate type of ESP, but a component of which focuses on situational language. is uniquely concerned with anticipatory future needs like requiring English to work in foreign institutions, attending conferences, postgraduate studies.

English for academic purposes

EAP is teaching English to help learners in their studies or researches to develop language skills such as listening comprehension, fluency development, oral intelligibility, reading, writing and vocabulary development, As well as academic skills like note taking, academic writing and reading, individual presentation or group discussion. It covers a broad area of academic communicative practice as divided by Hyland (2006):

- Pre-tertiary, undergraduate and postgraduate teaching (from the design of materials to lectures and classroom tasks).
- Classroom interactions (from teacher feedback to tutorials and seminar discussions).
- Research genres (from journal articles to conference papers and grant proposals).
- Student writing (from essays to exam papers and graduate theses).
- Administrative practice (from course documents to doctoral oral defences).

Similarly to ESP, EAP contains needs analysis and syllabus design but it is also much more theoretical and research informed enterprise. (Hyland. 2006)

Furthermore, the awareness of the importance of EAP is not exclusive for non-native speakers but also native university student speakers who need to write and read unfamiliar genres and participate in novel events.

English for occupational purposes

It is the teaching of English to workers according to their needs in their jobs to perform daily tasks with efficiency using English language depending on certain situations. In this context, Kennedy and Bolitho (1984) explained that EOP is taught in a situation in which learners need to use English as part of their work or profession .p. 4.

So, EOP must provide working people with relevant materials through specific courses designed for the execution of their jobs.

EAP vs. EOP

Generally, people use what they learn in their educational institutions to practice in their professional environment. Despite that EAP and EOP share a common ground, they have a bunch of differences on multiple aspects:

First of all, EAP is oriented toward higher education students, instead of EOP which is for adult workers and professionals. Then, the primal goal of EAP is to succeed in academic career unlike professionals who want to improve their performance in work/life throughout EOP. Other than that developing skills and vocabulary related to education and research field contrast with developing tools used for effective communication in professional setting as long term improvement. In addition, if the EAP is based on content and influenced the syllabus designed for courses, the EOP is influenced by cross cultural differences and the context. Finally, the two branches interlace in many ways as argued Hutchinson and Waters (1987): "... people can work and study simultaneously; it is also likely that in many cases

the language learnt for immediate use in a study environment will be used later when the student takes up, or returns to, a job" .p.16

English for Medical Purposes

English for Medical Purposes (EMP) can be considered as a specific sub-branch of ESP and what distinguishes EMP from other ESP sub-branches is that EMP has its own set of medical discourses; it can be considered as the *lingua franca* of medical publications and conferences across the world. Piquet et al. (1997) found in their study that most specialized medical literatures are published in English and so an international increasing use of the language in the last decades.

The EMP was defined by Maher (1986) as the teaching of English for doctors, nurses, and the personnel in the medical professions, he emphasized two identifiable goals: the successful performance of work and the optimum effectiveness of medical training. The medical learner will meet his language needs in addition to mastering themes and topics of the medical field, and finally control a restricted range of skills specific for medical learners such as writing a medical paper or prepare a talk for medical meeting.

Glylys and wedding (1993) assert that to achieve an accurate and effective communication in medical environment and healthcare setting, students and professionals need a perfect knowledge of medical terminology. Yang (2005) demonstrated that EMP terminology consists of suffixes and prefixes added in a very precise and concise way should be incorporated in medical courses.

In a study done by Orr (2002), he emphasized the role of the content areas related to medical topics and vocabulary like medical investigations and conversations between patient-doctor or inter-colleagues, in addition to linguistic and communicative features of the topics.

Conclusion

Literature review chapter delves into the history and the origin of ESP, then digs in variable aspects of this specialty and study EMP from different perspectives according to multitude of researches that emphasize alternating topics and activities to master fundamental skills at the point of achieving an effective communication in medical environment and healthcare setting.

CHAPTER THREE:

RESEARCH METHODOLOGY

Introduction

In this study a short self-administrated questionnaire (in both English and French form) was distributed to random sixth and seventh year students of Medical department at Badji Mokhtar University –ANNABA- respecting anonymity in order to assess their needs about English language especially in medical fields.

The survey question was kept as short as possible aiming to obtain maximum and accurate responses and avoid irrelevance. This questionnaire also, was designed to help teachers make precise and concise EMP courses by identifying and setting clear objectives.

Participants

The participants were chosen among sixth and seventh year students of Medical department at Badji Mokhtar University-ANNABA- for the reason that they have sufficient experience; they practically finished their academic curriculum, have enough knowledge about medicine and they are practitioner under supervision. In addition, the sample consisted of students at the door of the second cycle of medical studies (**residency**) and the beginning of medical practicing(**general practice**) where the needs of English language as an international tool and weapon drastically increases in front of globalization, and accelerating technology and sciences.

Some of the sheets were distributed after classes and the others at campus dormitory -El Bouni- during evening period then collected the next day.

Instruments

The questions were designed to reduce negative factors that hinder learning and teaching and facilitate the process of building knowledge, investigate students' linguistic situation in medical learning at medical department, identify the most important elements as well as their needs. The questionnaire was divided into three parts:

The first one is composed of eleven questions that gather important information, including personal data, their goals and their personal opinion concerning relationship between their studies and eventually their future practice, and the language especially English language.

The second part focuses on general topics of teaching/learning the English language and the questions were orientated toward which of these topics students find more relevant, more difficult and more suitable to emphasis on. Four classifying questions that would instigate students and help them comprehend different components of medical field, help them as future practitioner grasp the essence of their domain and of course guide the stream of EMP courses by sorting out subjects/topics, divers materials, and various functions and tasks.

The last eight questions treated the pillar of any language "skills". A perfect knowledge of listening, reading, speaking and writing are considered the most important factors needed to master the language.

The data collected from survey sheets were exported to SPSS version 24.0, which is a statistical tool for manipulating and deciphering survey data. SPSS is short for Statistical Package for the Social Sciences, and it's used by various kinds of researchers for complex statistical data analysis (Foley, 2018). By doing so, SPSS will automatically set up and import designated variable names, variable types, titles, and value labels, meaning that minimal legwork is required from researchers.

Conclusion

In this chapter, the participant was identified and profiled, the questions were generally described and analyzed, and the procedure was explored.

CHAPTER FOUR

FINDING AND RESULTS

Introduction

The study is based on a questionnaire destined to sixth and seventh year medical students at Badji Mokhtar University. The questionnaire was distributed randomly to a sample of thirty members; fifteen of sixth year and fifteen of the seventh. Collected data was analyzed and percentages were defined.

This chapter concerns the practical phase of this study. The data collected by the researcher will be investigated, analyzed and scrutinized in the most objective way possible to identify medical students' needs.

The questionnaire consisted of 24 questions and has three major parts: general, functional and skill questions. It was designed based on medical students needs and it meant to clarify their language learning procedures from their perspective.

Data analysis

Part one: personal information and generalities

Personal information

Age

Gender

Class

English level

It is obvious that needs change according to numerous factors, among them the **individual** profile of students and their characteristics: age, gender....etc. So, data collected about **age, gender and classes** were crucial to **distinguish their preferences**; what they want and then apply adequate approaches in teaching EMP courses. Also, knowing their certified

English language level would greatly help to discern them more and compare to less or non-English users.

Unfortunately, none of the samples' students had a certified level or passed an English language certified exam.

Table 1

Gender –Age cross tabulation

		Age			Total
		24,00	25,00	26,00	
Gender	Females	16,7%	33,3%	13,3%	63,3%
	Males	10,0%	23,3%	3,3%	36,7%
Total		26,7%	56,7%	16,7%	100,0%

Figure 1

Distribution of sample by class

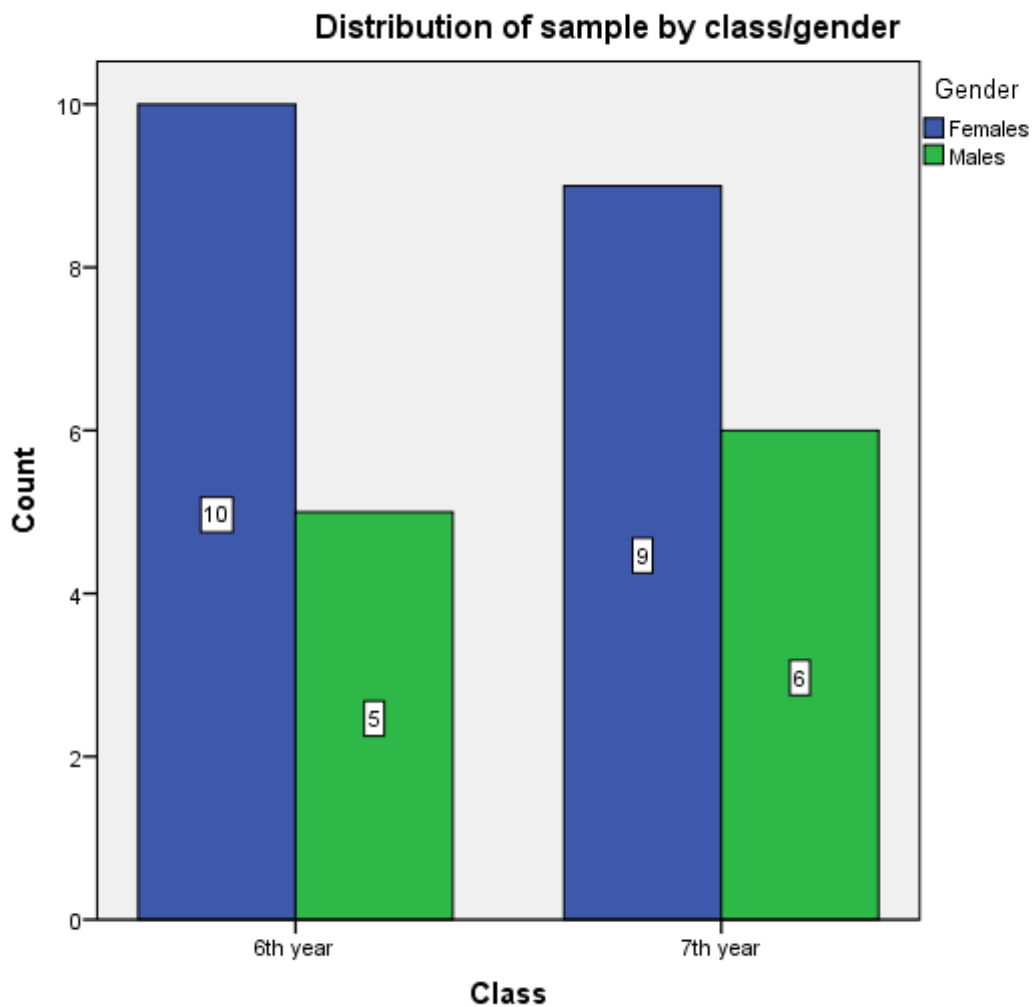
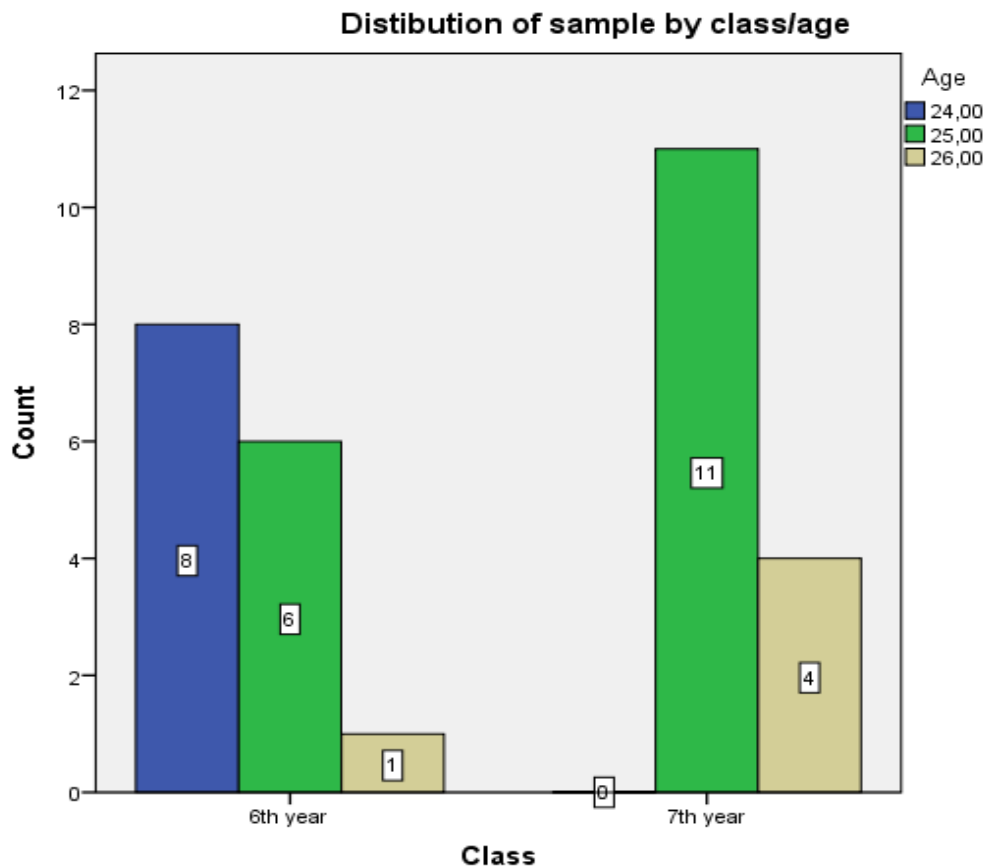


Figure 2

Distribution of sample by class/age



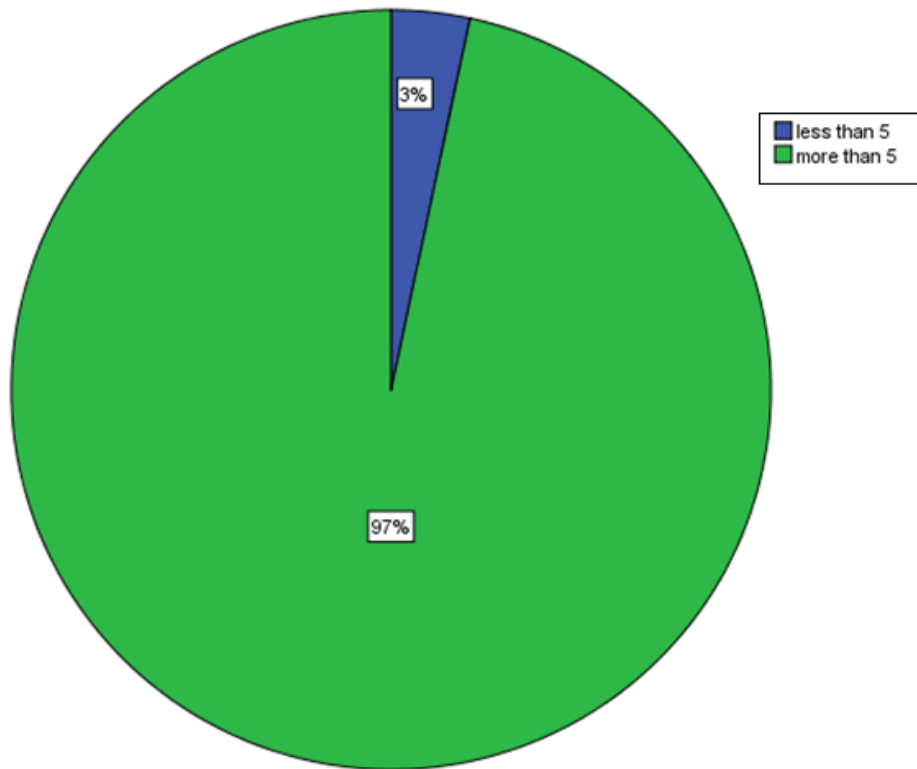
Questions:

Q1: For how many years did you stop studying English?

This question was asked to recognize if students still have contact with the English language and for how many years they were distancing themselves from it. The figure demonstrates that 97% of students have stopped learning the English for more than five years, this will incite teachers to include generalities and basics in the beginning of their courses.

Figure 3

Number of years students stop studying English language



Q2: Have you been studying English during Medical cycle?

- A2:
- No
 - At university
 - Private school
 - Others:

That was the sequel of the precedent question, **only** 3% of students who still in contact and learning English during medical cycle and **100% of them** were self-educated not related **to** **neither private schools nor their university.**

Q4: Do you think that English is important?

A4: -Not so much -important -very important

Q5: Do you think that Medical English is important for your career?

A5: -Not so much -important -very important

The questions 4&5 are closely interrelated. It is important to be aware if students are motivated to learn something especially a language. According to the answers provided by students, 70% consider that English language is important in both everyday life and in medical practice.

Figure 4

Importance of English language according to medical students

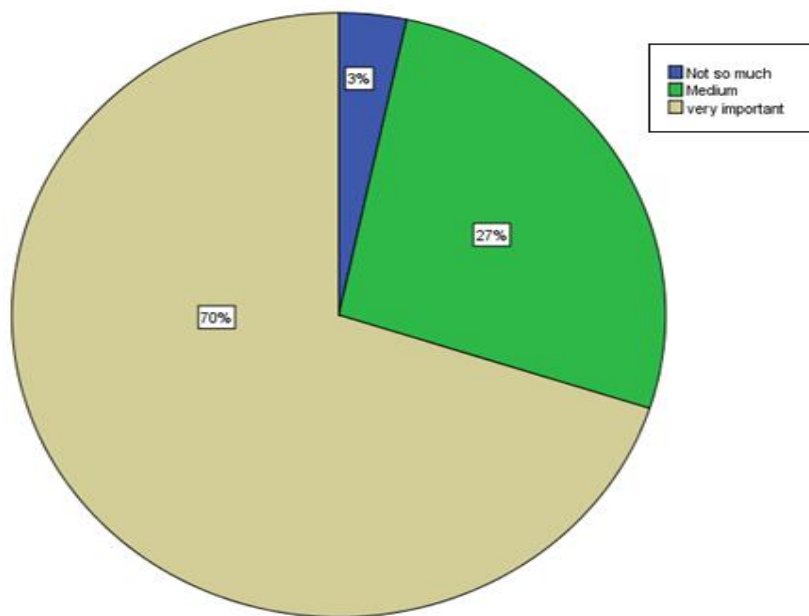
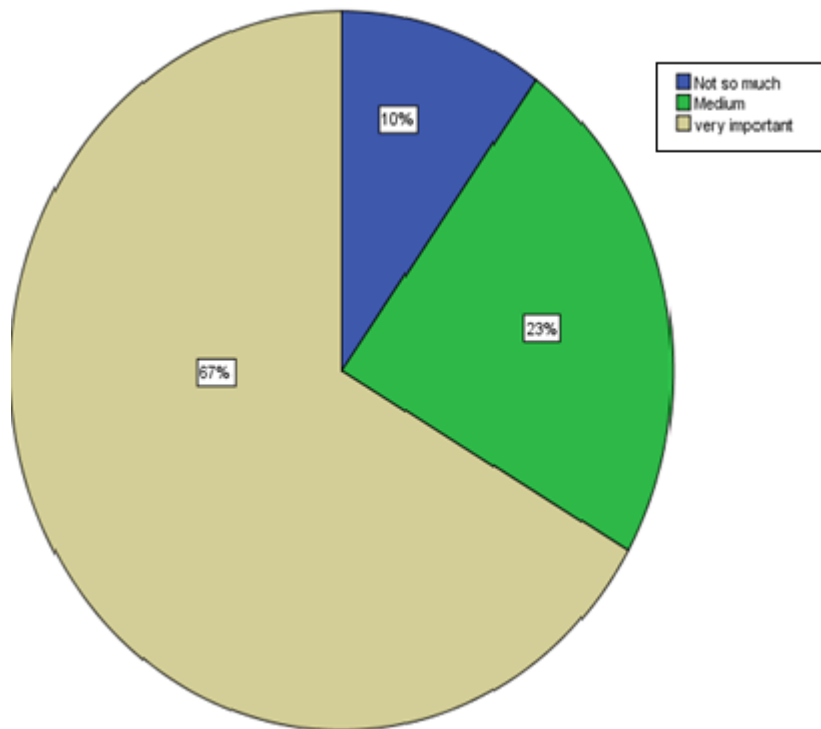


Figure 5

The importance of medical English for Doctor's career



Q6: how often do you use English in your everyday activities? and where?

A6: - rarely (<2/week) often (>2/ week) everyday
 -Studies others

Despite that 70% of the sample finds English important, the figure shows that 21 out of 30 students rarely use it in everyday activities (less than 2 times per week including in studies and others)

A comparative analysis between sixth and seventh years demonstrates that 86,7% of 7th year use rarely English, none use it often and only 13% everyday users. Compared to previous results, 54% of 6th year students rarely utilize the language.

-Based on the following factors:

-6th year students have more spare time than 7th year.

-7th year students have a dissertation to prepare (should use English sources). (Incite them to use it in their research).

-Lack of available national literature and Algerian publication in English language.

In comparison between genders there is no big difference in results both use it rarely. On the other hand, the graphic demonstrates that the employment of English in studies 20% and 13% for 6th and 7th year respectively. (Incite them to use it in their research: implication).

Table 2

Frequency of English use

		Class		Total	
		6th year	7th year		
Frequency of English use	rarely	Count	8	13	21
		% within Class	53,3%	86,7%	70,0%
	often	Count	4	0	4
		% within Class	26,7%	0,0%	13,3%
	everyday	Count	3	2	5
		% within Class	20,0%	13,3%	16,7%
Total	Count	15	15	30	
	% within Class	100,0%	100,0%	100,0%	

Figure 6.1

Frequency of English language use by gender

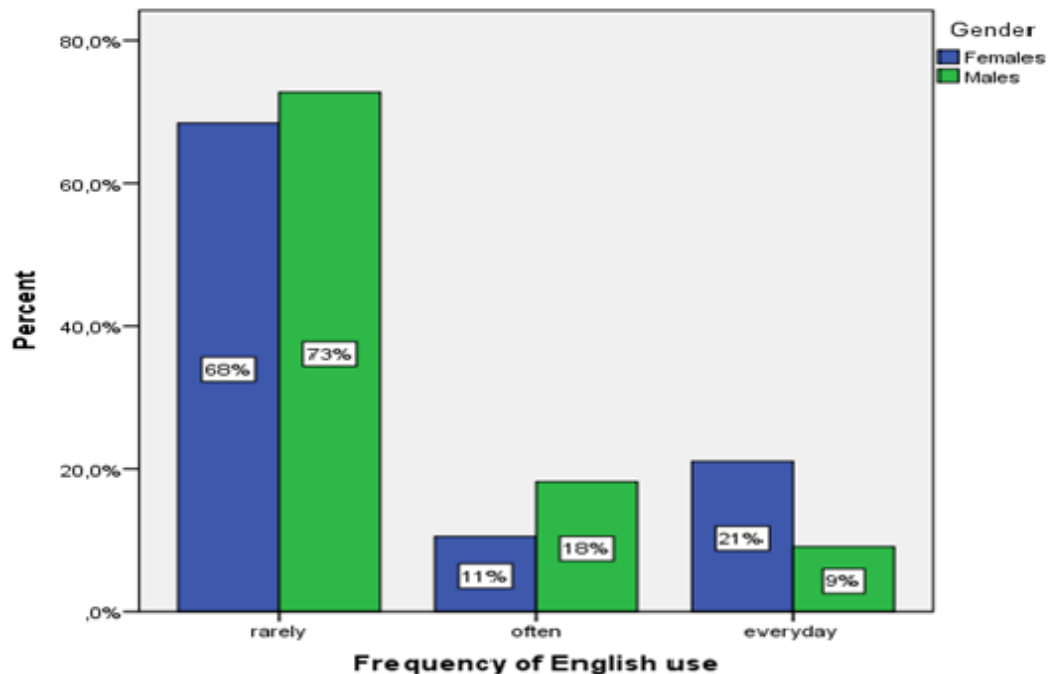
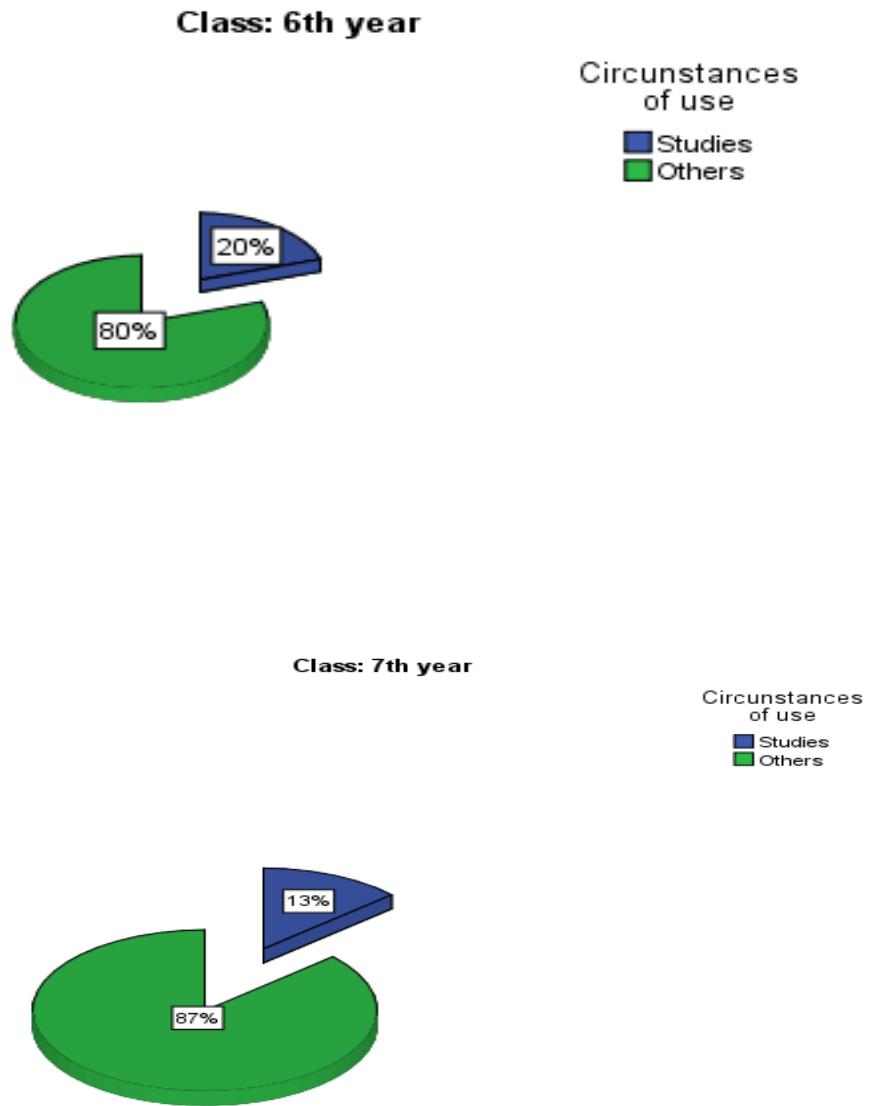


Figure 6.2

Circumstances of English language use by level



Q7: Do you intend to take English courses?

A7: yes no

If yes? What type? -For general purposes -For medical purposes

The aim of this question is the emphasis on their motivation to learn English. Results show that 67% of students have the intent to take English courses. Also, 9 out of 20 express their intention in general courses the other 11 students wanted EMP courses. All of this prove that student have complete comprehension of English importance.

Figure 7.1

Student' intentions to take English courses

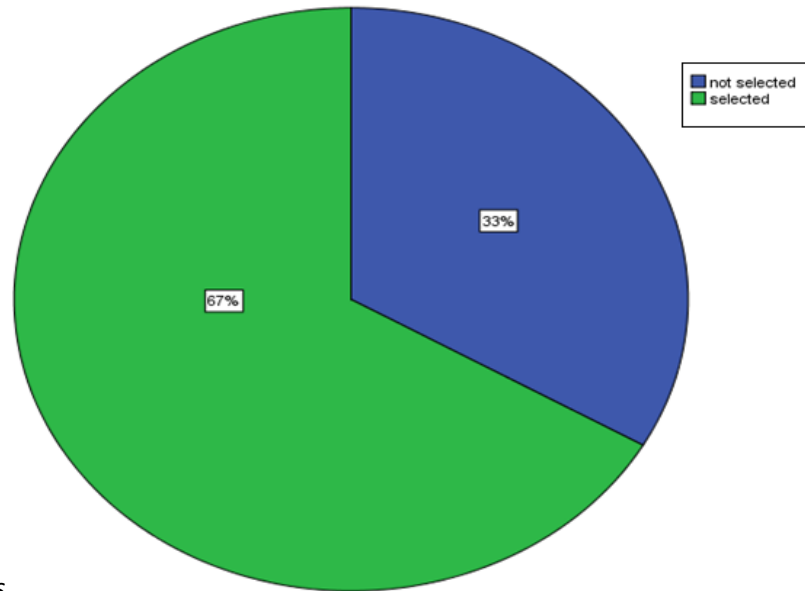
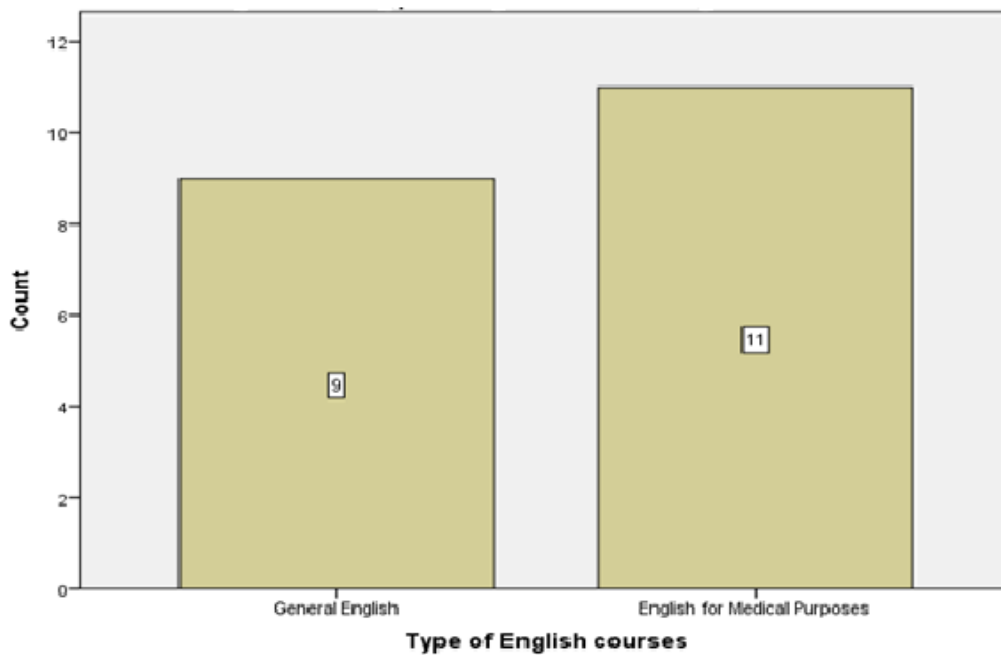


Figure 7.2

English courses

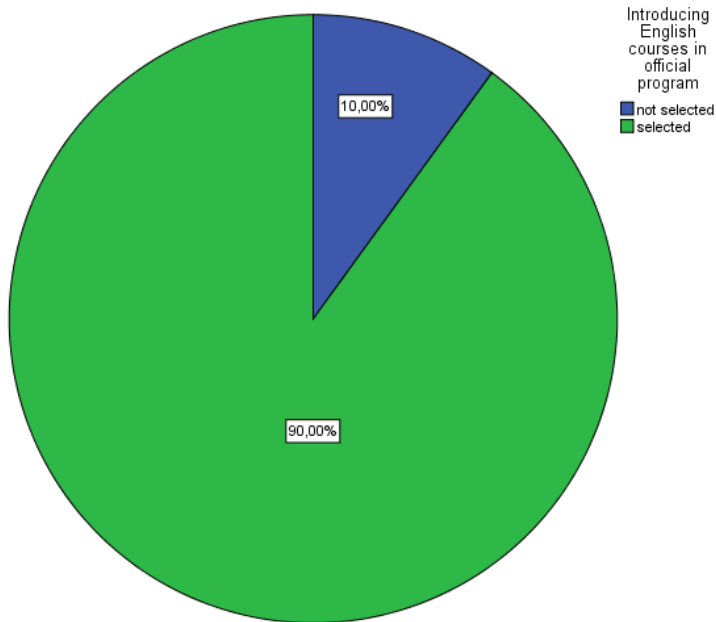


Q8: Do you want that English courses will be introduced in official program?

A8: yes no

Figure 8

Votes for the introduction of EMP courses into official program



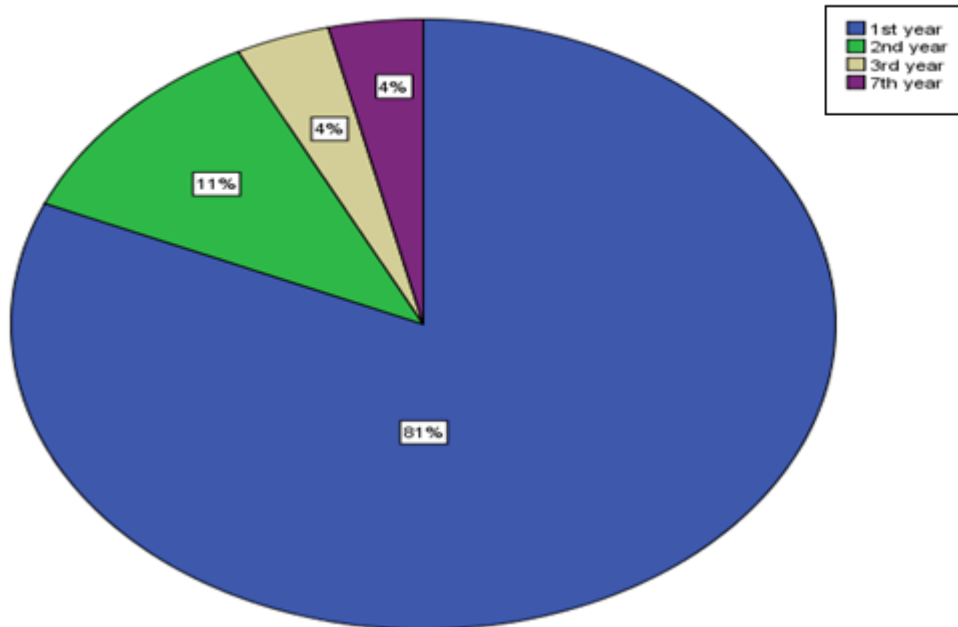
Q9: In which year would you prefer it to start?

A9: 1 2 3 4 5 6 7

6th and 7th year students as experienced student who passed through the entire cycle and studied all content of their curriculum, 81% of the sample voted for introducing teaching the English language starting from the first year and 11% from the second. This is a proof of their awareness that learning is a cumulative process in which many years are necessary especially in medical field that contains multiple branches.

Figure 9

Suggested year of introducing EMP into the curriculum



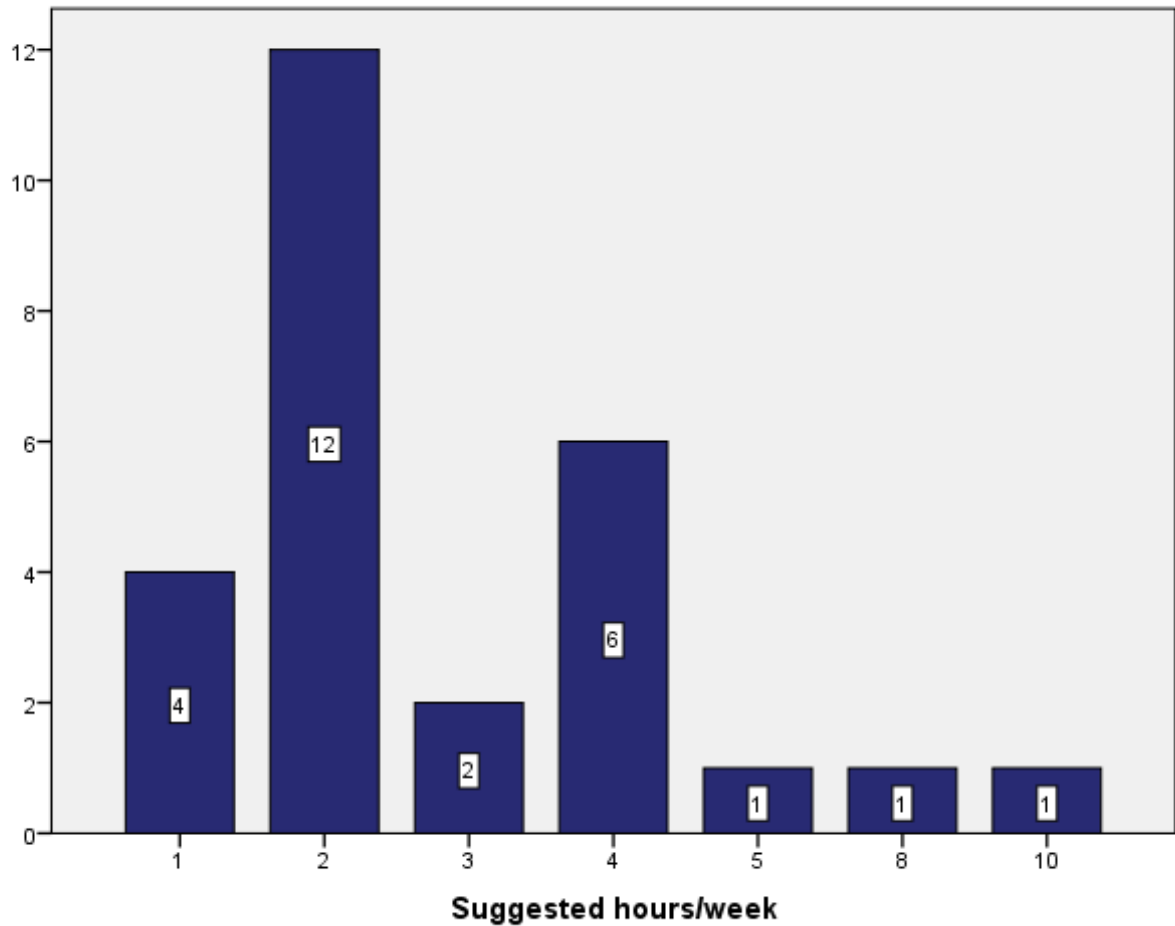
Q10: How many hours a week do you suggest the time allocated to English courses?

A10:

The figure shows that 44% of students suggested 2hours of EMP courses per week, 22% of them suggested 4h per week. Those results emphasis that the most suitable hourly volume dedicated to foreign language and ESP courses are between 2 and 4 hours per week.

Figure 10

Suggested hours per week



Q11: In which language would you prefer study medicine?

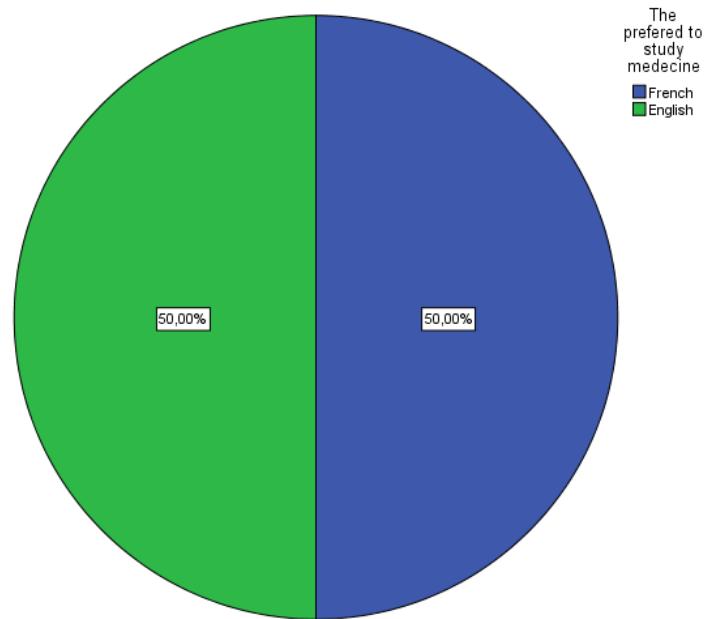
A11: French English

The table demonstrates that 50% preferred equally studying medicine in French and English.

-need more sensitization about the benefits of ESP and EMP.

Figure 11

Preferred language for medical education



Part two: functional and tasks

❖ Give a number according to your opinion:

Very important important not important

Q12: Which topic would like to study?

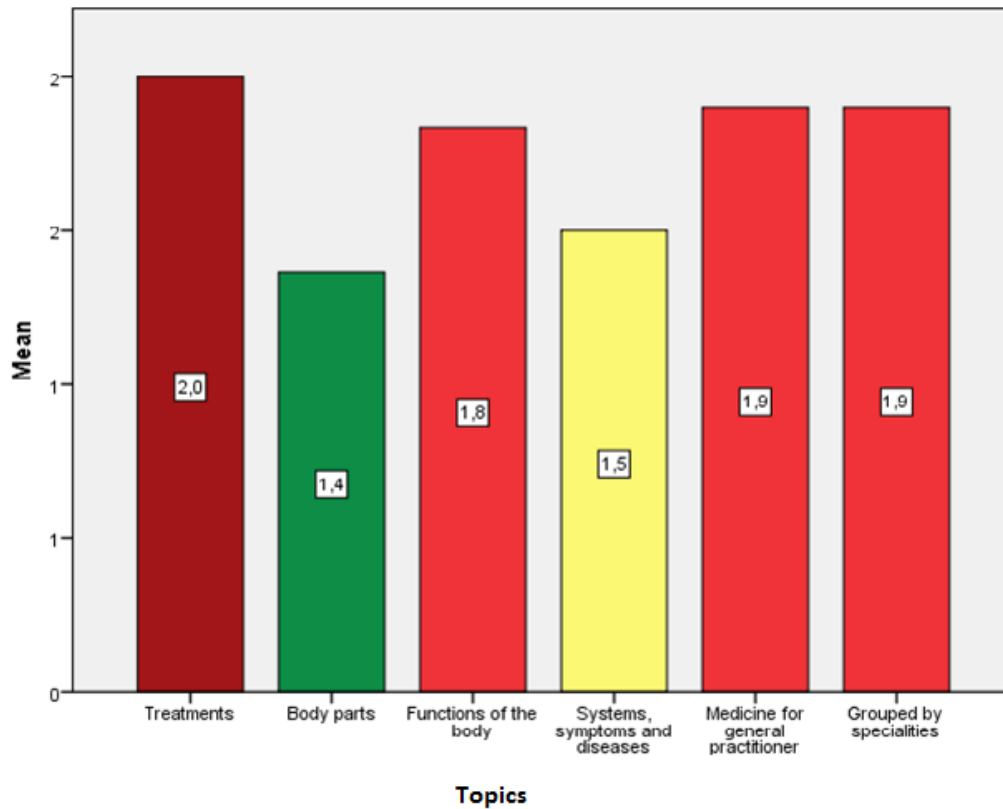
- Parts of the body.
- Functions of the body.
- Systems, symptoms and diseases.
- Treatments.
- Medicine for general practitioner.
- Grouped by specialties.
- Others:

According to results submitted by students, their interest into different topics is almost at the same level; the EMP courses should focus on subjects about general medicine as well as medicine for specialists, functions of the body and treatments due to its importance as the practical side of medicine. The figure shows a less interest learning in body parts, systems and

symptoms/diseases which they consider it as theoretical side that can be consulted easily on dictionary or internet.

Figure 12

Chosen topics for EMP courses



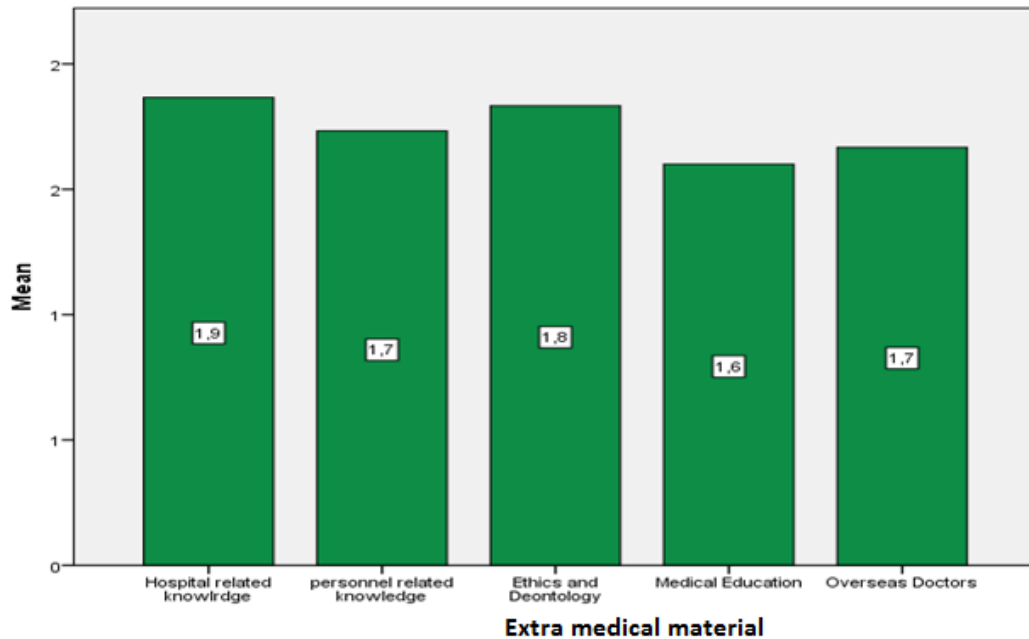
Q13: would you like to study some extra material?

- Hospital related knowledge (clothing, equipment, environment.....)
- Personnel related knowledge (jobs, hierarchy, tasks.....)
- Medical ethics.
- Medical education.
- Overseas doctors.
- Others:

In matter of earning extra-medical material, the figure demonstrates no particular preferences of the students between it. They expressed their desire to learn all hospital related material: about personnel, equipment, ethics, medical education and overseas doctors' tasks.

Figure 13

Preferences to study extra material



Q14: what would you like to learn for better execution of your tasks as a doctor? Give a number according to your opinion:

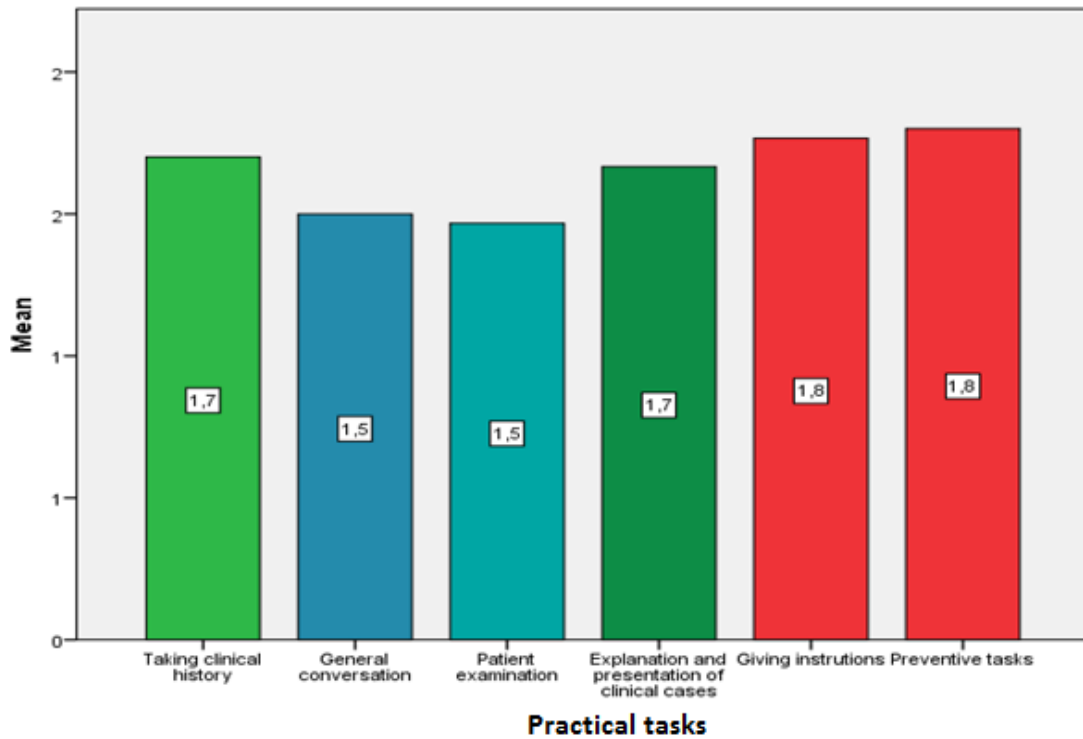
- Taking clinical history.
- General conversations.
- Examine a patient.
- Explanation and presentation of clinical cases.
- Giving instructions.
- Preventive tasks.

For the different tasks carried out by M.D in their daily routine job, giving instructions and preventive activities were considered the most important, followed by taking clinical history and the explanation/presentation of clinical cases. The tasks cited previously are rated the most used and more relevant in practicing in hospital with a view to give optimum output. Thus, effective communication is bidirectional between patients and healthcare systems. If either the patient or health care provider lacks clear understanding of the information conveyed, the delivery of care is compromised(Ratna,2019).

We also noticed that general conversation and patient examination were under rated despite their important role in communication but less in practicing.

Figure 14

Preferences to learn practical tasks



Q15: M.Ds are seeking to renew their knowledge and exchange it constantly. What are the most important things in researching you want to learn?

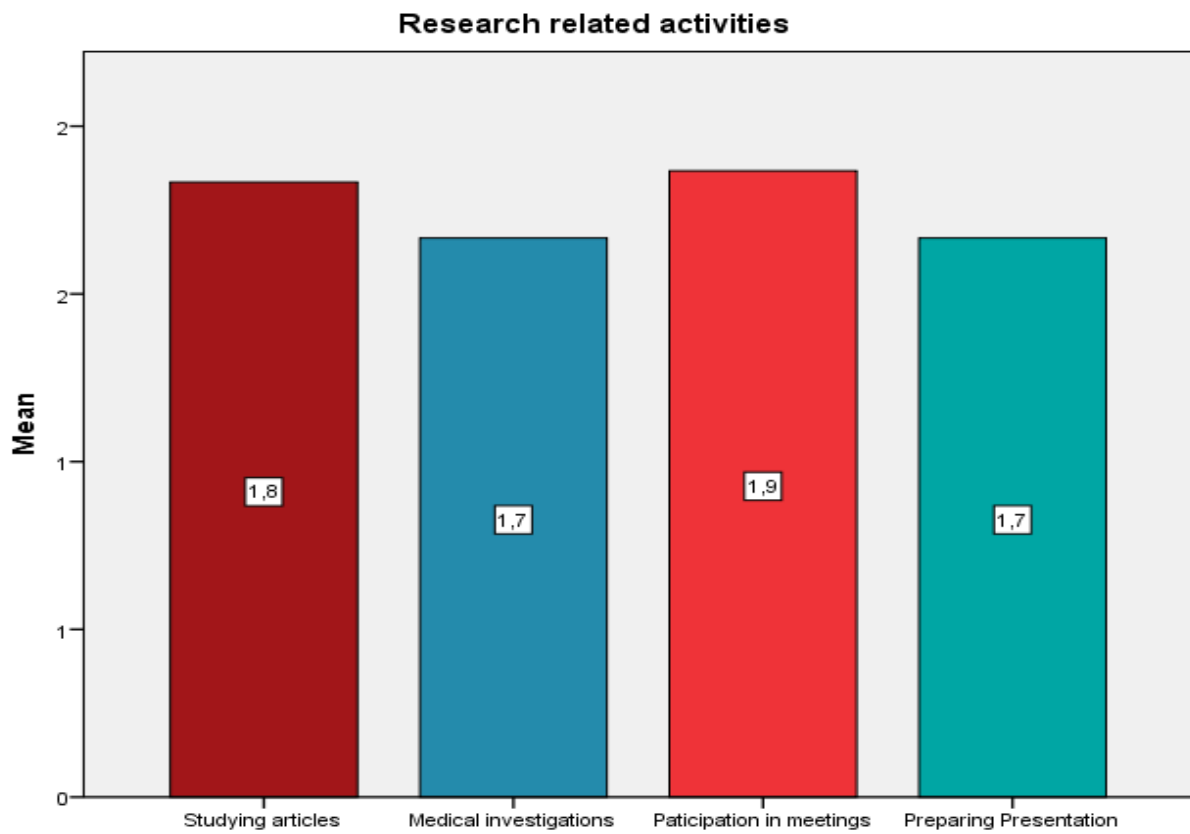
- How to study an article?
- Medical investigation.
- Participating in meetings.
- Prepare a presentation.
- Other suggestions.....

The academic part contribute a lot for medical practicing, constantly update knowledge, searching for the information and presenting it to the scientific community are vital point for the progress of medicine. An interest for participating in meeting was taking the lead among other choices due to its role in communicating finding and results notably that English

language is English is clearly the dominant language of publication(literature). Afterwards, learning how to study articles occupies the second row followed by preparing presentations and medical investigations.

Figure 15

Importance to learn research related activities according to students



Part three: language skills

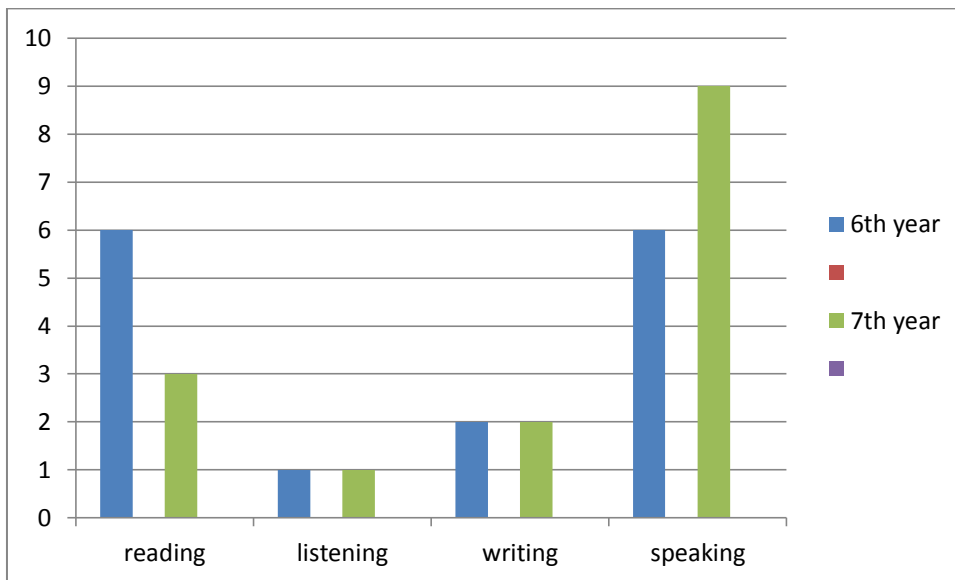
Q16: which of English language skills is the most important?

A16: reading writing listening speaking

According to 6th year answers they were equally divided about the importance of reading and speaking (both skills got 6 out of 15 students), followed by writing with 2 students then listening with 1 student. The 7th year answers demonstrated that speaking is the most important skill with 9 students who have chosen it, followed by reading 3 of the answers, then listening occupied the last position (1 vote).

Figure 16

The Order by Importance of Major Language Skills



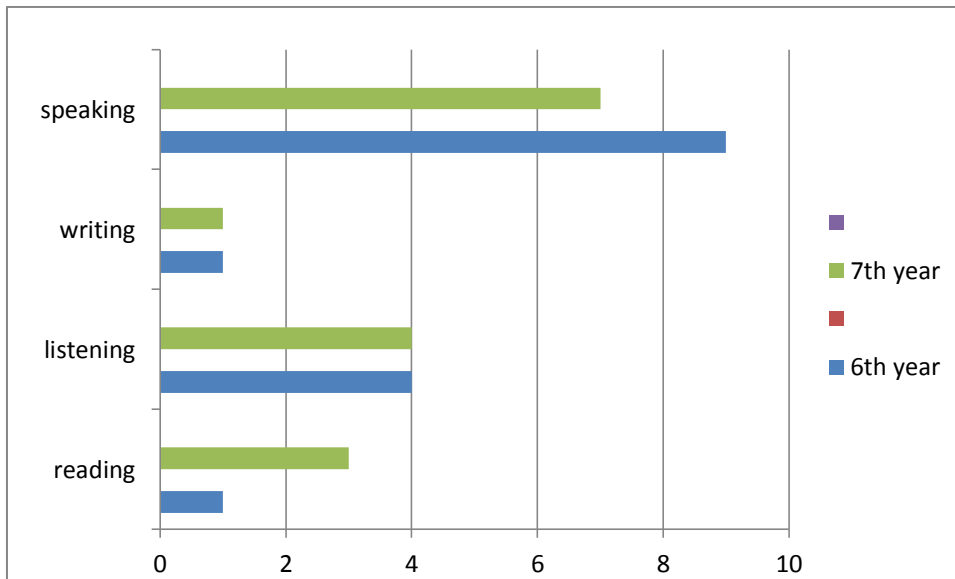
Q17: which of English language skills is the most important?

A17: reading writing listening speaking

The figure demonstrates that both 6th and 7th year students agreed that speaking is the most difficult skill respectively 9 and 7 votes, then again agreed that listening is the second most difficult. Those two skills need more practice especially with one or more partner. According to 6th year students reading and writing are easy to handle opposing to 7th year who think that writing is the easiest with 1 vote.

Figure 17

The order by difficulty of Major Language Skills



Q18: In your opinion, to master a language what is the most important? check one.

A18: practice motivation time interactive tools & methods .

Table 3

The most important factor to master a language

		Responses	
		Choices	Percent
factor	Practice	21	70,0%
	Motivation	3	10,0%
	Time	4	13,3%
	Interactive tools and methods	2	6,7%
Total		30	100,0%

Results from the table 4 show that 70% of the sample esteem that practicing is the most important factor for perfecting and mastering the language, different activities should be set and engaged in order to reach goals.13.3% suggested that they need more time to be acquainted with a language for better absorption. Another 10% consider that motivation with its both internal and external components is the most important factor to enhance language learning. And finally 6.7% emphasis on the need for interactive tools and methods.

Q19: what do find more interesting in learning to speak in English?

A19:

- Presenting conferences.
- Doctor-patient communications.
- Discussion with colleagues (national and international).
- Able to explain diagnosis and cases.
- Give advices and instructions.
- Use it only if abroad.
- Creating YouTube channel in English language.

According to the table n the most important speaking sub-skill is inter-colleagues discussion (27%), followed by presenting conferences (15.7%) then explaining medical cases and diagnosis (15.7%) also. The results emphasis on medical students’ awareness of the importance of exchanging information locally or worldwide to contribute in career advancement and solving daily encountered problems through communication especially speaking. A considerable proportion of 11.3% of the sample wanted to learn medical English and use speaking skill to create a very trend and popular activity among actual generation : “YouTube channel” presenting medical content.

With less importance percentages 8.6% and 7% needed to learn speaking for giving advises and instructions or only to go abroad and use it.

Table 4

The most important spoken activities for medical students

		Responses	
		Choices	Percent
Speaking	Presenting conferences	11	15,7%
	Doctor-patient communication	11	15,7%
	Discussion with colleagues	19	27,1%
	Able to explain diagnosis and cases	10	14,3%
	Give advices and instructions	6	8,6%
	Use it only if abroad	5	7,1%
	Creating YouTube channel in English language	8	11,4%
	Total	70	100,0%

Q20: for what reason do you need to learn reading in English?

A20:

- Read medical articles and books.
- Read abstract
- Pleasure reading.
- Quick reading.
- File reading and interpreting laboratory data.
- For detail understanding.

The table n demonstrates that the most important activity in reading according to students' answers with a percentage of 31.6% is reading medical article and books, then reading medical files and interpreting laboratory data 19.7% of the sample. These results should incite instructors to focus on giving an important portion of ESP courses to teach students how to analyze medical texts and articles with deep exploration of understanding and meaning.

The same should go for reading medical files and different data as it is considered as the most used practical daily activities for doctors on the field. The rest of students voted for pleasure reading, quick reading and reading abstract with 14%, 7.9% and 7.9 respectively. (Most of them didn't know what abstract is).

Table 5

Reasons to learn reading in English for medical students

		N	Percent
Reading	Read medical articles and books	24	31,6%
	Read abstracts	6	7,9%
	Pleasure reading	11	14,5%
	Quick Reading	6	7,9%
	File reading and Interpreting Laboratory data	15	19,7%
	Reading for detail understanding	14	18,4%
Total		76	100,0%

Q21: If you are interested in writing in English, what would you use it for?

A21:

- Only Abstracts for scientific journals.
- Full articles for scientific journals.
- Write for medical blogs.
- Taking notes.
- Reports for your work.
- Communications with foreign colleagues.
- Writing prescriptions.

The students interested in writing skill expressed their needs for written communication in English language with foreign colleagues similarly to speaking for the exchange of information. The data also conveyed the importance of writing medical prescriptions; the must to know written format for doctors.

There is also writing report for works and taking notes.it is a required tasks especially in an ongoing English globalization and the attempt of Algeria to substitute French with English.

Table 6

The most interesting use of writing according to medical students

		Responses	
		N	Percent
Writing	Only abstract for scientific Journals	3	4,2%
	Full articles	7	9,7%
	Write for Medical blogs	3	4,2%
	Taking notes	9	12,5%
	Reports for works	10	13,9%
	Communication with foreign colleagues	25	34,7%
	Writing prescriptions	15	20,8%
Total		72	100,0%

Q22: From where do you find more interesting to learn listening?

A22:

- English medical conferences.
- YouTube medical channels.
- English medical drama series.
- Medical talk show (the doctors.....).
- Non-medical speaking on T.V, internet, radio.....
- Natural daily speech from native or non-native (online discussion).

The table displays students’ opinions about the most efficient sources of learning listening in English language, 22.2% insisted on YouTube channel as it is the most accessible way in these days. Then different sources was used with roughly proximate figures according to the disponibility: English medical drama series, Medical talk show, Non-medical English speaking show on TV internet radio, Natural daily speech and English medical conferences

Table 7

The most relevant sources for learning listening

		Responses	
		N	Percent
Listening	English medical conferences	13	13,1%
	youtube medical channel	22	22,2%
	English medical drama series	17	17,2%
	Medical talk show	15	15,2%
	Non-medical English speaking show on TV internet radio	17	17,2%
	Natural daily speech	15	15,2%
	Total	99	100,0%

Conclusion:

The aim of this study is to seek deeply for medical students needs and investigate profoundly different components of their needs, by collecting data through a highly helpful questionnaire for identifying students’ profile and background, their precise preferences and real demands

on the matter of English language learning introduction, the hours dedicated, different relevant activities and topics, and detailed major skills investigation.

Chapter Five

DISCUSSION

Introduction

The collected data tends to answer on the three research questions: different variable were taken into consideration but the level of student (6th and 7th year) was the most important factor for the analysis of results due to a notable differences in the attitude of learners which correlate with literature (educational psychology) according importance to students' profile and focusing on learners' differences.

Analyzing the finding according to research questions

The approach to deal with this three research questions tried to use and compare concepts and ideas between previous studies and literature, and the finding of this study.

According to general information most of the students have a very insignificant connection with English language for their whole academic route, despite their awareness of the importance of English for career or other aspects.

The first question was dealt mostly in the second part of the questionnaire in which results demonstrated different level of needs for learning medical topics and extra material.

There is also a need for various tasks and activities related to healthcare system.

The second question turns around the problem encountered in learning English from their perspective; concerning the introduction of EMP courses from early years with sufficient time volume, efficient practice activities and appropriate motivation methods.

Finally, to answer the third research question, the author collected valuable data starting from identifying the level of difficulty and importance for the 4 major skills then classify some relevant activities and sub skills used to master and deepen the understanding of writing, reading, listening and speaking.

IMPLICATIONS AND RECOMMENDATIONS

- This study found that medical students (from this population) are aware of the importance of English language as an important tool in medical field. They have a considerable interest to learn and utilize it.
- According to results, the introduction of EMP courses into the curriculum is inevitable from the early years (first or second year) with sufficient amount of time 2 – 4 hours per week and adequate content.
- In addition, despite the awareness of the students about the importance of English language, they rarely use it for studies or researches. That is why we need more sensitization inside faculties and campuses about the utilities of the subject through the implication and encouragement of English language use in different academic and practical activities (home works, practical sessions, tutorial sessions...etc.) in order to incite them for further researches, widen and strengthen their medical knowledge and increase their level.
- One of most efficient ways to increase students' motivation about learning a language is through increasing the pace of organizing events inside faculties or university hospitals like: national or international meetings, conferences, medical collaboration with foreigner doctors and health care companies, medical showroom...etc.
- Many faculties impose abstract in English even though the study is in Arabic or in French, which is not the case at the faculty of medicine especially for the undergraduate dissertation. The study found lack of information about abstract and its importance that is why we urge to give more attention about the subject.
- Mastering medical English can greatly enhance not only academic level but also the global level of medical sciences in Algeria. According to this study, medical students need both courses in general and medical English especially in early years of their studies where generalities and basics should be included in EMP sessions.
- Also, the pairing up between French curriculum and EMP teaching is a crucial step to ignite the progressive march toward the exclusive use of the most dominant language in international scientific literature (Reiner, 2007).
- Results imply that EMP courses should prioritize communication skills and activities that involve students in conversation. According to (Whetstone, 2012) in an interview with an IMG student; less understanding between doctors due to language barrier can result misunderstanding and endanger patients' life. This can be seen in Algeria in

cases of collaboration between Algerian and foreigner doctors for complex and innovative interventions.

- Teachers should utilize NA to make the optimum courses adapted to each situation and different group of student by analyzing different patterns (of course it will be based on year by year syllabuses which is the most efficient way according to (Walter Davies, 2012).
- The study suggests a further research to enlarge the investigation about medical teachers' needs and even other healthcare personnel's needs to scrutinize the subject from different perspectives.
- Although the population of the research was medical students, the focus was on 6th and 7th year students for the reasons explained above and according to results, students needed EMP learning at early stages of their curricula we suggest a further study that enlarge the population to other years, further than that, in order to get more precise and accurate data about students' needs another investigation is needed after the implementation of EMP courses.
- Due to the importance of assessment in any teaching/learning system, a further research can deal with assessment methods, their efficiency and even other alternatives less used by our system like the use of multimedia or building a suitable environment for the e-learning.

Conclusion

In the last chapter, the research questions were discussed. Students' learning demands for medical topics and extra material, relationship between medical topics and vocabulary, and the highlight on the four major skills are all accordant with previous literature and other studies. Suggestions and recommendations for future research were provided.

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APPENDICES

Appendix A: Medical student’s questionnaire

This questionnaire aims to identify medical student`s and future doctors most important needs from English as a linguistic tool used to develop medicine and enhance their global level. For that reason, you are kindly requested to answer as clearly as possible. It will take about (05-10) minutes.

Age: Gender: Class:

Test done to assess English language level: ILETS TOFEL Other

The level: if you have.

Q1: For how many years did you stop studying English?

A1:

Q2: Have you been studying English during Medical cycle?

A2: - No

-At university

-Private school

-Others:

Q3: Do you intend to choose the path of

A3: -general practitioner

-specialist

Q4: Do you think that English is important?

A4: -Not so much -important -very important

Q5: Do you think that Medical English is important for your career?

A5: -Not so much -important -very important

Why?.....

Q6: how often do you use English in your everyday activities? and where?

A6: - rarely (<2/week) often (>2/ week) everyday

-Studies others

Q7: Do you intend to take English courses?

A7: yes no

If yes? What type? -For general purposes -For medical purposes

Q8: Do you want that English courses will be introduced in official program?

A8: yes no

Q9: In which year would you prefer it to start?

A9: 1 2 3 4 5 6 7

Q10: How many hours a week do you suggest the time allocated to English courses?

A10:

Q11: In which language would you prefer study medicine?

A11: French English

❖ Give a number according to your opinion:

very important important not important

Q12: Which topic would like to study?

- Parts of the body.
- Functions of the body.
- Systems, symptoms and diseases.
- Treatments.
- Medicine for general practitioner.
- Grouped by specialties.
- Others:

Q13: would you like to study some extra material?

- Hospital related knowledge (clothing, equipment, environment.....)
- Personnel related knowledge (jobs, hierarchy, tasks.....)
- Medical ethics.
- Medical education.
- Overseas doctors.
- Others:

Q14: what would you like to learn for better execution of your tasks as a doctor? Give a number according to your opinion:

- Taking clinical history.
- General conversations.
- Examine a patient.
- Explanation and presentation of clinical cases.
- Giving instructions.
- Preventive tasks.

Q15: M.Ds are seeking to renew their knowledge and exchange it constantly. what are the most important things in researching you want to learn?

- How to study an article?
- Medical investigation.
- Participating in meetings.
- Prepare a presentation.
- Other suggestions.....

Q16: which of English language skills is the most important?

A16: reading writing listening speaking

Q17: which of English language skills is the most difficult?

A17: reading writing listening speaking

Q18: In your opinion, to master a language what is the most important? check one.

A18: practice motivation time interactive tools & methods . Q19: what do find more interesting in learning to speak in English?

A19:

- Presenting conferences.
- Doctor-patient communications.
- Discussion with colleagues (national and international).
- Able to explain diagnosis and cases.
- Give advices and instructions.
- Use it only if abroad.
- Creating YouTube channel in English language.

Q20: for what reason do you need to learn reading in English?

A20:

- Read medical articles and books.
- Read abstract
- Pleasure reading.
- Quick reading.
- File reading and interpreting laboratory data.
- For detail understanding.

Q21: If you are interested in writing in English, what would you use it for?

A21:

- Only Abstracts for scientific journals.
- Full articles for scientific journals.
- Write for medical blogs.
- Taking notes.
- Reports for your work.

- communications with foreign colleagues.
- Writing prescriptions.

Q22: From where do you find more interesting to learn listening?

A22:

- English medical conferences.
- Youtube medical channels.
- English medical drama series.
- Medical talk show (the doctors.....).
- Non-medical speaking on T.V, internet, radio.....
- Natural daily speech from native or non-native (online discussion).

Appendix B: Questionnaire pour les étudiants en médecine

Ce questionnaire a pour but d'identifier les besoins des étudiants en médecine et future médecins en langue anglaise comme langue internationale et un outil de développement de la médecine et amélioration globale du niveau. Pour cette raison, veuillez répondre le plus clairement possible. Ça va prendre 5 à 10 minutes.

Age: sexe: Classe:

Test d'évaluation de la langue anglaise: ILETS TOFEL autres

le niveau: si fait.

Q1: Pendant combien d'année vous avez arrêté d'étudier l'anglais?

A1:

Q2: Est-ce que vous avez étudié l'anglais durant votre cycle de médecine?

A2: - Non

-A l'université

-Ecole privée

-Autres:

Q3: Prévoyez-vous de choisir :

A3: -Médecine Générale

-Spécialité

Q4: Est-ce que vous pensez que la langue anglaise est importante?

A4: -Un peu

-importante

-très importante

Q5: Est-ce que vous pensez que l'anglais médical est important pour votre carrière?

A5: -un peu -important -très important

Pourquoi?.....

Q6: A quel rythme vous utilisez la langue anglaise? Et où?

A6: - rarement fréquemment chaque jour

-Etudes Autres

Q7: Allez-vous prendre des cours d'anglais?

A7: oui non

Si oui? Quel type? - General - Médical

Précisez si vous avez d'autres buts:

Q8: Voulez-vous que la langue anglaise soit introduite Durant le cursus officiel?

A8: oui non

Q9: vous la préférez en quelle année?

A9: 1 2 3 4 5 6 7

Q10: quel volume horaire attribué à la langue suggérez-vous?

A10:

Q11: quelle est la langue qu'auriez-vous préférer pour étudier la médecine?

A11: Française Anglaise

❖ Donnez un numéro selon votre opinion aux réponses suivantes:

Très important important pas important

Q12: Quel sujet préféreriez-vous étudier pendant les cours de la langue anglaise?

- Parties du corps Humain.
- Fonctions du corps.
- Systèmes, symptômes et maladies.
- Traitements.
- Médecine générale.
- Groupée par spécialités.
- Autres:

Q13: préférez-vous étudier quelques sujets en relations avec votre travail?

- En relation avec l'hôpital (environnement, équipements, vêtements.....)
- En relation avec le personnel (jobs, administration, taches.....)
- Ethiques et déontologie.
- Education Sanitaire.
- Médecins Sans Frontières.
- Autres:

Q14: Quesque vous voulez étudier pour mieux accomplir vos taches comme médecin?

Donner un numéro selon votre opinion:

- Prendre l'histoire de la maladie.
- Conversations Générales.
- Examiner les patients.
- Explication et présentations des cas .
- Donner des instructions.
- Médecine Préventive.

Q15: Les médecins doivent renouveler leurs connaissances de manière constante. Quesque vous voulez apprendre dans le domaine de la recherche scientifique?

- Comment étudier un article?
- Investigation Médical.
- Comment participer aux conférences.
- Préparer une présentation.
- Autres suggestions.....

Q16: Voulez-vous classifier ces compétences de la langue selon leurs degré d'importance?

A16: lecture écriture écoute parole

Q17: Voulez-vous classier ces compétences de la langue selon leurs degré de difficulté?

A17: lecture écriture écoute parole

Q18: selon votre avis, quel est le facteur le plus important pour maîtriser une langue? Check one.

A18: pratique motivation temps outils interactives .

Q19: Quesque vous trouvez plus intéressant pour apprendre à parler la langue anglaise?

A19:

- Présenter des conférences.
- Communications entre médecin et malade.
- Discussion entre collègues (nationale et internationale).
- Pouvoir expliquer le diagnostic et les cas clinique.
- Donner conseils et instructions.
- Utiliser uniquement à l'étranger.
- Créer des chaines Youtube pour le public international.
- Autres.....

Q20: Pour quelles raisons vous avez besoin d'apprendre à lire en anglais?

A20:

- Lire des livres et articles médicaux.
- Lire des abstracts.
- Lire pour le plaisir.
- Quick Reading (lecture rapide).
- Lecture des dossiers et interprétation des données du labo.
- Pour comprendre les détails.

Q21: Si vous êtes intéressés a écrire en anglais, Quesque vous avez besoin d'écrire?

A21:

- Uniquement des abstracts pour des magazines scientifiques
- Articles complets pour des magazines scientifiques.
- Ecrire des blogs a contenu médical.
- Prendre des notes.
- Rapports pour le travail.
- communications avec des collègues à l'étranger.
- écrire des prescriptions.
- Autres.....

Q22: Quel sont les sources que vous trouviez intéressantes pour apprendre à écouter et comprendre?

A22:

- Les conférences en anglais.
- Chaines médicales sur Youtube.
- Séries télévisés médicales en anglais.
- Medical talk-show (the doctors.....).
- Des émissions non médicales sur: T.V, internet, radio.....
- Discussions quotidiennes avec des natives or non-natives (online discussion).