

NEEDS OF ESP LEARNERS FOR PRACTICAL ENGLISH COMMUNICATION

**A CASE STUDY OF FIRST YEAR STUDENTS AT THE MEDICAL
COLLEGE, UNIVERSITY OF ADEN**

By

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**A THESIS SUBMITTED FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY IN ENGLISH**

Research Guide

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DEDICATED TO

THE FOND MEMORY OF

MY MOTHER

***MAY ALLAH SHOWER HIS ILLIMITABLE MERCY ON HER
AND GRANT HER EVERLASTING BLISS IN HEAVEN***

DECLARATION

I declare that the thesis entitled ***“Needs of ESP Learners for Practical English Communication, A Case Study of First Year Students at the Medical College, University of Aden”*** submitted by me for the Degree of Doctor of Philosophy is the record of work carried out by me during the period from December 2002 to May 2005 under the guidance of **Dr. (Mrs.) S. S. Chopra** and has not formed the basis for the award of any degree, diploma, associateship, fellowship, titles in this or any other university or other institution of Higher Learning.

I further declare that the material obtained from other sources has been duly acknowledged in the thesis.

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C E R T I F I C A T E

This is to certify that the work incorporated in the thesis “***Needs of ESP Learners for Practical English Communication, A Case Study of First Year Students at the Medical College, University of Aden***” presented by **Mr. Gamal Mohammed Ahmed Abdullah** was carried out by the candidate under my guidance and supervision. Such material as has been obtained from other sources has been duly acknowledged in the thesis.

Dr. (Mrs.) S. S. Chopra
Research Guide

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LIST OF ABBREVIATIONS USED IN THIS STUDY

BDMS	Bachelor Degree in Medicine and Surgery
BDPSc	Bachelor Degree in Pharmaceutical Science
CNP	Communicative Needs Processor
CNV	Communicative Needs Variety
EAP	English for Academic Purposes
EBE	English for Business and Economics
EBP	English for Business Purposes
EEP	English for Educational Purposes
EFL	English as a Foreign Language
e.g.	exempli gratia `for example`
EGP	English for General Purposes
ELP	English Language Proficiency
ELT	English Language Teaching
EMT	English as a Mother Tongue
EOP	English for Occupational Purposes
ESL	English as a Second Language
ESP	English for Specific / Special Purposes
ESS	English for Social Sciences
EST	English for Science and Technology
et al	et alii `and others`
etc	et cetera `and so forth`
EVP	English for Vocational Purposes
FL	Foreign Language
FLT	Foreign Language Teaching
GE	General English
HIV	Human Immunodeficiency Virus
ibid	ibidem `in the same work`

i.e.	idest `that is, in other words'
L1	First Language
L2	Second Language
LNV	Learning Needs Variety
LSP	Language for Special Purposes
LTP	Learning /Teaching Process
ME	Medical English
MEC	Medical English Course
MPBABUH	May Peace and Blessings of Allah Be Upon Him 'for Prophet Mohammed'
MT	Mother Tongue
NA	Needs Assessment / Analysis
NB	Nota Bene `note'
N.P.	No Place (of Publication), No Publisher
Op. cit	Oper Citato `in the work already quoted'
PDRY	People's Democratic Republic of Yemen
ST	Standard Deviation
TESOL	Teaching English to the Speakers of Other Languages
TNV	Target Needs Variety
TSA	Target Situation Analysis
VESL	Vocational English as a Second Language
Viz.	Vide Liet `namely, that is to say'

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ABSTRACT

Needs of ESP Learners for Practical English Communication

A Case Study of First Year Students at the Medical College, University of Aden

English for Specific Purposes (ESP) is a recent phenomenon as it emerged just in the 1960s. Comparatively, it is a newly born branch of English Language Teaching (ELT). It is due to the fact that, not much research has been conducted in the field of ESP in general and in the Arab World and Third World Countries in particular. Furthermore, the disciplines, which are being investigated in the area of ESP vary from one branch to another. For instance, there is a great emphasis on the field of English for Occupational Purposes (EOP) rather than English for Academic Purposes (EAP). Unfortunately, the situation is worse in the field of English for medical studies, Despite, the fact that this area is of vital importance, nonetheless, the researches in this discipline are not limited, but it could be said that they are very rare.

The present study is an attempt to investigate the needs of ESP learners for practical English communication with reference to the learners of medical discipline, specifically, considering the needs of first year students at the Faculty of Medicine, University of Aden, Yemen.

Different instruments (triangulation procedure) are used to collect the data. When the data obtained is collected from different sources; the results would be more reliable as they would be analyzed on the basis of variables and group-wise analysis (comparison and contrast between the perspectives of the different informants).

Accordingly, a very common instrument in the form of a questionnaire (consisting of 22 items) was administered to one hundred student informants, selected randomly from the area of the study (The Faculty of Medicine, Aden University) and a structured interview (of 22 items) was conducted on ten teacher informants who were actually involved in the teaching of the concerned students. The major aim of the data collection procedures is to collect information regarding the entire needs of the medical students for practical English communication, i.e. what they need in order to function effectively through English either as a means for learning medical sciences or a medium of communication in different situational settings.

Prior to the administration process of the two collection methods (questionnaire and structured interview), systematic and rigorous procedures as piloting, validation and reliability criteria have been followed, this has been done to avoid any guesswork and ensure reliable results, which may provide valuable insights for evaluators, course designers, researchers, ESP practitioners and learners.

Preceding the analysis process and to establish some kind of legitimacy, inter-rater reliability procedure was administrated in order to

ensure the accuracy and constancy of the analysis techniques. As a result, inter-rater reliability procedure has indicated a greater correspondence between the researcher's analysis and the judge's results. It was then established as a positive criterion of the reliable analysis.

The results of the analytical process of the two tools of data collection (questionnaire and structured interview) revealed that the medical English materials in use at the Faculty of Medicine, Aden University, do not thoroughly match the entire needs of the learners.

Since the present work investigates the needs of the medical learners, the learner's needs should be well defined and determined before providing the proposed scheme. The analysis of the data obtained concluded that there are no limited and specific situations in which the students need to use English, i.e. there are no mono-needs for the learners of English as a second or foreign language. In short, the ESP learners of medical discipline require implementing English for multi-applications i.e. poly-needs. They need to use English as a means to learn medical sciences in different situations like research, reading of medical books and journals, participating in seminars, etc. These needs are known as academic needs. In other contexts, they may need to apply different types of English as in the areas of practical field, hospital and occupation. Such needs are known as practical needs. Meanwhile, outside the area of the medical discipline (social settings) they need to imply a different kind of English. Such needs are known as sociolinguistic needs.

Along these lines, a proposed schemata for a medical English course is presented in a condensed form of a course book (Eighteen Units) and also in a capsule form of a textbook (Six Units of supplementary grammar in the medical context).

The course book comprises three varieties of English, which adequately meet the three types of the learner needs mentioned above:

- (a) Registered English Variety: This type provides the learners with the academic needs, which help them to cope up with requirements of the medical studies.
- (b) Semi – medical English Variety: This constituent is prepared to match the prerequisites of the practical work, hospital settings and occupation (practical needs).
- (c) Ordinary English Variety: This kind of English is presented to help the learners to function effectively in different social settings, i.e. to meet the requirements of the sociolinguistic needs.

In addition to the above three components, a textbook of supplementary grammar in the medical context is proposed to be prepared to promote the course book in order to improve the students' writing in the situation of medical reports, researches, examination papers and even small scale research projects. This is because the tertiary students at this stage need high accuracy of grammar. A sample text was provided and is annexed at the end of this study.

Several recommendations emanated from the rest of this study. Firstly, pure medical English in its own right does not satisfy the entire needs

of the learners, therefore, it should be integrated with semi-medical English and general English. Secondly, it is recommended that materials drawn from the students' culture in relevance to the subject-specialization, particularly, those materials related to the scientific discoveries revealed in the Holy Book "Qurán" and Muslim achievements in the field of medicine, should be included. Thirdly, the ESP courses should be based on the assessments of the learner's needs who join these courses, as also the students' perspectives towards their needs should be taken into consideration. Finally, an intensive ESP training for the teaching staff is required, in addition to the availability of the latest ESP references so that the ESP teachers can get acquainted with the recent innovations in the field of ESP.

The present study consists of six chapters. **Chapter One (Introductory Remarks)** is a preliminary chapter. It starts off with the identification of the problem and systematically plans the organization of the study. It offers a brief background about the area of the research and provides a review about ELT in Yemen in general and medical English materials in use at the Medical College in particular. Further, this chapter determines the research hypotheses, questions, major aims and limitations of the study.

Chapter Two (Literature Review) is concerned with a review of the literature available on the studies and researches, which are closely related to the topic of the present work. It discusses the status of ELT and ESP, because they are regarded as the prime aims of this study. Further, it offers

a lucid description in an analytical manner so as to illuminate the parts and subdivisions of ELT and ESP.

Chapter Three (Needs Assessment and Contextual Survey in Medicine). Since this work is concerned with the investigation of learner needs, therefore, this chapter is devoted to the discussion of the notion of needs and provides a practical definition of needs assessment in the light of views and insights of different linguists. Furthermore, as it has been pointed out earlier that this study investigates the needs of medical learners for practical English communication, therefore, a contextual survey was offered to cover some studies and researches, which are expected to investigate the needs analysis in the medical context. This may provide invaluable insight to enrich the topic of the present work under investigation.

Chapter Four (Description of the Data Collection Methods) explains the techniques and methods, which are used in collecting the data of this study. It describes the criteria applied to establish the efficiency of the two instruments (questionnaire and structured interview) such as validation, piloting and reliability evidences, in addition to the full description of the administration processes.

Chapter Five (Data Analysis and Review of Results) is devoted chiefly to a discussion and analysis of the data obtained.

Chapter Six (Summary, Conclusions and Recommendations) sums up the findings of the research. Chiefly, it defines the learner's needs on the bases of the applicable features and more importantly it presents the

proposed schemata of the present investigation. This part is the concluding chapter of this work. It summarizes the results of the analytical procedures; in addition it presents in brief conclusions, recommendations and ends this study with a concluding word for further researches.

CHAPTER ONE

INTRODUCTORY REMARKS

CHAPTER ONE

INTRODUCTORY REMARKS

1.0 Preliminaries

In recent years, the world has witnessed a dramatic increase in different aspects of science. It has become more complicated, industrial, and progressive as many events have effected rapid changes, leading to modernization and automation, due to the demands and challenges of the new millennium. Of course, this development varies from one state to another, for instance, the situation in advanced countries is different from the one in Third World Countries, despite slight improvement, but the movement runs slowly towards the scientific revolution, as compared to the former.

However, scientific research constitutes an essential global component in that movement. Great emphasis is drawn to English Language Teaching (henceforth referred to as ELT), as it plays a very important role being the language of instruction of the new technology and science of the modern world. Therefore, many research programmes in different organizations, institutions and conferences are conducted to survey various disciplines. There is a lack of a specific language to accomplish the needs of the target situation according to the subject – specialization of the learners, i.e. functional and situational implementation of the language in real

communication (Widdowson, 1978; and Rogers, 1969). Hence, English for Specific Purposes (henceforward referred to as ESP) emerged in order to promote and contribute in that scientific and revolutionary shift.

Tan (1988: 110) suggests that the teaching / learning of the whole of the English language, or General English or the English grammatical system (call it what you may), cannot be a sound basis for a practical approach to language teaching because:

- It is not what is urgently needed,
- it would not be attainable,
- it would not be economical,
- it would not be motivating.

The need for an ESP programme was recognized in stages, and is now generally accepted.

Robinson (1980) argues that the teaching of ESP is an excellent illustration of the pace at which change may take place. This argument is strongly supported by Drobnic (1978) when he describes the current importance of ESP as follows:

The shift and changes in the world's balance of power in this century, the nations of the world have a greater say in determining their own language policies instead of having a language thrust upon them. ESP is not totally different from other areas of language teaching.

Hence, ESP has greatly increased in the last two decades. Many ESP courses are designed to meet the requirements of the inquiries.

Nevertheless, the consideration of the ESP course designers varies from one area to another as it is affected by the quantity of the participants and inquiries in which it leads to enrich some areas and neglect others to some extent. Recently, there is an emphasis on English for Business and Economics (henceforth referred to as EBE) rather than English for Science and Technology (henceforth referred to as EST). Shuja'a (2004:10) states:

Unquestionably, English for Business Purposes (henceforth referred to as EBP) is one of the ESP branches, which has an increasing demand in the market.

According to Dudley-Evans and St Johns (1988) EBP has emerged as a major stand and has become the largest area of growth in English for specific purposes. This growth in EBP is very conspicuous to the extent that 21 books out of 24 books were published in the area of EBP in the UK in 1994.

The medical discipline is a vital and crucial phenomenon as it deals with issues directly related to human body and health. Unfortunately, the ESP courses for medical learners are very limited and traditional in contrast to the other phenomena. There is very little previous research in the field of medicine in the situation of English as a Foreign Language (henceforward referred to as EFL).

The classical approaches to curriculum design and management, which go back to the early years of the twentieth century, could not respond adequately to the requirements of the new situation. Now, there is a need to

make more investigations in order to introduce reforms and innovations in medical education to make it more responsive to the health needs of the society and the advances in medical science and technology (see Maher, 1986; and Hattab, 2002).

Unfortunately, many ESP practitioners in some parts of the world handle English courses, which do not meet the entire needs of the medical learners.

A failure to begin an ESP course design process by carrying a systematic needs analysis is claimed to result in a course that is not relevant to the student's needs and hence hinders the teaching / learning process (see Munby, 1978; Allwright and Richard, 1977; Mackay and Mountford, 1978; Widdowson, 1981; Hutchinson and Waters 1987; Zoghoul and Hussen 1985; Waite 1989; and Robinson 1991).

The present study is an attempt to investigate the needs of the ESP learners for practical English communication, with reference to the learners of medical discipline. In other words, it aims to reveal what these students need in order to function effectively through English either as a means to learn medical science and cope with academic prerequisites of the subject-specialization or as a medium of communication in different occupational and social settings.

1.1 Statement of the Problem

As stated earlier, this study investigates the needs of ESP learners for practical English communication, particularly, the needs of First year Students of Medicine, University of Aden. Actually, these students study a Medical English Course (henceforth referred to as MEC) at the first year only out of a six-year duration study, as a university requirement. Generally, this course "MEC" teaches purely medical topics such as: Injections, The Blood – Brain Barrier, HIV Infection, Drug Abuse, etc. In other words, the MEC focuses on a restricted language, which is immediately related to the subject specialization of the learners (i.e. medicine). This type of communication may constitute an essential component as it may enable the learners to some extent to interact with each other as colleagues of the same discipline but within the medical context. But it is very important to take into account that medical learners are a part of the society and they need to interact not only with their classmates but also with the members of the society. For instance, they may need to go abroad for higher studies as an overseas post-graduate student; they may need to talk with the employees of the airport, to hire a taxi to a hotel, etc. All these situations and many others need a different type of English communication, which they lack, having attended only medical English programmes.

Unfortunately, they will be put to serious difficulties and constraints as they have learnt a limited language, which runs around one domain, i.e. medical context. Therefore, medical English as it has been pointed

previously, forms just one component, “one angle of the triangle”. In addition, they necessarily need other components such as English for General Purposes (henceforward referred to as EGP) or General English (henceforth referred to as GE). In brief, medical English can be described as one angle of the triangle, which cannot stand by its own right to form a full triangle. Hence, GE is equally important as the ESP.

Kennedy and Bolitho (1991) suggest that it is important not to regard ESP as an area of development separated from the rest of General English. This is a recent move within English language teaching towards a more communicative basis for teaching and learning.

Moreover, medical students do not only need GE to contact with the other members of the society who belong to different disciplines, but career and professional situations also impose the need for English Language Proficiency (henceforward referred to as ELP). In other words, a chemist in pharmacy needs GE in order to dispense the drug and explain the amount of dosage, etc. to the customers. The practical student in internship needs to talk to the patient about his case history and write a report for which he requires the knowledge of GE rather than ME. A nurse or a doctor in a casualty ward dealing with an accident case needing emergency admission and treatment will certainly need to talk in the social language (i.e. GE). Similarly, when a new patient is transferred from a family doctor or clinic to a hospital or when a doctor on shift duty needs to know some personal information and case history, etc. the need for GE becomes imperative.

Another simple example, which can be cited, is that of filling in the admission form for medicine at Yemen Medical College. Here the candidate is required to give personal details about himself for which he needs to use GE.

However, the medical English course in use at the Faculty of Medicine, Aden University, does not meet the essential and entire needs of the learners as it does not enable the learners to function appropriately even at the career or professional settings.

The difficulties which the students encounter arise not so much from a defective knowledge of the system of English but from an unfamiliarity with English usage, and consequently their needs cannot be met by a course which does not provide different communicative acts (Allen and Widdowson, 1985).

Therefore, there is a problem, which deserves serious investigation, as the subjects tackle vital issues, which directly relate to the health and life of human beings. Hence, the present study is an attempt to investigate the needs of the medical learners for practical English communication, with a view to propose a medical English course that meets the adequate needs of such learners, i.e. academic needs (in-study), occupational needs (post-study) and even situational needs of the social settings.

It is worthwhile, to state here that the present study is a twofold research. On the one hand, it is pragmatic and on the other it is theoretical. Pragmatically, it exposes the medical practitioners or specialists to use

English effectively either in study or post-study. Theoretically, it can be used as a reference as it claims to carry out more investigations in medical field in order to keep up with the recent innovations and inventions in medical discipline.

1.2 Organization of the Work

This work is organized systematically into six chapters. Chapter One is an introductory one. It introduces the problem via the statement of the problem and shows the background of the problem, determines the research hypotheses, questions related to it, aims of the study and scope and limitations of the investigation.

Chapter Two offers a review of literature available on the studies and researches which have investigated the ESP area and closely related to the topic of the present work, it looks at the starting point and developments of ESP, parts and sub-parts of ESP, EGP and its correlation to ESP.

Chapter Three is devoted to discuss needs assessment and its position in ESP area. It also provides an overview about varieties of needs analysis in general. In addition, it establishes some kind of legitimacy and offers a critical survey about needs assessment in the medical context.

Chapter Four explains the techniques and instruments, which are used in collecting the data of the current work. Further, it describes the methodology, which is applied to approve the validity and reliability of the

data collected; furthermore, it gives a full description of the administration processes.

Chapter Five is concerned with the discussion and analysis of the data obtained.

Chapter Six sets out the findings of the work. Chiefly, it defines the learner's needs on the basis of the application, and presents the proposed schemata of the present research. Of course, this part is the concluding chapter of the study. It summarizes the results of the analytical procedure, in addition it presents in brief conclusions, recommendations and ends this work with a concluding word for further researches.

1.3 Socio-educational Background

Yemen witnessed the dawn of higher education in the beginning of 1970's, with the establishment of the College of Higher Education. This institution was the first genuine step towards a socio-educational change in the country, and the starting point in the establishment of Aden University. This venture opened new vistas of education and in 1970 the University of Aden flourished with various disciplines like medicine, agriculture, law, economics, engineering, etc. The University of Aden, during the 1990's underwent considerable changes and made profound extensions that affected crucial developments in all aspects of academic and administrative fields. Post-graduate and research centers, to meet the scientific and social needs of society, were established.

1.3.1 Objectives of the University

As with all the private and state institutions, the University of Aden has its own objectives, which normally, have emanated from the general scheme of the governmental legislation. This is due to the fact that the university objectives aim at preparing the students to be well educated and develop their knowledge in different scientific and academic disciplines according to their culture. Generally, the University carries out all the scientific and academic plans on the basis of the following objectives:

1. First and foremost, it emphasizes the true Islamic attitude in its general horizon of Islamic knowledge and the universal human outlook of life and of Islam, as well as the formation of straight forward scientific knowledge and personality on true Islamic basis, i.e. in the light of the Holy Book (Qurán) and Teachings (Sun'na) of the Prophet Mohammed May Peace and Blessings of Allah Be Upon Him (henceforth referred to as MPBABUH).
2. It provides an opportunity of profound and specialized studies in different fields of knowledge for the students, to educate them in scientific critical thinking in order to meet the requirements of the country as specialists, technicians and experts in all disciplines.
3. It aims at developing the positive attitudes of the students towards continuous self-education and contemporary research through their life in order to build a fully educated and developed personality.

4. It assures importance of the teaching and developing the student's mother tongue (Arabic) into a scientific language so that it may become an essential instrument in the different aspects of learning and teaching processes.
5. It aims at assisting to acquire different aspects of knowledge through specialized scientific research either at the individual or group levels, which can be used in developing plans and improving social life towards progressed technology and social developments.
6. It encourages the creative ability of translation and publishing activities in different scientific and cultural disciplines.
7. It upgrades the efficiency of government, public and private sectors' workers and professionals through preparing qualified service programmes such as workshops, conferences and forums.
8. It strengthens the scientific and cultural relations with Arab and foreign universities, research and development centers in order to develop and strengthen the position of Aden University to gain eminence among the Arab world universities in particular and the universities of the world in general (N.P.).

Since the present study investigates the needs of the learners for practical English communication in medical section the following discussion will throw some light to reveal some of its activities such as nature of study, teaching methodology in this field, and the study courses, which are involved in the six-year duration of the medical course in Yemen.

1.3.2 Nature of the Study

The study at the Faculty of Medicine is of six years duration. During the first year, the students have to study intensive courses, which survey thoroughly the university requirements such as the medical English course and the skills leaning course. In addition to that, they have subjects, which are known as faculty requirements of basic sciences. These include; biology, chemistry and physics. English is the language of instruction of all the university and faculty subjects.

In the second and third years, the students cope with courses in basic medical sciences, particularly in morphology, physiology, social medicine and public health, diagnostic medicine, behavioral science and pharmacology.

In the fourth and fifth years, the learners are exposed to applicative programmes on junior clinical rotations and clerkship, which includes the major clinical sciences required for the optimal practice of medicine as general practitioners. Furthermore, medical and surgical diseases are taught during this period (i.e. semesters 7,8,9,10 and 11), in this regard it is worth noting that fifth year consists of three semesters (i.e. 9,10 and 11).

The sixth year is the last year, and is known as the internship. The term internship can be defined as the final academic year of the medical course and it constitutes a general application of the acquired knowledge and skills to the practical care of health problems under the supervision of the senior doctors. The period of internship is an implementation, a clinical

rotation in medicine, surgery, pediatrics and gynecology and obstetrics. Each programme lasts for eleven weeks. The students ideally become part of the patient management teams and essentially act as interns under supervisions.

1.3.3 Methodology

As mentioned earlier, English is the medium of instruction in teaching and learning. The methods of teaching, which are managed at the Faculty of Medicine, are different from those, which are applied in the other faculties such as Engineering, Law, Education, Arts, etc. This is due to the nature of the study of the concerned faculty, but the most common teaching methods employed in the medical course programmes are as follows: Lecturing, seminar, tutorial, practical session, field work and projects in addition to some other practical duties.

1.3.4 ELT in Yemen

Arabic is the mother tongue (henceforward referred to as MT) of the Arab world as a whole. It is used as the first language (henceforth referred to as L1) in professional and social situations. So, it has a unique characteristic that is the language of classical Arabic, i.e. the language of the Holy Book “Qurán” and the teachings of “Sun’na” of the Prophet Mohammed

(MPBABUH). Certainly, all the speakers of Arabic as L1 are proud of it as it represents the language of their religion "Islam".

In Yemen, English is used as a foreign language as in all the Arab states. Therefore, it is used in very restricted settings in contrast to L1 (Arabic). All the professional and school subjects in basic and secondary education are taught in Arabic except one (i.e. English), which is taught from the VIIth class onwards. Hence, English has a limited exposure and insufficient instruction.

Nonetheless, many learners in Yemen have a strong desire to learn English, because they perceive its importance. This is evident from the fact that many students prefer to join English courses in state and private institutions in order to improve their English language proficiency.

Abdullah (1999:6) observes that many applicants in different foreign language institutions prefer to join English language programmes, because of its importance and wide use as an international language, the language of new technology and automation such as information technology. Furthermore, it is a medium of communication between different cultures of the world and is of crucial importance in the modern context. Therefore, English is not only important for Yemenis but practically for everyone all over the world.

In this respect, it may be pointed out that there is a difference in English language proficiency between the learners of different regions of Yemen. Obviously, this difference can be noticed between the settlers of the

eastern and southern governorates on the one hand, and the settlers of the western and the northern governorates on the other. Such variation is ascribed to the influence of foreign occupation.

The occupation by Europeans, in particular the British, the French and to a lesser degree the Italians of the Arab countries in the 18th and 19th centuries has had a tremendous impact on the various aspects of life (economic, political, social, etc.) in those countries. One of the facets of the impact was the domination of European languages in several Arab communities, as they became the official languages of the government and administration, media of instruction in schools and languages of great prominence in many other domains. This linguistic impact did not cease with the departure of the European invaders and missionaries rather it lingered on as the economic and political contacts between the Europeans and Americans on the one hand and the Arabs on the other hand, continued to flourish (Bahumaid, 1990:37-8).

As is well known, the British ruled the southeastern areas, which were known as People's Democratic Republic of Yemen for about 128 years. During the period of colonization, English was used as a medium of instruction for professions and social contacts. In those days, many citizens acquired English as a second language (henceforth referred to as SL). This has resulted in many English words entering subconsciously in the vocabulary of those people and in turn affecting their language ability.

Roger (1969) assumes, “the learning capacity increases and people learn more words when they contact each other in an open environment”.

Such improvement cannot be over-generalized to reflect the level of all the learners in basic and secondary education or even at the university stage. It has already been mentioned earlier that the teaching of English as a school subject starts from standard seven of the basic education in Yemen. Formerly, it was taught from standard five which was a bit better, because many recent learning theories have proved that the learning of a foreign language in the early stages helps the learners to acquire the language better and faster which enables them to cope up with the prerequisites of the higher education.

The English course in Yemen has been changed many times in the last two decades, which indicates that the benefit and utility of such courses is still unsatisfactory. As Al-Sohbani (1997) puts it:

Unfortunately English is introduced quite late in all Yemeni state schools at the age of thirteen (grade seven of the basic education). This is not pedagogically sound. The earlier the learners are exposed to the target language the more easily they acquire it.

The current English course in use in basic and secondary education now is the Crescent English Course For Yemen (henceforth referred to as CECFY) by O’Neil, T. and Snow, P., Oxford University Press, 1997. It is a series of books of English language teaching for the Arab world. This course consists of six levels, distributed as follows: levels one, two and three are

designed to match standards seven, eight and nine respectively in basic education. Whereas, levels four, five and six match standards: ten, eleven and twelve respectively first, second and third grades of secondary education. CECFY is designed lately by natives of English on the basis of consultations and experiences of some qualified institutions in the United Kingdom and Yemeni educationalists and researchers. In fact, the contents of the course are adapted to practise all the four language skills “listening, speaking, reading and writing”. Further, the selection of the language reflects some authentic uses of English in many situational settings. Moreover, in contrast to the former courses, this is the only English course used in state basic and secondary education that involves tape-scripts of native speakers of English. Each level of CECFY consists of the following components:

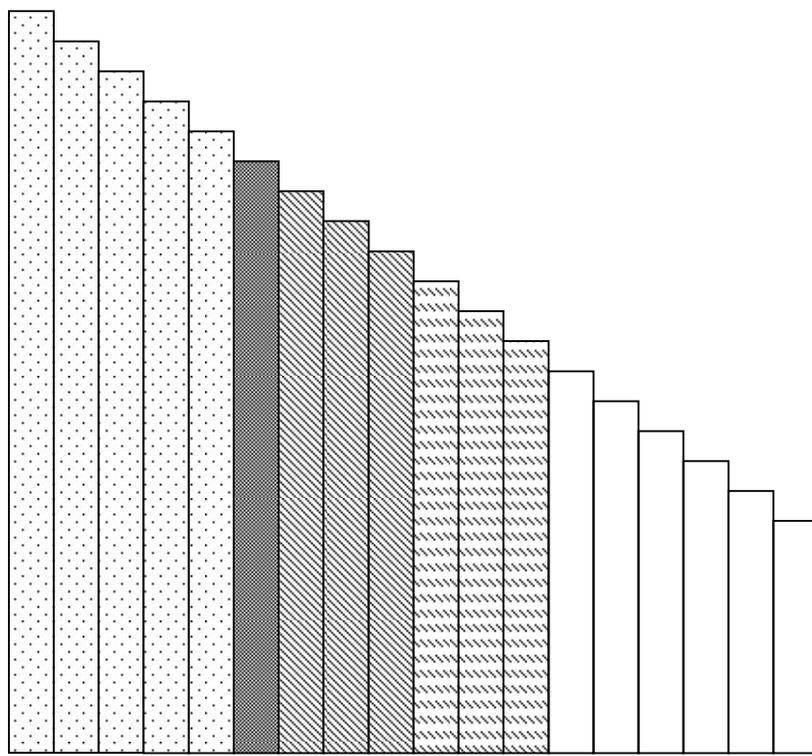
Pupil’s Book

Work Book

Teacher’s Guide

Recording Cassettes.

Here, it appears to be more appropriate to conclude the discussion of ELT in Yemen by a figure, which clarifies the scope of the present study and the position of ELT in the three stages of education, i.e. basic, secondary and university.



(Figure No.1.1)

-  (0) Nil English in basic education stage.
-  English in the basic education stage.
-  Secondary school stage
-  Scope of the present study
-  University stage.

Figure (1.1) illustrates the three levels of learning in Yemen “basic, secondary and university”, in the first six years of basic education there is a nil use of English, so all the school subjects are taught in the instruction of the mother tongue “Arabic”. English as a school subject is taught from standard seven, with ten classes per week, each period consists of 35 minutes. This system is used in the two stages of secondary and basic education.

In the above figure, the university education is labelled by six standards to refer to the longest duration in the Faculty of Medicine. The dark level in the university education demonstrates the scope of the study. The present research investigates the needs of the first year medical university students for practical English communication.

1.3.5 Medical English-materials in Use

The students of the Faculty of Medicine have to study medical English course for two semesters at their first year only, two classes per week for about four hours. Due to its importance in the medical discipline as a language of instruction and of specialization, it is prescribed as a university requirement and in addition to that the students have to study specialized subjects such as biology, chemistry, histology, embryology, anatomy, biochemistry, etc.

In this respect, it is worthwhile differentiating between the two forms, i.e. specialized subjects and university requirement of medical English. The students perceive that the former are obviously more important and are considered as major subjects, whereas the latter is regarded as a minor one.

However, English is essential for the learners either as a foreign or second language in different scientific disciplines. Further, the needs of English increase widely, particularly, in such disciplines where English is used as the medium of instruction for the teaching as well as learning as in the Faculty of Medicine. Unfortunately, some educational systems in many foreign countries do not pay much attention to the status of the English. Instead, it is considered as a secondary or sub-ordinate subject.

However, the medical English materials in use at the Faculty of Medicine mainly teach pure medical texts. The same course is taught in the Medical Section and the Pharmaceutical Section. It emphasizes the element of specialized data. Hence, it has a limited scope that is of medical discipline only. No doubt, the learners will not be motivated by such constraints. Though, the materials are relevant to the student's specialization yet the learners need to enjoy learning with the other interesting topics and uses of the target language.

Unfortunately, the ESP world places emphasis upon relevant materials according to the needs, e.g. medical texts for medical students, engineering English for the engineers and so on. The students should be inspired and enthused by the obvious relevance of their ESP materials,

taking into account, the fact they are human beings not machines. The relevance of medical English needs to be sweetened with the sugar of enjoyment, fun, creativity and a sense of achievement (see Gardner and Lambert, 1972).

1.3.6 Restricted Language and Authentic Application

First of all, it is necessary to explain: What is meant by the two head terms 'restricted' and 'authentic'? And what do they refer to?

Restricted means limited or constrained for a specific sphere, in the present context it refers to the medical language.

Authentic means real, here it demonstrates the real use of English in different situational settings.

In fact, medical English course in use at the Faculty of Medicine emphasizes just medical texts, "restricted language" and neglects general English texts or authentic language.

A text can only be truly authentic in the context in which it was originally written; in ESP most of the texts are automatically removed from their original context. Therefore, there would be no such thing as an authentic text in ESP (Hutchinson and Waters, 1987; Phillips and Shettlesworth, 1978; and Allen and Widdowson, 1985).

Anyway, as stated earlier (1.3.4), the medical English course teaches pure medical language which is restricted to the subject-specialization of the

learners. This may help the learners to inter-act within the restricted field of their discipline. But such learners do not need only medical language. Certainly, in addition to that, they do need other types of communicative language, which is useful for other situational uses in real life.

Traditionally, the aim of ELT had been to describe the rules of English usage. However, the new studies shifted attention from defining the formal features of language usage to discovering the ways in which language is actually used in real communication (Widdowson, 1978).

Indeed, the learners and teachers of ESP need to use EGP not only outside the scientific discipline but also in the ESP classes during the teaching and learning processes. Candlin et al. (1976) point out:

All the teachers of the specialized subjects lecture in English, as it is the language of instruction for the courses. Interestingly, a great amount of the teaching procedure needs general English language even in the purely specialized texts.

In medical practice many issues arise, particularly, in the practical field. In hospitals, patients are worried about their health and are often uncertain or confused in their replies about the symptoms of the disease or case history. Doctors are not sure of the symptoms and diagnosis; all this happens because of the improper communication between the two parties “the doctors and the patients”. Therefore, general English assumes great importance in such a sensitive and serious field as health.

The field of medicine, more than any other, needs everyday language outside the world of research laboratory and clinic for the daily routine of medical practice. A communication situation may arise in which a doctor tries to understand the problems of the patient, and the patient tries to understand the doctor's diagnosis. Language is greatly involved in medical consultation. The initial statement of symptoms is of critical significance as it guides the doctor's search for a proper diagnosis. Similarly, the doctor's explanation of a problem, and his recommendations are very important and need to be strictly followed by the patient. Therefore, medical practitioners should be competent enough in general English language proficiency (see Heath, 1979; and Crystal, 1997).

Accordingly, the ESP courses should include an authentic social communication, because language would have to be used in daily routine and real life situations.

The course designers consider the situational use of a language required by ESP learners as the most difficult issue in course design. There is no limit for the social use of language, since language is not confined to any boundary. However, assumption and prediction of the situational uses of the language should be properly gauged in such courses (see Morrow, 1977; Widdowson, 1976; Phillips and Shettlesworth, 1978; and Sculthorp, 1974).

Unfortunately, most of the ESP syllabuses are designed in a restricted manner containing topics, which are limited and relevant only to the subject-

specialisation of the learners. It is not advisable to limit the needs of the learners to specific uses of the target language.

On the whole, the medical student should not be constrained by restricted communication of his discipline; but should be equipped by an authentic communication of the general language (see Morrow, 1977; and Brasuett, 1976).

1.3.7 Level of Learners

As stated earlier (1.3.4), English is used in Yemen as a foreign language, where there is a lack of exposure to practise the language neither in the learner's discipline nor in real life communication (i.e. outside the educational sphere). Of course, this situation is over-generalized in most countries of non-native speakers of English. Definitely, it has a great affect on the learners' standard in general.

In Yemen, the situation is the same; there is a noticeable difference between the levels of the learners in English proficiency. This variation has been influenced by many factors, which differ from one learner to another. For instance, the level of the learners who come from urban areas is different from those who come from rural areas. That is to say that the former is slightly better, whereas the latter has serious difficulties such as lack of textbooks, comfortable accommodation, competent teachers, teaching aids, etc. Of course, such a situation is common for the learners of

English as a foreign language in most of the Third World Countries (see Bin-Taya'a, 1996).

It can be concluded that the standard of English of the learners in Yemen has also been affected by most of the factors mentioned above. Therefore, the students who go for higher education in the Faculty of Medicine have considerable problems, especially, during their first year when they are exposed to an intensive application of English as their medium of instruction. The majority of medical books, research journals, etc. are published in English, and therefore the students should have a fairly good degree of competence in English.

1.3.8 Previous Study of English

It is necessary to throw some light on the previous competence of English of the medical students since there is a correlation between the previous level of competence in English and the needs of the present study.

Kennedy and Bolitho (1991) assume that a student's previous learning of English may influence the attitudes of an ESP course. Where this learning has not been successful, there may be a negative feeling towards the past failure. This leads the designers to develop material, which is different from the type of learning experience the student has had in the past. This motivates the student and enables him to overcome his initial reluctance to study English.

As mentioned earlier, in Yemen English is taught as a school subject for three years at the basic education stage and three years at the secondary education stage. However, all the other subjects of the two educational stages are taught in the official language of the country (i.e. the student's mother tongue, which is Arabic). Comparatively, in private schools most of the subjects are taught in English. Definitely, private education is better than the state education (see Al-Sohbani, 1997:32). Unfortunately, majority of the students join state schools, because of their poor economic condition. Although, the students have studied English for six years at the two educational stages "basic and secondary", yet the standard of English proficiency in state education is unsatisfactory.

It is good that students cannot join university education immediately after they have passed the higher secondary examination but have to have a gap. They utilize the period of gap for improving their proficiency in English. Generally, they study general English courses such as:

Headway English Course, by Soars, L. and Soars, J. Oxford University Press, 1995.

New Interchange English for International Communication, by Richards, J.C. Cambridge University Press, 1998.

Look Ahead English Course, by Naunton ,J. et al. Longman, 1999.

In fact, all the English courses in use either in private institutions or the state ones focus on teaching English for general purposes, i.e the social

language, one which is used in different situational contexts. The duration of each programme varies from one course to another and from one institute to another, usually between 45 - 90 days, 3-5 days per week for 2 hours every day. The participants have to pay a tuition fee of approximately forty dollars for each programme. These courses help the students a great deal in improving their proficiency in English in an authentic manner, the emphasis being upon social situation. Unfortunately, the students cannot offer long term courses as they have to prepare for the university entrance examination, for which there is keen competition due to limited number of seats.

1.3.9 Motivation

Motivation plays a very important role in the learning process of a foreign language. Therefore, many organizations and institutions teaching foreign languages ascertain the learner's motivation and attitudes towards the learning of the target language.

The most influential study of motivation in language learning has been that of Gardner and Lambert's (1972) study. They identified two forms of motivation:

- (a) **Instrumental motivation:** It is the reflection of an external need. The learners are not learning a language because they want to, but because they need to. The need may derive from varying sources: The need to sell things to the speakers of a language; the need to

read texts in the language for work or study. The need may vary, but the important factor is that motivation is an external one.

- (b) **Integrative motivation:** On the other hand, this motivation derives from a desire on the part of the learners to integrate with the members of the community using that language. It is an internally generated want rather than an externally imposed need.

In the investigation of the motivation of English language teaching, the most common study is Roe's (1977). He suggests three levels of motivation to learn English. Level one, the highest level when English is required to obtain a degree or a desirable job or to get promotion. Level two, to improve exam grades or influence positively career prospects; and level three where English could increase the student's status, be useful if he went abroad, or to widen his knowledge and interests. This system of level also emphasizes instrumental motivation (where English is seen as a means of achieving some practical or professional purposes) to be more important for success than integrative motivation (where the learner identifies with the social and cultural aspects of learning English). It is, generally, assumed that ESP programmes by their nature tend to emphasize the instrumental aspect of learner's motivation (quoted in Kennedy and Bolitho, 1991:15).

ESP courses are taught in most of the Faculties of Aden University (Medicine, Law, Engineering, Economics, Administrative Science, Agricultural Science). But, as stated earlier, the ESP courses in the above-mentioned institutions are dealt as minority subjects. However, the students in such faculties need greater access to the English courses either as

present needs (in-study) or future needs to pursue higher education or go for a professional career (post-study).

Unfortunately, a majority of the learners pay more attention to specialized subjects and regard them as important in contrast to the ESP courses, which are not considered as essential. So, they study English courses just to pass the examination. The situation is more or less similar in Yemen too. Thus it could be said that, the motivation is not so high to learn the target language (Dharmapriya, 1988: 32).

Robinson, (1991) points out that in many parts of the world, university students may not see the value of their ESP course, perhaps because they know that they can in fact pass their subject examination without a knowledge of English. Very often, university EAP courses are taught at the beginning of a student's university career and the student may not appreciate the value of the course until much later. In this respect, it is worth pointing out that motivation plays a major role in generating interest in the learner.

Mead (1980) conducted research on the motivation of students undergoing ESP courses in the Faculties of Medicine, Agriculture and Veterinary Science at a university in the Middle East. All the students were given ESP courses based on texts from their subjects of specialization, e.g. Medical texts for medical students and so on. This, it was assumed would motivate the students, because of the apparent relevance to their course of study. When Mead enquired into the interest the students had in their special

subjects, he discovered that only medical students were really motivated by their subject texts. The Agriculture and veterinary students were not motivated by their subject texts, because they did not really want to pursue the said courses. They wanted to become doctors, but there were not enough seats in the medical faculty to accommodate all of them. They had no alternative but to opt for agriculture and veterinary courses, which they really did not like (quoted in Davies and Currie, 1971).

1.3.10 Constraints

Lack of motivation as is seen earlier causes a hindrance for any kind of study. Besides lack of motivation there may be other constraints which the student might have to face in learning a particular course, these may be textual constraints, large classes, limitation of time, etc.

Students of the Medical Faculty in their initial stages of study have to face the trauma of long, complicated, unfamiliar terminology, which appears absolutely alien to them. Kenenth and Chantana Methold (1975) observe:

Medical writing relies very heavily on a specialized vocabulary; most of the words cannot be properly translated or even defined. Medical vocabulary is often difficult to understand, it is necessary to approach it from a variety of angles if one is to understand the full and implied meaning of the words and complex sentences.

The other essential constraint, which often hinders the learning process, particularly, in the medical English classes is the large number of the students, (around 120-140). In many Third World Countries English is taught under most difficult circumstances, one of the problems nearly every teacher has to face and find a solution for, relates to large classes, sometimes sixty or even seventy students. Teaching a foreign language successfully to large classes requires a specialized approach involving group work (see Bhatnagar and Bell, 1999: 263).

Finally, limitation of time forms another difficulty. The English classes are scheduled for the afternoon periods or the last day before the weekend when the students are tired. It is difficult to teach a foreign language in such a situation where the learners do not get enough practice or opportunity to master productive skills due to paucity of time, the courses being of very short durations.

Hence we can say that large classes is one of the common problems of the ESP courses in different parts of the world and low priority in the timetable, the ESP classes being held at awkward times of the day or week (see Johns, 1981; Robinson, 1981;and Rivers, 1983).

1.3.11 The ESP Practitioners

As stated earlier, the curriculum of the Medical Faculty is divided into two parts, one, the subjects of specialization or the main topics, and the

other, the ESP course in English. A majority of the teaching staff of the specialized subjects is highly qualified having a doctorate from foreign universities of UK, USA and in some instances from Arab countries. The qualification of teachers of English varies from B.A to M.A. Most of the ESP practitioners have received their education in Yemeni Universities. Unfortunately, the majority of the ESP teaching staff has just a B.A degree having very little experience and knowledge about ESP discipline. The ESP courses should be very specific requiring teachers having a high degree of knowledge and skill (see Pilbeam, 1986; Johnson, 1986; Skeldon and Swales, 1983; and Robinson, 1981).

It may be pointed out here that the ESP teachers who are non-native speakers of English and teach the ESP course in a foreign country are required to have a training or attend workshops in the ESP field in order to widen their knowledge and acquaint with the recent movements in the ESP discipline. Such training greatly helps the teachers in updating their knowledge and thus, they are able to overcome most of the difficulties in the teaching process in their ESP classes.

Stevens (1988) urges that in order to make a success of ESP course, the teachers have to view ESP as a normal, acceptable challenge, they have to understand as fully as possible the nature of the language teaching and learning processes; they have to be able to observe and assess the learner's progress and identify his problems; they have to be familiar with the widest possible range of alternative teaching techniques; they have to know which

response to select at any particular time in order to meet the particular learning requirements of a given student. Above all, they have to be optimistic and believe that success is definitely possible. Hence the teacher needs to exercise professionalism based on training and experience.

1.4 Research Questions

The present study investigates the needs of the first year students at the Faculty of Medicine, University of Aden. It also tries to investigate research questions directly related to the subject and their answers, which can decide what the students need in order to effectively communicate in English either in their discipline or social settings. Therefore, the current study attempts to set out to investigate the following research questions:

- What do the first year medical students at Aden University study in the medical English course?
- What kind of English does the course teach?
- Can the current course achieve its proposed objectives?
- Does it match the academic needs of the learners?
- Does it meet the professional needs of the learners?
- To what extent does it help the learners to communicate outside the discipline of the subject specialization?
- To what extent does it meet the students' entire needs (in-study and post-study)?
- What are the needs of these learners for practical English communication as perceived by the fellow students?
- What are the needs of the learners for practical English communication as perceived by the teaching staff?

- How can the learners use English effectively to pursue their medical studies?
- How can the learners use English effectively in their field of work / occupation?
- What do those learners need in order to use English effectively as a medium of communication in different social settings and situations?

1.5 Research Hypotheses

1. The medical English materials in use do not match the thorough needs of the learners.
2. There are no variables between the views of students and teachers regarding the students' attitude and motivation towards the medical English course.
3. There are some variations between the perspectives of students and teachers regarding the assessment of the medical English materials in use.
4. There are some similarities between the perceptions of students and teachers regarding the entire needs of the learners for practical English communication either in-study or post-study (present or future needs).
5. Pure medical English in its own right does not satisfy the adequate needs of the learners. Such learners need a combination of pure medical English, semi-medical English and general English.

1.6 Significance of the Study

Most of the linguistic researches in ESP focused on the formal aspect of a language especially in the academic field. They emphasized the

specialized language, which helped the learners within the confines of the specialization only, and neglected the needs of the situational settings.

In fact, relatively very little work is available which investigates the use of language in non-professional settings (William, 1984; Lenz, 1989; Jupp and Holdin, 1976; and Coleman, 1985).

In many ESP studies, consideration is given to the theoretical aspect rather than the pragmatic one. The present study is totally different as it investigates an area of ESP, which has very limited relation to the former researches and studies. It attempts to relate the two aspects theoretical and pragmatic as also it investigates the needs of ESP learners for practical English communication. It shows how the learners need to use English effectively as a medium of communication. Moreover, it sheds lights on the needs of the learners for practical English, in order to function effectively in their discipline, i.e. as a means of instruction to learn specialized science.

1.7 Aims of the Study

The present study attempts to achieve the following aims:

- To evaluate the medical English materials in use at the Faculty of Medicine, University of Aden and match them with the entire needs of the learners.
- To investigate the needs of the learners for practical English communication from the viewpoints of the students.
- To investigate the needs of the learners for practical English communication from the viewpoints of the teaching staff.

- To provide a proposed medical English course which is threefold:
 - (a) To meet the entire needs of medical learners for practical English communication in the discipline of study.
 - (b) To meet the needs of the learners in fieldwork and occupation.
 - (c) To meet the thorough needs of medical learners in different situational settings.
- The proposed course aims to expose the learners to use English effectively in both student's discipline and social situations.

1.8 Scope and Limitations of the Study

- This study is limited to the ESP learners.
- It is limited to the learners of English as a foreign language.
- It is limited to learners of medicine.
- It is limited to the first year medical students at the University of Aden.
- It investigates the needs of medical learners for practical English communication, either as a means to learn specialized science of medicine or as a medium of communication in different situational settings.

1.9 Definition of Terms

ESP: ESP is the language of the learners of English either as an FL or L2 designed for definite purposes of a particular group of learners to meet their precise needs, like English for medical studies, English for hotel staff, English for technicians, etc.

General English /Ordinary English: General English demonstrates the role of English in a language programme of specialization in ELT in which the content and aims of the course are not identified for a limited communication or for particular learners. This may be compared with courses, which are limited to definite needs of a particular group of learners, known as English for specific purposes programme.

Needs Assessment / Needs Analysis: Needs assessment is the process of determining the needs for which a learner or group of learners require a language and also arranging the needs according to the priorities.

1.10 Conclusion

Chapter one is devoted to the background of the problem and identification of the research problem, which can be summarized as under:

The present study investigates the needs of the first year students, at the Faculty of Medicine, University of Aden, particularly, for practical English communication. The medical English course in use teaches purely medical English topics (see 1.3.5). The standard of students in English is unsatisfactory, they cannot use English efficiently neither in their discipline, (i.e. the medical sphere) nor in the situational settings (i.e. outside their discipline). Therefore, the present study attempts to investigate this problem and tries to find out what the learners precisely need in order to use English properly either as a tool for learning medical science or as a means of communication in social life.

This chapter also provides overviews about ELT in Yemen and presents hypotheses, aims of the research, questions about the study and limitations of the investigation. Moreover, this chapter answers one of the research questions, that is:

What do the first year medical students at Aden University study in the medical English course?

Above all, this chapter addresses one of the research hypotheses viz. the medical English materials in use do not match the thorough needs of the learners.

CHAPTER TWO

LITERATURE REVIEW

CHAPTER TWO

LITERATURE REVIEW

2.0 Preliminaries

As stated earlier, the current work is an attempt to investigate the needs of ESP learners for practical English communication, with reference to the first year students at the Faculty of Medicine, University of Aden, Yemen. Chapter one presents an overview about the background of the problem, identification of the problem, in addition to the aims, limitations and setting up the questions and hypotheses of the research.

In Chapter Two, literature review is offered to cover the work, which is closely related to the subject of the present investigation. It systematically provides an exhaustive survey, organized from more general to more specific. It also gives an overview about the present status of English then it interprets the term ELT along with its varieties. It also attempts to define the two terms 'ESP' and 'EGP' in addition to pointing out the distinction between such forms in their application. Moreover, it provides an analytical description of the different categories and sub-categories of ESP.

2.1 English Language Teaching (ELT)

2.1.1 Overview

It is a fact that English has been accepted as an international language all over the world; it is extensively used at present than it was in

the past. Moreover, the use of English continues to increase greatly all over the world. It is estimated that, more than 350 million people today speak English as the mother tongue, and it is spoken as a second language by more than 400 million people, in addition to a large number of other users of English as a foreign language. Totally, more than a quarter of the whole world speak English, which shows that English has the greatest importance as compared to other languages.

Huckin (1988: 61) refers to English in a recent issue of U.S. News and World Report, stating that more than 745 million people all over the world now use English as a first or second language. It has become the worldwide Lingua Franca not only of diplomacy, aviation, tourism, and popular culture, but also more importantly of science, technology and commerce. The driving force behind today's increasing global economy is the explosion of technology. But technology itself depends on information, and this information is mostly conveyed in English, both internationally and intranationally.

There is no doubt then that English like any other language serves the native speakers with a wide range of implementations in different disciplines, but it is striking to note that it serves the non-natives of English with an equally wide range of use as it is international and can be used in various fields of commerce, trade and communication between the different states of the world (Talgeri, 2004: 117).

Increasingly, the range of the learners and speakers of English is increasing day by day, due to the demands of the new world in its application and use. The effect was to create a whole new mass of people wanting to learn English not for pleasure or prestige of knowing the language, but because English was the key to international contacts of science, technology and commerce. Previously, the reasons for learning English had not been well defined. Knowledge of a foreign language had been generally regarded as a sign of sound education, but few questioned its necessity. Learning a language was, so to speak, its own justification. But as English became the accepted international language of technology science and commerce, it created a new generation of learners who knew specifically why they were learning the language (Hutchinson and Waters, 1987:6).

As a result of the above discussion, a question arises here, what is meant by ELT? And what does it refer to? The full form of ELT is English Language Teaching. It is used especially in Britain to refer to the teaching of English as a second language or English as a foreign language. In North American usage this is often referred to as TESOL "Teaching English to the speakers of other languages" (Richards et al., 1992:121).

ELT indicates the role of English in an institution or an English language programme, where the aims are identified to prepare the learners to acquire proficiency in English. For example, there are ESP courses, EGP programmes and subject-specialists in English language disciplines belonging to both English literature and applied linguistics stream.

2.1.2. ELT Varieties

ELT is divided into three main streams:

- English as a mother tongue (henceforth, EMT)
- English as a second language (henceforth, ESL)
- English as a foreign language (henceforth, EFL)

(Quirk et al., 1976:3)

The relation between ELT and its branches (EMT, ESL and EFL) can be described as follows:

ELT can be considered as the parent body and EMT, ESL and EFL can be considered as subsidiaries. The following diagram illustrates the relationship:

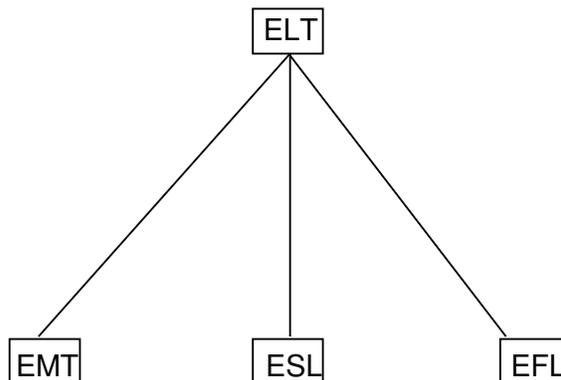


Figure (2.1) The relation between ELT and EMT, ESL and EFL

2.1.2.1 English as a Mother Tongue

This refers to the first language (L1) acquired by the child. It is obtained by natural acquisition not by learning, i.e. the child acquires it by contacts gradually and subconsciously with the mother and the other

members in the family. It is worth stating here that there is a distinction between learning and acquisition, the former is seen as a conscious process as the learning of the foreign language, whereas the latter is regarded as a subconscious process as the acquisition of the first language (Krashen, 1981, 1982; and Littlewood, 1984).

2.1.2.2 English as a Second Language

English as a second language is used to refer to the non-native speakers of English. It has great use and official status, within a country, which any other foreign language does not have.

The application of English as a second language is used to a great extent in the fields of politics, economics, commerce and trade. It is also used widely as a language instruction in school and higher education. English as a second language is also used by immigrants and other minority groups in English- speaking countries.

2.1.2.3 English as a Foreign Language

English as a foreign language means a language used by foreigners. EFL is applied in some countries where it is taught just as a school subject, but not used as a medium of instruction in a school or as a language of communication within a country, such as in government, business or

industry; for example, English is used as a foreign language in Arab States, France, Japan, China, etc.

With reference to the above information it becomes necessary to bring out the distinction between the three varieties of ELT viz. EMT, ESL and EFL. The distinction is obvious if the diffusion of English is viewed in terms of three concentric circles: the inner circle, the outer circle and the expanding circle. The first circle represents the native varieties, which refers to the speakers of English as a mother tongue, for example citizens of America, UK and New Zealand. The second circle represents the institutionalized varieties, which refers to the speakers of English as a second language, spoken by people in Singapore, India, Nigeria, Philippines, etc. Finally, the third circle represents the non-native varieties, which refers to the speakers of English as a foreign language such as is spoken by the people in Egypt, Japan, France, China etc. (Kachru, 1988:11).

2.2 ESP

2.2.1 Overview

We all know that the whole world has witnessed tremendous advance in different aspects of science, commerce and technology, which requires the use of a special language to facilitate contacts and dealings between the different states of the world. This function is admirably performed by the ESP, the language of new technology and automation of the modern world.

Robinson (1991) claims, ESP to be active around the world also having a pluralistic approach. Hutchinson and Waters (1987:2) point out:

As with most developments in human activity, ESP was not a planned and coherent movement, but rather a phenomenon that grew out of a number of converging trends. These trends have operated in a variety of ways around the world.

Accordingly, ESP has emerged as a principal language of communication of the new brave world, represented in the new revolution of science, technology and commerce.

2.2.2 ESP Definitions

ESP (English for Special or Specific Purposes) cannot have a single definition. ESP can be defined in a number of ways according to its functions and usage. Scholars like Robinson (1991), Strevens (1977), Hutchinson and Waters (1987) are of the opinion that a universally applicable definition of ESP cannot be attempted.

Traditionally, ESP was known as Language for Special Purposes (henceforth referred to as LSP). Later, it was known as English for special purposes; now it is known as English for specific purposes. English for special purposes relates to restricted languages, which for many people is only a small part of ESP, whereas English for specific purposes focuses

attention on the purpose of the learner and refers to the whole range of language resources (Munby, 1978: 167; and Robinson, 1986:5).

There are, however, a number of definitions of ESP provided by renowned linguists, but we have incorporated only a few significant ones since all seem to be focusing on common aspects of ESP viz. learner's particular needs and occupational and vocational requirements.

One definition of ESP has been offered by Khan (1986:11), where he describes it as a working definition of ESP. He points out:

ESP aims at providing instruction in consonance with the learners' particular needs as related to their designated areas of study, occupation or vocation with an appropriate selection of language content and skills needed.

Hutchinson and Waters (1987) define ESP as follows: "ESP is not a particular kind of language or methodology, nor does it consist of a particular type of teaching materials, understood properly, it is an approach to language learning which is based on learner needs". They add, "ESP is also an approach to language in which all decisions as to content and method are based on the learner's reason for learning".

Robinson (1984:13) states that: "ESP course is purposeful and is aimed at the successful performance of occupational or educational roles. It is based on a rigorous analysis of students' needs and should be tailor-made".

Mackay and Mountford (1978a) offer a definition of ESP in terms of three purposes:

- Occupational requirements e.g. international telephone operators, civil airline pilots, etc.
- Vocational training programmes e.g. for hotel and catering staff, technical trades, etc.
- Academic or professional study e.g. engineering, medicine, law, etc.

Richards et al. (1992) offer the definition of ESP as: “ESP refers to the role of English in a language course of instruction in which the content and aims of the course are fixed by the specific needs of a particular group of learners. For example, courses in English for academic purposes and English for science and technology and English for nursing. These courses may be compared with those which aim to teach English for general purposes” (Richards et al., 1992:125).

Finally, in the light of the above definitions we can say that ESP can be defined as the language of the speakers of English either as a foreign language or a second language, designed for definite purposes of a particular group of learners that meets their accurate needs. For instance, English for medical studies, English for technicians, English for hotel staff, English for airlines employees, etc.

2.2.3 Brief History of ESP

By the end of the Second World War in 1945, some states of the world started competing in industries for peaceful purposes instead of armaments. A revolution in various aspects of science and technology arose and the new world became more highly industrialized and mechanized.

In the 1950's, different states of the world started interacting and conducting trade import and export; hence, it was imperative to have an international language to develop the new revolution in industry and technology. No doubt, English language admirably suited the requirement, but it was necessary to simplify and condense the function of English according to specific contextual needs.

English is accepted as an international language. In addition, it is the language of automation, new technology and science. Moreover, English can be used in various contacts and dealings between the different states of the world. But, it is noticed that, the speakers of English as FL or SL are not as fluent as the native speakers of English. They do not communicate well in different scientific and social settings, as it is not their mother tongue, due to some communicative constraints. Therefore, it was unnecessary and time-consuming to teach English to the whole world in general disciplines, particularly, for the speakers of English as FL or SL. Then, the need to narrow down the scope of the English language according to the demands of the specific purposes started emerging.

As already mentioned above the mid 1960's and 1950's saw a great revolution in science and technology. Therefore, it was time to develop a special language to fulfill the demands of that shift. Thus English for science and technology (EST) started emerging, which can be described as the starting point of ESP.

Trimble (1985) claims "most of the work at this time (here the 1960's) was in the area of English for science and technology and for a time ESP and EST were regarded as almost synonymous".

Williams et al. (1984:2) argue "ESP began to evolve in the 1960's in response to an awareness that certain types of learners had specialized needs that were not being sufficiently and efficiently met by wide-spectrum of EFL courses".

To support the birth of the new phenomenon (represented by ESP) in ELT discipline, an international meeting of specialists was held in London in December 1960 on second language as a factor in national development in Asia, Africa and Latin America which focused on three basic needs: (a) internal communication, (b) transmission of science and technology and (c) international communication.

Another step in ESP development was the convening of the first conference for English for special purposes in 1968, which could be regarded as a milestone in ESP. In the next few years, particularly, in the beginning of 1970's, ESP started growing rapidly according to the demands of the world. As Mackay (1975) puts it:

For the last ten years or so, the term language for special purposes has begun to appear more and more frequently in language teaching literature.

2.2.4 Categories and Sub-categories of ESP

Many linguists provide different divisions and sub-divisions of ESP. Undoubtedly; there are some correspondences in some branches. At the same time there are some differences in the others. In the following few pages the discussion will be devoted to discuss and analyze the most well-known and consummated classification and divisions of ESP.

Stevens (1977c) assumes a classification, which clarifies the categories and sub-categories of ESP; the following tree-diagram illustrates the branches and sub-branches of ESP as viewed by Stevens:

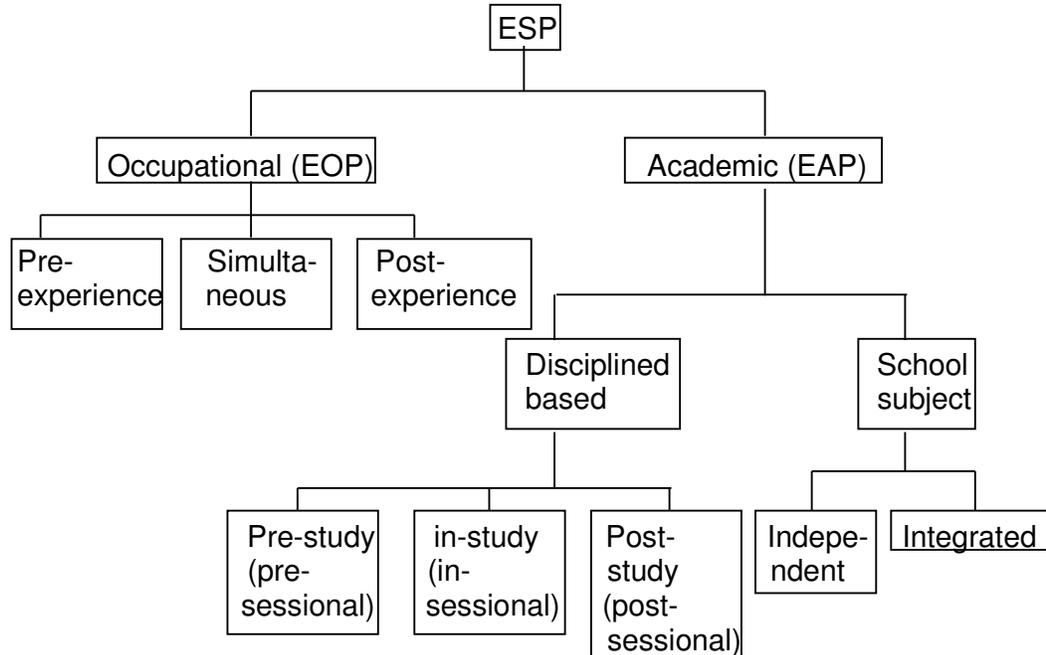


Figure (2.2) : Categories and sub-categories of ESP (From Stevens, 1977c-81)

English for Occupational Purposes (henceforth referred to as EOP) always refers to the needs of the occupation, profession or job, for example, English for technicians, English for secretaries, English for hotel employees, etc. EAP often indicates the study needs, for instance, English for medical studies, English for economics, English for psychology, etc.

An Indian learning English in order to be able to join his duties in an oilfield in Saudi Arabia and at the same time being instructed in the job itself is an example of pre-experience ESP. Doing two things simultaneously viz. practicing at work and at the same time studying an English course in order to improve English proficiency as required by the demands of the job, for example a group of employees of the Indian Airlines undergoing an English course to improve their English, particularly, their communication skills and performing their duties as well.

An Egyptian doctor learning English in order to communicate with his patients about their symptoms, case history, accident, etc. is an example of post-experience ESP. Pre-study means pre-sessional programme or course before joining the study; for example a Pakistani student who wishes to join Engineering Faculty in the future, meanwhile enrolls for an English course to improve his English to meet the future requirements of the study as a pre-sessional English course.

A Yemeni student in the Faculty of Medicine, University of Aden, learning English to read books, articles, on his/her specialization, is an example of in-study discipline based ESP. ESP as independent school

subject is English helping the study of one or more of the subjects in the school curriculum. Integrated ESP means learning English parallel to the study as in chemistry, biochemistry, physics, etc.

Now, it is worth giving more details and explanation about the divisions and sub-divisions of ESP in a critical and analytical manner, i.e. analyzing different parts from the larger units to smaller ones.

As pointed out earlier (2.1.3), ELT is divided into three main branches viz. EMT, ESL and EFL. Meanwhile, ESL/ EFL is subdivided into two main branches which are ESP and English for General Purposes (henceforward referred to as EGP). The following diagram illustrates the division.

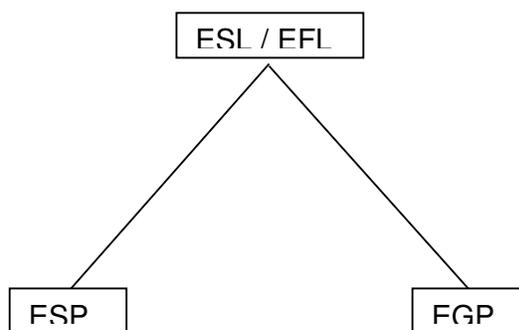


Figure (2.3) ESL/ EFL divisions

In this connection, the discussion will illuminate and analyze the various divisions and sub-divisions of ESP, as it is the subject of the present discussion, whereas EGP will be referred to later more generally.

As already mentioned above, the analytical process will proceed from larger to smaller. Therefore, the discussion will start by analyzing the main parts of ESP (larger units). So, ESP can be divided into the following:

- (a) English for science and technology (henceforward referred to as EST). Traditionally, EST was looked upon as a separate component of EFL or ESL, now it is considered as one of the main divisions of ESP.
- (b) English for Business and Economics (henceforward referred to as EBE).
- (c) English for Social Sciences (henceforward referred to as ESS).

The following tree-diagram shows the immediate divisions of ESP:

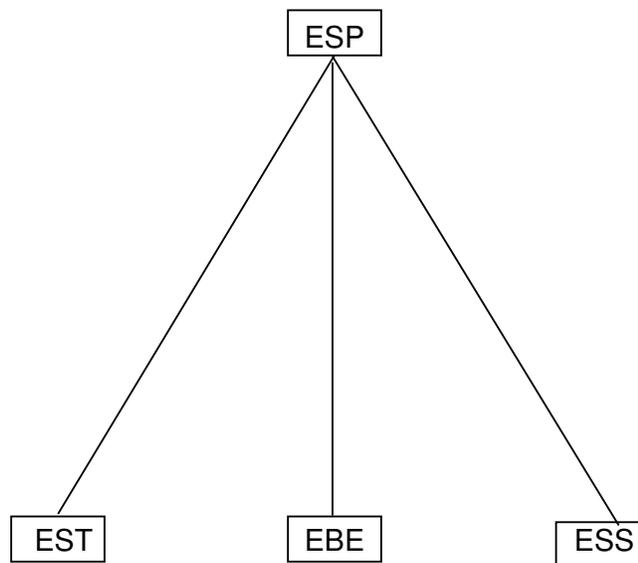


Figure (2.4) The main divisions of ESP

Figure (2.4) illustrates the main divisions of ESP namely, EST, EBE and ESS. However, each part of the previous divisions can be subdivided into two branches EOP and EAP. EST can be subdivided into EAP e.g. English for medical studies and EOP e.g. English for technicians. Typically, EBE can be subdivided into EAP e.g. English for economics and EOP e.g. English for secretaries. Normally, ESS also can be subdivided into EAP e.g.

English for Psychology and EOP English for teaching. We have tried to clarify the process in the form of a tree-diagram.

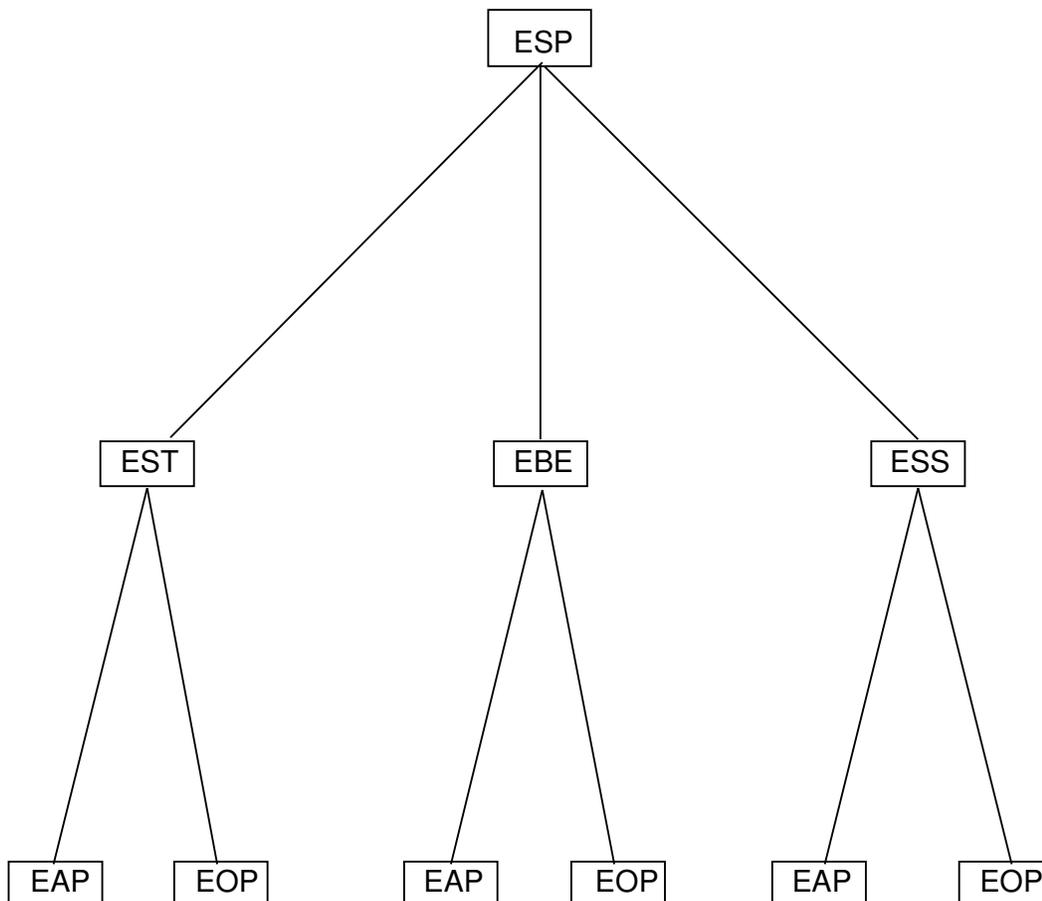


Figure (2.5) Divisions and sub-divisions of ESP

As a result of the previous description and analyses, the discussion will conclude by providing a classification, which summarizes the whole process. The following diagram clarifies ELT and its parts, EFL/ ESL and its branches and ESP and its categories and sub-categories:

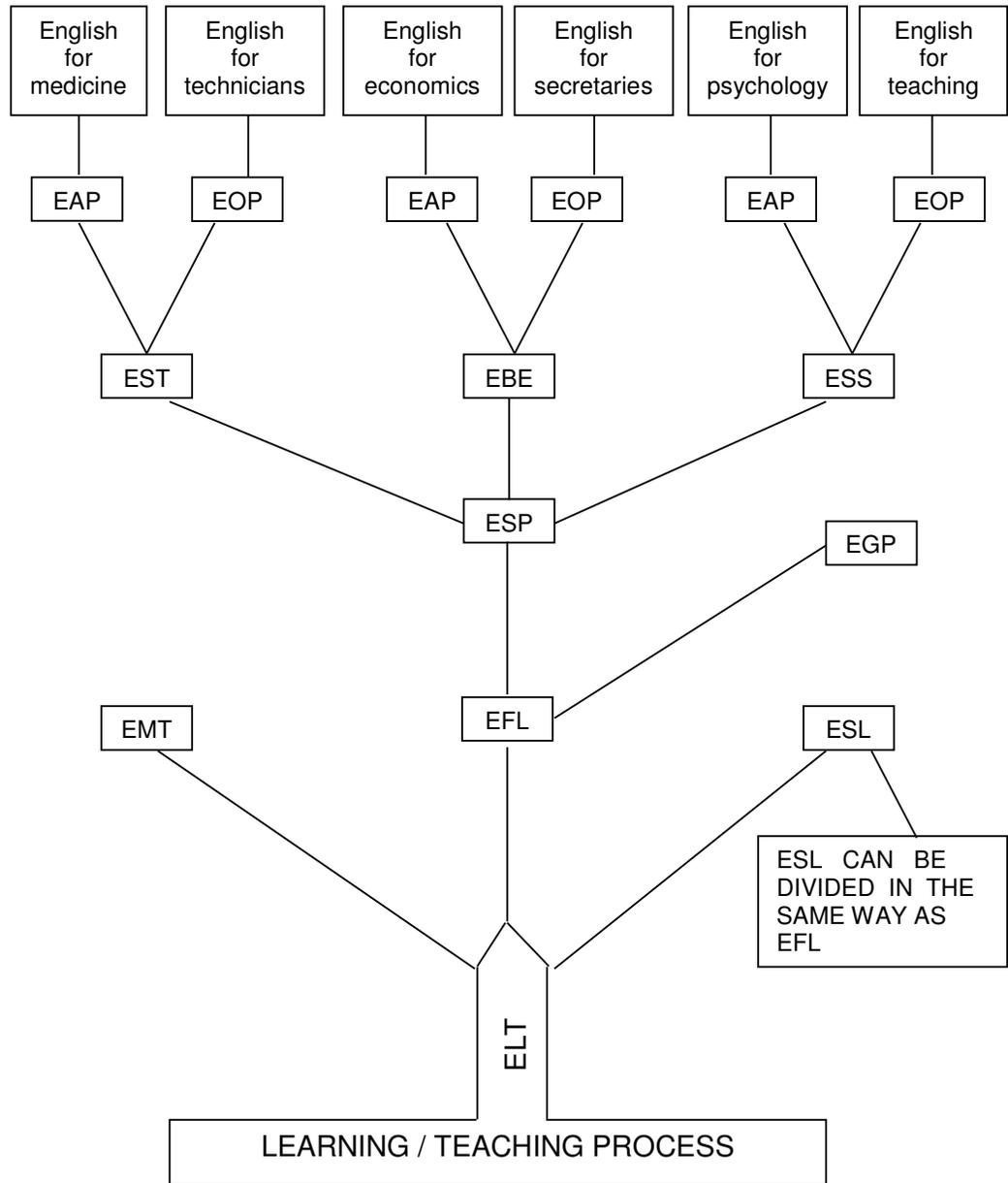


Figure (2.6) ELT and its parts, EFL / ESL and its branches and ESP and its categories and sub-categories

In Figure (2.6), Learning/ Teaching Process (henceforth referred to as LTP) may be described as the roots, which support the tree; ELT can be defined as the main stem of the tree (LTP). Whereas, EMT, EFL and ESL can be viewed as the offshoots of the stem (ELT). ESP and EGP can be considered as the main parts of EFL / ESL. Further, EST, EBE and ESS could be considered as the main divisions of the branch (ESP). EAP and EOP can be represented as the leaves of the sub-branches (EST, EBE, ESS). Finally, the different samples of ESP courses, which appear at the top of the tree, can be described as the bi-products the tree (ELT).

Hutchinson and Waters (1987) provide a fertile description to interpret the relation between ELT and its branches and ESP and its categories and sub-categories in the form of a metaphorical story given below in brief.

Once, there was a city called ELT. The people of ELT led a comfortable, if not extravagant life, pursuing the noble goals of literature and grammar. There were differences, of course some people preferred to call themselves EFL and others ESL. But, the two groups lived tolerating each other and had more unity than disunity among themselves. It so happened that, the city was surrounded by mountains inhabited by tribes called scientists, businessmen and engineers. Few people from ELT had ever ventured into that land. Then, things began to change. Some of the people in ELT became restless. The old city could not support its growing population and eventually some brave souls set off to seek their fortune in the land beyond the mountains. Many in ELT were shocked at the prospect. It was

surely no place for people brought up in the gentle landscape of English literature and language.

But as it turned out, the adventurers found a rich and fertile land. The local inhabitants welcomed them and they founded a new city, which they called ESP. The city flourished and prospered as more and more settlers came. Soon there were whole new settlements in this provisionally uncharted land, EST, EBE and ESS were quickly followed by EAP and EOP, other smaller groups took on the names of the local tribes and founded a new town called English for Hotel Staff, English for Marine Engineers, English for Medical Science and so on. Future expansion and prosperity looked assured.

In this connection, it may be appropriate to highlight the most common divisions and sub-divisions of ESP.

2.2.4.1 English for Science and Technology

As pointed out earlier (2.2.3), English is accepted as an international language, which can be used for various contacts in different disciplines. Further, it has established itself as the principal language of science and technology all over the world. Moreover, it is seen as the language of new automation and technology, far ahead of all the languages as the medium of twentieth century science and technology. Accordingly, EST is regarded as

the principal division of ESP, because of its great importance. Mackay and Mountfurd (1978b) state:

EST has been identified as the major sub-division of the field of teaching English for special purposes.

Traditionally, EST has been regarded as a separate part of ESP, later it was defined as the major sub-division, however, it can be described as the starting point of ESP. Most of the work at this time was in the area of English for science and technology and for a time ESP and EST were regarded as almost synonymous (Ewer and Latorre, 1969; Swales, 1971; and Selinker and Trimble, 1976).

Widdowsown (1975) defines EST in the following manner: “EST is best considered not as a separate operation but as a development form, or an alternative realization of what has already been learned of existing knowledge. EST is alone and at the same time a variety of English and a particular linguistic realization of a mode of communication, which is natural in respect to different languages”.

The major advantage of EST is that, it facilitates the scientists and technologists to communicate adequately with their colleagues about the specialized field of studies in speech and writing.

EST seems to be theoretical on the one hand, and practical on the other, or it could be said, educational and occupational. Educationally, when we consider school and university students around the world studying

Physics, Chemistry, Medicine, Mathematics and Engineering through the medium of English. EST, especially, from the EEP “English for Educational Purposes” point of view, the most prestigious development of ESP. Occupationally, we can consider its usage by the oil-field workers, engineers, computer programmes, etc.

Selinker et al. (1976) assume that EST can be referred to both work and study related needs.

2.2.4.2 English for Occupational Purposes

EOP is also known as English for Vocational Purposes (henceforward referred to as EVP) and Vocational English as a Second Language (henceforth referred to as VESL). EOP is used in order to meet the requirements of the occupation. It is taught in a situation in which the participants need to use English as a part of their work, job or profession. For example, students who would be doctors in casualty or technicians using equipment would require English in the first situation to talk and respond to patients, to take information about case history, symptoms of the case, etc, and in the second situation, to read technical manuals.

There will be differences in such courses depending on whether the learners have learnt English before or are studying it side by side with their training for their job / profession or after having completed such training. For instance, the content of an English programme for someone actually

studying for a secretarial course, with its acquisition of practical skills and theoretical knowledge is going to be different from a programme for someone who is already a qualified secretary but now needs to operate in English (Kennedy and Bolitho, 1991:4).

EOP can be subdivided into different branches such as:

- English for technicians
- English for secretaries
- English for teaching.

2.2.4.3 English for Academic Purposes

EAP is applied to match the requirements of the study. It is taught generally within educational institutions to students needing English in their studies. The course may be taken before joining the study or specialization, i.e. the students may undergo an English course before joining a particular field of study in order to improve their English to meet the requirements in such a discipline. In this case, EAP is known as a pre-sessional or pre-study programme.

When the language is taught to enable the student to pursue particular disciplines at the higher level of education, when he is specializing in a subject / field, in such a case, the course is known as an in-sessional or in-study programme.

EAP can be subdivided into various divisions such as:

- English for Medical studies.
- English for Economics
- English for Psychology.

2.2.5 ESP Learners

ESP learners are non-native speakers of English, they are the speakers of English either as a second language such as in India, Nigeria, etc. or speakers of a foreign language as in Arab World States. ESP learners are also non-specialized in English literature. They have specialized in disciplines such as medicine, veterinary, engineering computer science, etc. where English forms a major medium of instruction of the specialization as a whole. They do need English for the purposes of the study as required by their subject- specialization as EAP or for job requirements as EOP.

The ESP learners are distinguished from the other English learners by the perceptions of the needs, i.e. their needs are well identified for them, as they are quite mature in age.

In fact, many ESP learners are adults as they have left secondary school and are now continuing their studies of English. It is then a question of matching the needs of the learner as perceived by his teacher. There is likely to be more agreement on the needs between teacher and student at adult level, since the purposes are more clearly defined (Kennedy and Bolitho, 1991: 14).

2.2.6 ESP Teachers

Most of the ESP teachers are originally general English teachers. They have had no experience of using ESP teaching materials or techniques. They simply graduate from ELT to ESP courses.

Stevens (1988) assumes that an ESP teacher is one who is basically a teacher of general English but has suddenly been asked to teach students with ESP needs. The experience is often shocking, though it should not be so, because we know that the teacher is trained only in literature and not language. The fear is natural that the teacher will not be able to teach ESP, as he is not trained in it.

As a matter of fact, the ESP teaching process is totally different from the one in general English. The most common characteristic of ESP teaching process is the awareness of the learners of their precise needs. Therefore, the ESP practitioners must adopt materials, which match the accurate needs of such learners.

Hence, the ESP teachers often have serious difficulties in handling ESP materials. Given below are some constraints, which generally hinder the teaching process in ESP situation.

The teachers have not acquired training in the ESP field. Most of the ESP teachers teach courses without sufficient qualification and experience in that discipline. Robinson (1991) points out:

ESP practitioners need training in ways of describing language, training in teaching

language and training in designing language courses. In addition, teachers teaching ESP need some training / knowledge or at least access to the subject of specialization such as economics, physics, nursing, catering, etc.

With regards ESP, the problem of trained teachers is rather acute. Providing adequate number of teachers teaching ESP courses is a serious problem in many parts of the world. In most cases the people teaching or conducting ESP programmes have themselves received no special training in ESP. The report on an ESP seminar held in Manila in 1978 notes that most of the participants are university teachers who found themselves forced willy-nilly into ESP and service English programmes in their institutions (Khan, 1986: 99; and Coffey, 1978).

The needs of ESP learners are clearly defined by the learners themselves, it is not an easy process for the teachers to find the materials easily which meet the learner's needs.

Roe (1981) writes of the difficulties many ESP teachers have had in meeting the diagnosed needs of ESP learners.

Teaching ESP is not an easy process in general and the EST teaching process is really very difficult. However, some of the EST teachers teach topics, which are irrelevant to the students' subject specialization in order to avoid the complicated analyses and terminology of science and technology. Swales (1975) points out:

When asked to teach EST the teachers experience a crisis of confidence and tend to

treat a scientific text as they would a literary one, ignoring many relevant and useful types of explorations.

Kennedy and Bolitho (1991) provide some insights regarding the ESP teacher and the constraints of the teaching process in ESP situation. These are summarized as under:

- He (here the ESP teacher) might be expected, with or without support, to carry out and interrupt a needs analysis for a group or for individuals.
- On the basis of such analysis, which he may or may not have carried out himself, he might be expected to design a syllabus for a class.
- From the plethora of published materials now available, he might be expected to select and adapt learning materials for a class. He must be thoroughly familiar with a wide range of ESP materials both course and supplementary materials.
- He might find no materials suitable or adaptable to the needs of particular class and, consequently, will have to select and explore suitable texts, and write suitable materials.
- He may have to prepare course outlines and write course reports for industrial and educational sponsors.
- He may have to develop a working knowledge of his student's subject.

Mackay (1983) claims that the ESP teacher does not only teach, however, very often he or she is involved in designing, setting up and administering the ESP course.

This view is supported by Harmer (1983). According to him:

The ESP teacher has to be adaptable and flexible. Adaptability refers to the teacher's ability to choose and adapt his programme on the basis of the different groups he finds himself teaching.

The ESP teacher is an important mediator between the input and the outcome, and the successful achievement of outcomes, no matter how carefully identified and selected depends on the ESP teacher being equipped not only with linguistics but also with knowledge of methodology (Tickoo, 1988: 110).

2.3 English for General Purposes

2.3.1 Overview

English for general purposes is generally abbreviated as EGP and it is also known as General English. The major function of EGP is that, it attempts to teach English for general purposes, i.e. for different situational settings and not for limited or specific reasons as in ESP situation.

EGP attracts great attention. It is applied in different functional and social engagements, at airports, seaports, shopping centres, social communication such as greetings, visits, etc.

Orr (1998:1) points out that English for general purposes is essentially English language education in junior and senior high schools. The students are introduced to the sounds and symbols of English as well as to the lexical

/grammatical/rhetorical elements that compose spoken and written discourse. EGP also focuses on applications in general situations: appropriate dialogue with restaurant staff, bank officials, postal clerks, telephone operators, English teachers, and party guests as well as lessons on how to read and /or write the English typically found in textbooks, newspapers and magazine articles, telephone books, shopping catalogues, application forms, personal letters, e-mail, and home pages. He adds that supplementary information about appropriate gestures, cultural conventions, and cultural taboos are also normally included in EGP curriculums. EGP conducted in English-speaking countries is typically called ESL, and EGP conducted in non-English-speaking countries is normally known as EFL. Pedagogically, a clear understanding of basic EGP should precede higher-level instruction in ESP if ESP programmes are to yield satisfactory results (ibid).

EGP may be embedded in the topics of English as a school subject in which it concentrates on application of English for general purposes and not for particular needs. It can also be administrated in subjects of specialized streams of ELT for those who specialize in English language major, for example, English literature stream or applied linguistic stream. It may be pointed out that general English language is not needed only by the learners of EGP but is generally required by the learners of ESP. General English is an equally important element for either ESP learners or EGP learners. It is not true to look at ESP as a detached phenomenon in which it is not

correlated to the base of EGP. They should both be considered under the umbrella of ELT. Kennedy and Bolitho (1991) point out:

It is important not to regard ESP as an area of development separated from the rest of English language teaching. This is a part of a recent move within ELT towards a more communicative basis for teaching and learning.

2.3.2 EGP Application

EGP is used to demonstrate the role of English in a language programme or specialization in ELT in which the content and aims of the course are not identified for a limited communication or for particular learners. This may be compared with those courses, which are fixed by definite needs of a particular group of learners, which are known as English for specific purposes programmes. Normally, EGP focuses on teaching English that can be used for various purposes and in different situational settings. It aims at qualifying the participants to be competent in English language in respect of functions and enabling them to communicate proficiently in different situations.

2.3.3 The Implementation Distinction between ESP and EGP

It is well known that ESP has its own characteristics, which may generally vary from the ones in EGP situation. The main feature which distinguishes ESP from the rest of the EGP is that, ESP concentrates on

restricted use of language which is designed for specific needs of a particular group of learners, whereas EGP provides an unlimited range of language which can be applied for various purposes without identification of a particular need or a specific people.

The other distinction, which differentiates ESP and EGP is that, ESP emphasizes the needs analysis, which EGP does not. In other words, in ESP situation the language is identified and analyzed on the bases of the learner's needs of a particular discipline or stream. For example, medical English for medical students, agricultural English for agricultural students, technical English for technicians, etc. However, EGP is not concerned with needs analysis, because it caters to unlimited people and its language has no specified boundaries, therefore, precise needs cannot be identified. In this regard, it may be suitable to illustrate the distinction between EGP and ESP in the following figure.

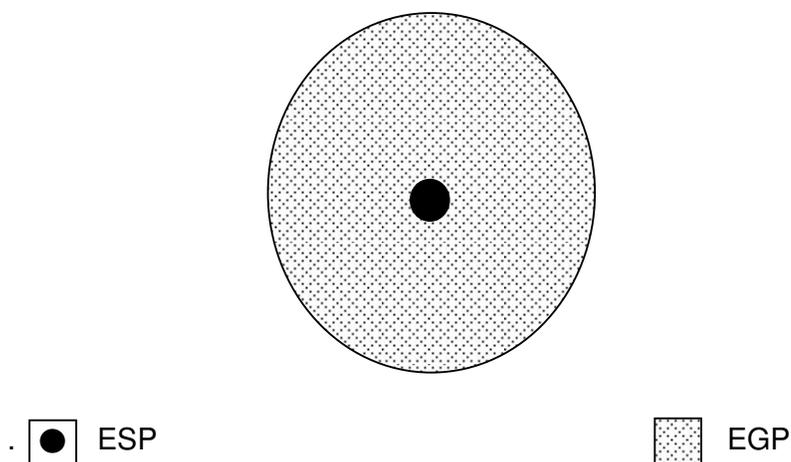


Figure (2.7): The distinction between ESP and EGP.

In Figure (2.7), EGP covers the entire globe, and it is very difficult and even impossible to define a particular variety of language, as it is very extensive. ESP is concentrated at a particular point, which can be described as the bull's eye. Therefore, it is very simple to identify this specific point on a target situation and analyze it according to the needs of the subject specialization of the learners.

The existence of needs is not the only characteristic that distinguishes ESP from EGP. The awareness of the need is also an important element. The ESP learners perceive what they are going to learn or what they need English for, whether in an EAP situation or in an EOP situation.

2.4 Conclusion

In chapter two, we have elaborately discussed the status of English language teaching in general and the prestige of ESP in particular, since these two topics are of prime importance for the present study. Further, this section also offered a lucid description in an analytical manner illustrating the different parts of ELT and ESP. Moreover, this chapter attempted to provide complete answers to some questions, which are directly related to the subject of the present work. The interpretation covered the following questions.

- What are the varieties of ELT?
- What does ESP mean?
- When did ESP come into existence?

- What are the categories of ESP?
- What are the sub-categories of ESP?
- Who are the learners of ESP?
- What are the constraints, which hinder the teaching process in ESP?
- What are the distinctions in implementation between ESP and EGP?

CHAPTER THREE

NEEDS ASSESSMENT AND CONTEXTUAL SURVEY IN MEDICINE

CHAPTER THREE

NEEDS ASSESSMENT AND CONTEXTUAL SURVEY IN MEDICINE

2.0 Preliminaries

Needs Assessment or Needs Analysis (henceforth referred to as NA), in ES plays a very important role in both learning and teaching processes. In the former, it is crucial for the learners to offer their views regarding their needs in order to enable the finding out of materials which would match their accurate needs being as they are in the awareness stage where they can easily perceive their accurate needs (Sculthorp, 1974; and Altman and James, 1980). In the latter, pedagogically, it is very worthwhile for ESP practitioners to juxtapose their perception to the students' perception in order to extract suitable materials.

NA is generally regarded as a criterion of ESP, although, ESP is by no means the only educational enterprise, which makes use of it (Berwick, 1989 Brindley, 1989).

Nagarajan (1988) defines a learner's needs in terms of the reasons for which the learner wishes to learn English and the kind of English he will have to use in future. These aspects are very important in an ESP course design, so needs analysis can determine the type of English which would be

needed to be taught, based on the requirements of the subject-specialization of the learner.

3.1 Needs Assessment

First of all, it is very important to define the kernel word 'need'. What is meant by 'need'?

Grammatically, 'need' can be used as a lexical verb or as an auxiliary verb in interrogative and negative constructions and as a noun meaning necessity (Swan, 1995: 357).

Terminologically, 'need' can refer to require, lack, want, desire, wish or necessity. However, in ESP it is not easy to produce a specific or limited meaning in its own right to demonstrate the use of 'need'. What is finally established as a 'need' is a matter for agreement and judgment not discovery (Lawson 1979: 37). It is fairly obvious that the term 'need' is both ambiguous and imprecise, it can be noted that 'need' can cover a range of meanings (Chambers, 1980: 26).

The very concept of language needs have never been clearly defined and remain at least ambiguous (Richterich, 1983:2; and Johnson, 1989).

However, in ESP there is a distinction between the meanings and usage of 'need' and 'want'. The difference can be seen obviously, by reference to two types of motivation. The term 'need', is related to instrumental motivation, which itself is related to external needs, for instance,

the need to learn a second language. Whereas, the term 'want' relates to integrative motivation, which means the desire of the learners to be a member of the community; so, it is an internal want rather than a need (referred to 1.3.9).

Different views and concepts regarding the meaning of 'need' and definitions of 'needs assessment' are provided by a number of linguists.

'Needs' can refer to students' job or study requirements, that is, what they are able to do at the end of their language course (Widdowson, 1981:2).

'Needs' can mean what the user-institution or society at large regards as necessary or desirable to be learnt from a programme of language instruction (Mountford, 1981:27).

Brindley's (1991) definition offers a division of needs in two forms; objective needs and subjective needs. The first form refers to needs, which are derived from different kinds of factual information about learners, their use of language in real life communication situation, as well as their current language proficiency and language difficulties. Objective needs are known as perceive needs (Berwick, 1989: 55), normative needs (Bradshaw, 1974, Griffith, 1978, Mounette, 1977) and even as real needs (Chambers, 1980). The second form refers to the cognitive and effective needs of the learner in the learning situation, derived from information about effective and cognitive factors such as personality, confidence, attitudes, learners' wants and

expectation with regard to the learning of English and their individual cognitive style and learning strategies.

A general definition of needs assessment is given by Richterich (1980) and Trim (1980):

Needs analysis comes to mean the whole cluster of techniques which lead to an understanding of the parameters of the learning situation: ego, learners, teachers, administrators, course-writers, producers, career-expectation and job satisfaction, social dynamics, learner-type and resource analysis, etc, are relevant factors in addition to the original predicted communication behaviour.

According to Holec (1980):

Needs assessment is a classical procedure by which a close link can be established between the learners and the curricula.

In the light of the above discussion, the practical definition of needs assessment can be given as under:

In language teaching, NA is the process of determining the needs for which a learner or group of learners requires a language and arranging the needs according to priorities. Needs assessment makes use of both subjective and objective information (e.g. data from questionnaire, tests, interviews, observation) and seeks to obtain information on:

- a. The situations in which a language will be used (including who it will be used with)
- b. The objective and purposes for which the language is needed

- c. The type of communication that will be used (e.g. written, spoken, formal, informal).
- d. The level of proficiency that will be required.

Needs assessment is a part of curriculum development and is normally needed before a syllabus can be developed for language teaching (Richards et al., 1992:242-3).

It is worth pointing out that the function of needs assessment in language teaching for non-native speakers of English is to identify students' needs by looking at the learners' future roles and to specify what language skills or linguistic knowledge the learner needs in order to perform the roles adequately. However, the perfect needs assessment schedule must take into account the distinction that can be made amongst different types of needs. One can distinguish formal requirements (the 'need' to pass an exam, to read certain books) from actual needs or obligations entailed by his duty (what the students actually has to do with the language), and from hypothetical future needs (the 'need' to inform oneself and become a better professional in the future by reading in a foreign language), and one can also distinguish demands made by the institution (the 'need' for actual behaviour, for example, reading that one is expected but not compulsorily required to do) from the wants of the students (the 'need' the students feel to read English as distinct from what is required or expected) and his or her desires (the 'need' to learn to speak English in order to interact socially or just to learn the language for pleasure, although, the want or need may only be for reading). An adequate needs analysis must take all these 'needs' into

consideration and the syllabus and materials design should be based on a judicious consideration of all of them (Alderson, 1980:135).

3.2 Position of Needs Assessment in ESP Globe

As stated earlier (3.0), needs assessment plays a very important role in ESP; further, it occupies a great measure on the ESP scale. The ESP learners cannot learn ESP courses well and cope well with what they have learnt if they are not aware of their 'needs'. Therefore, 'needs' is a crucial element in the learning process. Further, the ESP practitioners cannot teach the ESP courses correctly and handle the teaching process properly unless they fully understand their learner's 'needs'. Hence, 'needs' becomes the core of the teaching process. Farhat et al. (2001) state that:

The basic rationale for needs analysis, is the generally accepted fact about the impossibility of learning the language in its entirety. Only part of it can be learned and perhaps mastered. That is why it is important to know why one needs to learn a language and the context within which he learns it, and the situation in which he will use it later.

Furthermore, the ESP designers cannot design appropriate and successful ESP courses unless such courses are based on analyzing the learners' 'needs' for the courses. Needs analysis can then be considered the core and successful guide in course designing.

However, the ESP graduates working in the vocational field cannot practise what they have learnt and function effectively, if they do not realize the 'needs' of the situation, therefore, needs analysis is regarded as an important event in the field of application. Above all, one of the main principles of ESP says: "tell me what you 'need' English for and I will tell you the English that you 'need'" ((Hutchinson and Waters, 1987).

Eventually, ESP places great emphasis on 'needs analysis' at every stage, i.e. course designing, learning / teaching process and application. It is an approach to language teaching and learning based on 'needs analysis' (Abdullah, 1999:31).

3.3 Needs Assessment Varieties

3.3.1 Target Needs Variety (TNV)

Target needs variety refers to what the learners need to do at the target situation. When needs analysis focuses on student's needs beyond the course programme or what the learner is going to achieve by the end of the course, such a situation is known as the Target Situation Analysis (henceforth referred to as TSA). This form (TSA) is introduced and discussed by Chambers (1980:25) who states:

TSA goes into the target situations, collects and analyzes the data in order to establish the communication that really occurs – its function, forms and frequencies and provides a basis for selecting the long-range aims of the course. Certain intermediate objectives will also be

established prior to the course as a result of pedagogic considerations.

Bloor (1984:16) describes target need as follows: “a needs analysis may be target-centred, that is to say that it looks at the learners’ future role(s) and attempts to specify what language skills or linguistic knowledge the learner needs in order to perform the role(s) adequately”.

In needs analysis, TNV can be clearly explained in the terms of necessities, shortcomings and wants:

Necessities:

Necessities are that type of needs which is determined by the demands of the target situation, i.e. what the learner has to know in order to function effectively in the target situation. For example, a medical student will need to understand medical English, which helps him to communicate effectively with his colleagues in the area of study or in the practical field. He also needs to know functional, structural, lexical and discourse features which are commonly used in the situation identified.

Shortcomings

We also need to know what the learner lacks so that we can decide his needs appropriately. The gap between the target proficiency and the learner proficiency can be referred to as the learner's lacuna in learning.

Wants

Wants refer to the learner's view, interests and motivation. There are a number of ways in which information about target needs can be collected.

The methods, which are frequently used, are:

Questionnaires

Interviews

Observation

Data collection e.g. gathering texts and informal consultations with sponsors, learners and others.

The data obtained on target needs can be analyzed on the basis of the following framework.

Why is the language needed?

How will the language be used?

What will be the content areas?

With whom will the learners use the language?

Where will the language be used?

When will the language be used?

3.2.2 Learning Needs Variety (LNV)

Learning needs variety (henceforward referred to as LNV) refers to what variety the learner needs. So, to explain learning needs we will make the following analogy. ESP is a journey in which our starting point is 'shortcomings' and our destination is 'necessities'. There will be some disagreement as to the destination of 'wants'. What will be the route from our starting point 'shortcomings' to the destination 'necessities'? This will be the

learner's needs, i.e. the needs between the starting point and destination (op. cit.).

Bloor (1984:17) assumes that a needs analysis may be learner-centred, in that it examines what the learner can do at the commencement of the course, what problems he or she may face or what skills he may acquire which will enable him to learn well in certain aspects. This analysis greatly helps in framing an adequate teaching syllabus; it is almost certainly desirable to operate on both levels of need-analysis-target-centred and learner-centred.

The data obtained on learning needs can be analyzed on the basis of the following framework.

Why are the learners taking the course?

How do the learners learn?

What resources are available?

Who are the learners?

Where will the ESP course take place?

When will the ESP course take place?

3.3.3 Communicative Needs Variety (CNV)

CNV refers to what the learner needs in order to function effectively in different communicative settings. This variety is based on communicative competence, which is made up of four major standards: grammatical competence, socio-linguistic competence, discourse competence and

strategic competence (Canale and Swain, 1980; Canale, 1983; Maley, 1988; and Saraswathi, 2003: 81).

If the CNV is compared to the previous two varieties, i.e. TNV and LNV, it could be concluded that TNV and LNV can be described as the inputs whereas CNV can be defined as the outcome of the needs analysis.

In the learning process and syllabus design, communicative needs variety focuses the learner who contributes greatly and should be considered as the centre of the learning process. Further, a successful syllabus design is based on communicative needs of the learners. Munby(1978:4) supports this viewpoint in course design when he suggests that:

The most crucial problem at present facing foreign language syllabus designers, and ultimately material producers in the field of language for specific purposes is how to specify validly the target communicative competence. At the heart of this problem is a reluctance to begin with the learner rather than the text and the lack of a rigorous system for finding out the communicative needs that are a prerequisite to the appropriate specification of what is to be taught.

The most known framework for a CNV is the one introduced by Chambers (1980) who presents a Communicative Need Processor (CNP) comprising a set of parameters within which information on the students' target situation can be plotted. Among the useful characteristics of this model are, comprehensive data banks, for example, micro-skills and attitudes, which can be used as checklists for the resultant syllabus. A helpful insight is

provided which relates to target level performance. For certain jobs, students may require only a low level of accuracy of native–speaker-like ability.

Another characteristic of CNV is that, it focuses on the meaning and functional and situational uses of the language rather than the grammatical forms and lexis.

In the field of ELT, the last few decades have witnessed a dramatic shift in the views on language teaching and language learning, from focus on form-lexis and structure, to focus on meaning, notional and functional, and on language as a vehicle for the realization of interpersonal relations, and for the performance of social transactions between individuals (Richards and Rodgers, 1982: 56; and Kumar, 1995: 283).

3.4 Needs Assessment in the Medical Context – A Survey

A large amount of research work investigates the needs of the learners and participants in disciplines such as business, commerce and technology (particularly engineering and computer science), although, there is very little investigation regarding the needs analysis in the medical context, particularly, in an EFL situation.

Nevertheless, some researches moved on to investigate the needs of medical learners in some institutions in the area of English for medical studies, but unfortunately, they did not enrich sufficiently, the medical field, despite, its great importance and concern for human life and health. Below is

a survey, which throws some light on investigations and studies, which are conducted in the field of medicine.

Mackay and Mountford (1978) conducted a needs analysis work in order to design a course that meets the needs of the learners in the Faculty of Veterinary Medicine. They carried out two sets of structured interviews; one designed to collect information from the teacher informants and the other from the student informants. In this way, they could identify the discrepancy regarding the needs as perceived either by the teaching staff or the students. The aim of this investigation was to see to what extent English was needed for academic studies.

Bin Tayáa (1996) conducted a research (MA study) to investigate the language needs of the medical students at the University of Sanàa, Yemen. She used two instruments of data collection (questionnaire and interview), the subjects of the questionnaire were 350 participants (240 students, 60 graduates, 50 lecturers), whereas the subjects of the interview were 80 participants (60 students, 10 graduates, 10 lecturers). The study revealed that the medical materials in use at the Medical College, University of Sanàa, did not meet the needs of the learners.

Abdullah (1999) carried out a research to investigate the learner needs of would-be medical students (pre-university learners). He used three sets of data collection, one a questionnaire designed to collect information from the students (50 informants), the second an interview of the teaching staff (10 informants) and the third language proficiency tests in receptive

skills (listening and reading) and productive skills (speaking and writing) in order to measure the English language proficiency of those learners. The aim of the study was to see what these learners required particularly at this stage (pre-university stage). The results of the study revealed that the learners (pre-university learners) needed a pre-sessional English course, which would help them to join the Faculty of Medicine and to some extent meet the requirements of the study in that faculty.

Albadri (2001) conducted a research to investigate the needs of medical learners in reading comprehension in the medical context at the Faculty of Medicine, University of Aden, Yemen. He used two collected-data methods one questionnaire (administered to 50 student informants) and second interviewing 20 student informants. The study revealed that the reading skill was the most important skill for the medical learners as perceived by students.

Adams–Smith (1979) drew up a needs profile of paramedical students in Kuwait University. She used just one data collected questionnaire. The research revealed that the paramedical students had needs different from the medical students, the goals of the former being occupational than academically oriented.

Another study also based on the English language needs was that of the Iraqi undergraduate medical students doing their preliminary year in Kufa Faculty of Medicine at Al-Mustansiria University of Iraq. The aim of this work was to bring out a needs profile that would help in designing a reading skills

course. The sample consisted of 114 students. They were divided randomly into three groups; Experimental, Control 1 and Control 2. In order to identify the students' language needs the researcher worked on five procedures:

- (1) He used an observation tool through his previous experience in teaching a course in English for science and technology.
- (2) He evaluated the medical materials used by the institutions and had discussions with some experts in ELT from three different faculties.
- (3) The students participated in pre-tests to help the researcher in gauging students' linguistic and medical attainments.
- (4) The researcher administered three questionnaires for students and members of the teaching staff to find out the language needs and a questionnaire was filled in by the students giving their perceptions regarding the reading materials.

The results of the study revealed that reading was the most needed skill (82.81%) followed by listening, speaking and writing. As far as the reading material was concerned, motivation was respectively higher for materials, which were medically oriented (Tawfiq, 1984:76).

Khan (1986) conducted a study on ESP and the teaching of medical vocabulary at Aligarh Muslim University, India. The research attempted to present the special vocabulary of medicine, which is the accepted international terminology of the discipline. It claimed, consistence with the principle of 'use' as a guide to the understanding of the lexical items. Medical vocabulary in different aspects of its use had been selected and presented in the form of pedagogic inventories, which could be enlarged as per

requirement. The study provided a list of huge medical terms, which could be applied to various contexts of medical discipline.

Zoghoul and Hussen (1985) carried out large-scale investigations on students' language needs at the University of Yarmouk (Jordan). This study included students from six faculties: Natural Sciences, Engineering, Medical Sciences, Economics, Administrative Sciences and Arts and Humanities. The researcher used two questionnaires; one was administered to the students (1147 informants) and the other to the faculty members (90 informants). The aim of this study was to investigate three major issues: the extent of English language used at the university, perception of the students' language abilities and perception of English language needs. The results indicated that both the students and staff agreed that the most needed skill for success at the university was listening comprehension. On the other hand, while the students perceived their needs in English in this order – speaking, reading and writing, the faculty members were of the opinion that the order reading, writing, speaking was more suitable.

Despite, the discrepancies involved in the results of the previous studies and investigations as in Albadri (2001) and Twafiq (1984) on the one side, and Zoghoul and Hussen (1985) on the other, they do provide valuable insights in needs analysis in the medical context.

3.5 Conclusion

Since the present work is concerned with the investigation of needs, Chapter Three is devoted chiefly to discuss the notion of 'need' in the global scale, it offers some views and insights of different linguists regarding the 'need' aspect in order to arrive at a clearer understanding and perception of the term 'need'. In addition, a full and practical definition of 'needs assessment' has been provided as a result of a fruitful discussion of the concept. In view of the fact that, this study investigates the needs of medical learners for practical English communication, in this sphere, a contextual survey was conducted to cover some studies and researches which attempted to investigate the needs analysis in the medical context and is closely related to the subject of the present work.

CHAPTER FOUR

DESCRIPTION OF THE DATA COLLECTION METHODS

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DESCRIPTION OF THE DATA COLLECTION METHODS

4.0 Preliminaries

In the investigation of many issues, there are several procedures, which can be traced in collecting the data for such researches. These data techniques play a very important role in assisting the researcher by providing him with some of the information required. The most common instruments applied nowadays are:

Questionnaires,
interviews,
tests,
verbal reports and
informal consultants

Of course, some of the data collection methods, can be subdivided into different types, for instance, questionnaire can be subdivided into structured questionnaire, semi-structured questionnaire and unstructured questionnaire. The selection of the specific type of the instrument depends on the kind of research and type of information required whether qualitative or quantitative.

In the case of the present work under investigation, the researcher preferred to apply the triangulation procedure.” Triangulation refers to the

use of two or more methods of data collection in an investigation of certain phenomenon” (Cohen and Manion, 1980).

A questionnaire and an interview constitute the major tools in collecting the data of the current study, in addition to the researcher’s experience as a practitioner of medical English, since this research investigates the needs of medical learners for practical English communication at the Faculty of Medicine, University of Aden, Yemen.

McDonough (1984:128) argues needs analysis might require devising and administration of questionnaires interviewing potential learners as appropriate people in target situation.

It is worth pointing out that the implementation of two different techniques as a triangulation procedure in an investigation of a certain issue is regarded as a very important source, which may provide the researcher reliable and valid data through juxtaposition and analogy being the results of the two instruments.

Seliger and Shohamy (1989:122) claim that often several different methods are used in the same study in order to compile a more complete picture of the activity covered. Because, data are collected from different sources and with different means such as observations, tables, questionnaires, interviews, case histories, field notes and so on, such research methodologies depend on a single approach such as an experiment or a test. They add that the use of variety of methods to collect data allows the researcher to validate finding through triangulation.

In triangulation, the same pattern or example of behaviour is sought from different sources. Use of this process increases the reliability of the conclusions reached. Hence, the triangulation procedure through a questionnaire and an interview is applied in the data collection of this work, as these two are the most effective means of data collection.

Two formal ways of gathering information, i.e. a questionnaire and a structured interview can be effectively used to identify the real needs of the learners (Khan, 1986:71; and Parren, 1974).

In the next few pages the discussion will be devoted to shed light on the description of the data collection methods.

4.1 Questionnaire

4.1.1 Overview

The questionnaire is the most common instrument, which is used in collecting the data of many studies and researches nowadays. It plays a very important role in providing the researchers accurate and reliable information, in addition to the facilities it offers in the work making it easy and generally reliable.

Questionnaire is a major means, which is applied in collecting the data of the current study because of its great merits. Generally, questionnaires are varied in their type as already explained earlier, i.e. structured questionnaire, semi-structured questionnaire and unstructured

questionnaire. In the context of the present work, structured questionnaire is preferred as it has many good characteristics like easy research process, quick and fairly accurate results of the investigation, facility for the respondents and the researcher himself.

4.1.2 Aims of the Instrument

The first step in drawing up a questionnaire is to decide its exact purpose and aims, only when this has been done it is possible to accomplish the purpose (Evans, 1984:47).

Once a decision has been taken to administer a questionnaire instrument in an investigation of a particular behaviour or phenomenon, it is very important to determine the aims of the data collection method, the information required to be gathered and to what extent the instrument will contribute in the collection of the data required and eventually how the tool will achieve perfect objectives which are set up at the advanced stage.

In the present study, the questionnaire instrument aims chiefly to gather information regarding three main parameters:

(a) English Implementation and Students' Attitudes and Motivation

This aspect attempts to obtain information regarding the use of English and the main difficulties, which hinder the learners in the usage of

English; in addition it investigates the students' attitudes and motivation towards learning English.

At this stage, it is crucial to know the students' motivation towards the learning of the target language, because there is a correlation between the investigation of the student's accurate needs and his motivation.

(b) Evaluation of the Medical English Materials in Use

The second parameter attempts to elicit information from the students about the utilization of the medical English materials in use, whether the material helps the students or not in communicating within their discipline or outside their discipline.

Thus, evaluating an ESP course helps to establish whether the course is meeting its aims. The information gathered forms the starting point for any revision in the course, and may also help to guide the design of similar other courses in the teaching institution or elsewhere.

(c) Needs

This section has the most important impact on the questionnaire instrument, as it requires the respondents to offer their views regarding their needs in order to effectively communicate in English either for learning medical science or as a medium of communication in different social settings.

Once a learner's information regarding his needs has been obtained, as to why he wishes to learn English and the kind of English he would have to use, then this information would serve as a guideline in deciding the content of a course suited to his interest and needs (Kennedy and Bolitho, 1991: 2).

Above all, the questionnaire aims to answer one of the principal research questions, i.e. what are the needs of the learners for practical English communication as perceived by the fellow students?

4.1.3 Questionnaire Schedule

As stated earlier (4.1.2), the questionnaire is designed to collect information regarding three aspects: English implementation and students' attitudes and motivation, evaluation of the medical materials in use and the students' needs as perceived through the learners. Therefore, the purpose of the questionnaire, the information required and the sources are well defined which can be regarded as the main characteristics of the efficient instrument of data collection. However, a researcher should take into consideration the principal features of the questionnaire, which could be summarized in the following:

- (a) Define clearly the purpose of the questionnaire,
- (b) decide exactly what information is required,
- (c) analyze it into its component parts and

(d) frame a series of questions designed to elicit it (Evans, 1984:49).

It is worth pointing out that before designing the questionnaire schedule, an intensive review of literature covering many ethnographies and studies in questionnaire design should be referred to.

The questionnaire is designed in a structured way, with a high degree of explicitness. It requires the subjects to mark responses and this type is considered to be more efficient than the open one (unstructured questionnaire), as the responses to the structured questionnaire are more explicit. The responses are based on a Likert's scale (Likert, 1932) in which the questionnaire is marked by a tick mark on the proper option or by encircling it.

The current instrument consists of the best alternatives. Blanks were provided so that they could be filled in with suitable comments, or reasons could be furnished regarding filling up of certain parts of the questionnaire.

The questionnaire format consists of four sections (referred to in appendix I) and the total items of the questionnaire are twenty-two. Using a lot of items in one collective data instrument, has its own disadvantages as it puts a heavy burden on the part of the researcher particularly in the analytical process, but at the same time it has its own merits, as a large number of questions are answered and much data is collected (Borg and Gall, 1979; and Travers, 1964).

The first parameter (items 1-4) is an introductory section in more ways than one. It is a preliminary section to which the subjects respond easily and confidently as it elicits personal information about the participants such as age, sex, their previous education of English. This information becomes crucial for the researcher for it gives an idea about the background of the subjects of the study in order to relate in a proper sequence the two stages of learning, helping to bridge the gap which may have arisen between the previous education and the present situation.

The second part of the questionnaire is concerned with the usage of English and difficulties experienced in English communication mentioning specific hindrances / constraints (Item 7). So, the constraints that affect the teaching/learning process are to be taken into consideration in the collective data procedure, and should occur in conjunction with the needs analysis.

In section two (see appendix I), the subject informants are asked to give their own views regarding their attitudes and motivation towards English classes and English course in general (items 9-11). This query regarding preference and attitudes provided by learners towards the English language is necessary in the investigation, because if the student's attitude towards a foreign language or culture is negative there may be strong internal barrier against learning.

The third section of the questionnaire instrument concentrates on the evaluation aspect of the English materials in use. In this regard, the informants are given a chance to evaluate the English materials in use, by

providing their views towards the utilization of the medical English course either in their discipline (i.e. medical field), or outside the area of the study (i.e. social settings), (see items 12-17).

As a matter of fact, the students' evaluation will offer guidelines to the researchers and course designers, as such participants partially represent half of the educational circle (i.e. the learning process), whereas the teachers represent the other half viz. the teaching process. Therefore, students' evaluation will enlighten the researcher and will assist him in suggesting appropriate materials, which may meet the needs of the learners.

The main techniques used in an evaluation process are tests and questionnaires plus interviews. Questionnaires may be given to both teacher and student informants seeking information and impressions at different levels of the items concerning teaching materials.

The last aspect is concerned with the needs, so this section is the most important part. It can be described as the core of the questionnaire. In this parameter, the students are asked to express their perception about their needs (items 18-22), to indicate their needs in order to function effectively in English as a means for learning medical science either in their subject of specialization or in social setting which this work is mainly investigating and which is the main aim of the study. In fact, learners form the center of the learning process; therefore, they should be taken into consideration and involved at all stages of the process.

Nunan (1990) assumes that in recent years, the incorporation into curriculum development the subjective needs of learners, relating to their perceptions of what they want to learn and how they want to learn, has added an important dimension to needs analysis avoiding criticism made earlier of more mechanical approaches. He further adds that from the humanistic education came the notion that learners are central to the educational process and have the right to be involved at all stages of the process (ibid: 17).

Accordingly, the first year learners at the Medical College are at a conscious stage where they are aware about their precise needs now “in-study” or future needs “post-study”. Therefore, they are in a position to properly express their viewpoints regarding their needs. Sculthorp (1974) states:

The adult learners in English are highly conscious of themselves and their purposes. So, ESP has developed alongside a new concern for the needs and feelings of the learner and is not content with an externally imposed syllabus.

The figure below illustrates the format of the questionnaire schedule, the four parameters of the device and the aims the aspects lead to.

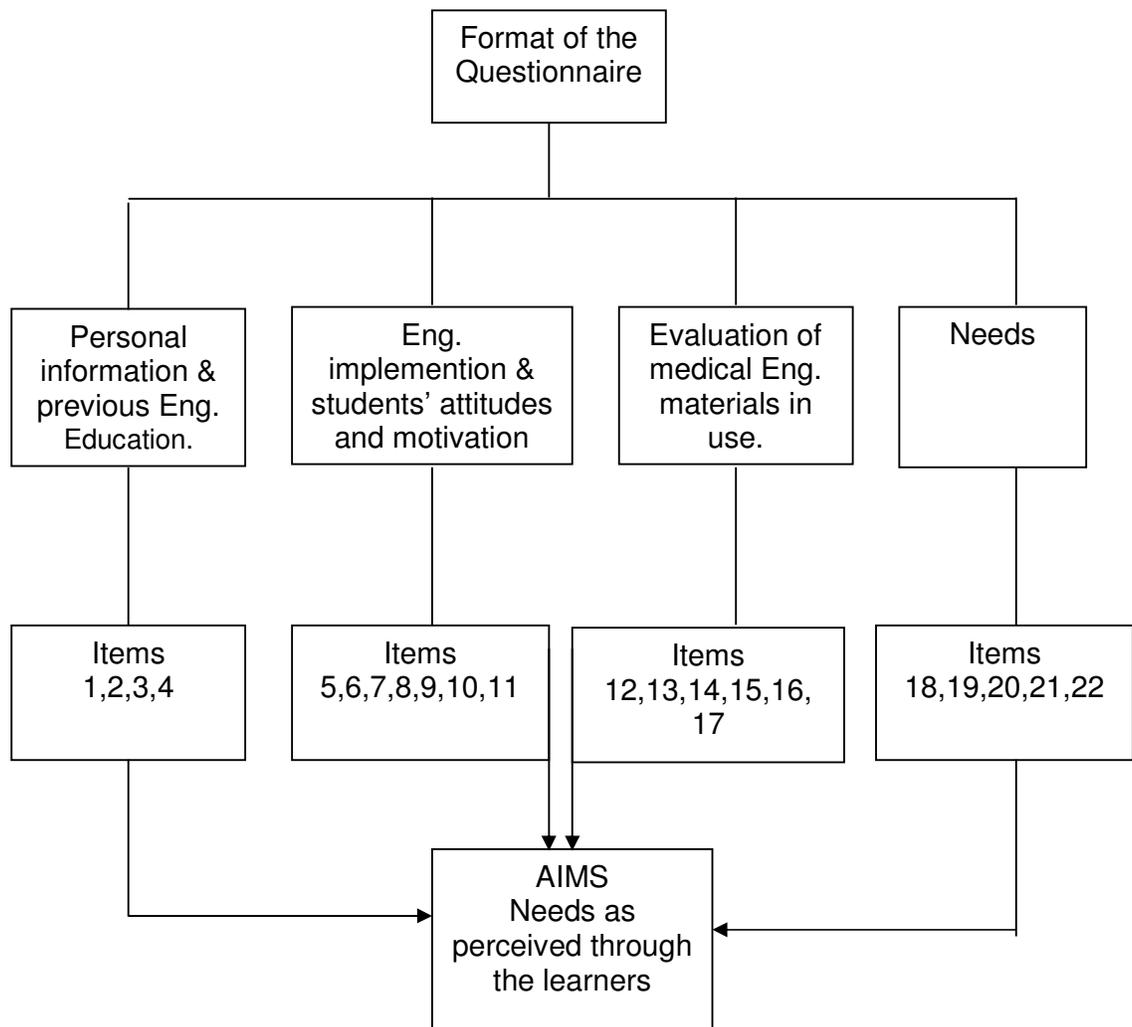


Figure (4.1) Format of the questionnaire schedule

4.1.4 Subjects of the Questionnaire

Since this study investigates the needs of the first year students at the Faculty of Medicine, University of Aden, therefore, it is logical to select the subjects of the questionnaire instrument from the area of the work under investigation, which is authentic and factual. The researcher has selected randomly 100 informants (i.e. 50 students from the Medical Section and 50 students from the Pharmaceutical Section), because they study the same medical English course in their first year. Further, the comparison and contrast between the views of the two group informants will enrich the work and will yield sufficient data. These informants were kind enough to willingly participate as the subjects of the questionnaire instrument.

4.1.5 Piloting of the Questionnaire

Piloting means to try out the instrument in order to determine which items can be revised or eliminated (Reid, 1998:325).

Several drafts of the questionnaire were given to some ELT experts in the University of Aden, Yemen and the University of Pune, India. Furthermore, the questionnaire had a trial run with some subjects where they were asked to underline the difficult words and ambiguous questions. As a result, some words were shifted, whereas some questions were re-arranged and re-phrased in order to avoid ambiguity.

In this regard, it is worth pointing out that the researcher made great efforts to make the questionnaire instrument as clear and accurate as possible and he tried to use simple language, in order to avoid complexity in the items as clear questions lead to clear responses, clear responses in turn help the investigator in the data analysis phase.

4.1.6 Validation of the Instrument

Validity is usually taken to mean that the questionnaire is in fact measuring what it claims to measure. The questions had to be validated in terms of their relevance to the research questions. It is important to stress that before using any questionnaire, it is necessary to try it out in order to examine the relevancy of the information obtained, the clarity of the questions, the format and amount of time required to answer the questions, so that the questionnaire can be revised if necessary. This process significantly improves the quality of the data being obtained.

In the case of the present information, the questionnaire was tried out on sample subjects of ten informants, i.e. 10% of the subject population in order to check the relevancy of the items in accordance to the aims of the instrument in particular and the aims of the work as a whole under investigation. As a result of the trial run, two questions were dropped as they were repeated whereas two other items are also eliminated as they were found to be irrelevant to the general aims of the study.

4.1.7 Reliability Evidence

The reliability criterion provides information on whether the data collection procedure is consistent and accurate. Prior to the questionnaire being administered, it is important to have a trial run on the sample of subjects in order to reveal if there is any variable.

In this regard, the questionnaire had to be assessed by trying it out on a sample from the area of the study. Then, it was re-administered on the same sample group (i.e. 10 informants). After two weeks of the former process (i.e. validity trial out), the questionnaire instrument had test-retest reliability (i.e. reground process). By reground, is meant a type of test-retest reliability where the researcher goes back to the data a second time and compares the patterns obtained with the results obtained the first time.

Test-retest reliability is an estimate of the reliability of the instrument to the extent that it gives the same results if administered at two different times. This is evaluated from the coefficient of correlation, which is obtained from the two administrations of the instrument (Richards et al., 1992:377-8).

Fortunately, there were no variations in all the responses and perception of the sample subjects in both the processes. This result of high consistency over a period of time is sufficient to establish the reliability of the questionnaire as a major instrument of the data collection of the present study.

The reliability of the instrument is a matter of consistency, as it produces similar results under similar circumstances on different occasions.

4.1.8 Administration Process

Before carrying out the administration process of the questionnaire instrument, all the developmental steps of the efficient procedure were taken into consideration. Designing questionnaires, which are valid, reliable and unambiguous, is a very important issue.

Firstly, at the beginning of the administration process, the researcher gave the participants a complete idea about the aim of the study and the importance of the information that they would provide. In addition to that, a brief statement of the purpose of the study was placed at the head of the questionnaire paper. The researcher made sure that the data obtained would be used just for research purpose and no other person could obtain the data.

Secondly, the questionnaire forms were distributed among the informants in the presence of the researcher and the medical English teacher. Actually, the subjects were told how to fill the questionnaire properly. All the items were supplied by multiple choices (Likert's Scale) in order to assist the informants to respond easily. Some blanks were left for any additional comments or to mention specified reasons.

Thirdly, the researcher persuaded the subjects to deliberate the accuracy and veracity in their responses and ask for any clarification or interpretation.

The administration process was carried out on the 26th of May 2003, in the last lecture of the English classes for the academic year 2002-2003. By this time, the students would have already completed their first year, which means that, they have formed a complete idea about the medical English materials, which might help them to evaluate the medical English course and would present their views correctly. A time near the end of the term is often best for carrying out the data collection instrument.

Finally, at the end of the administration process, the questionnaire papers were collected with the help of the medical English teacher. Fortunately, all the items of the instruments were responded to which indicates a high degree of explicitness of the instrument.

4.2 Structured Interview

4.2.1 Overview

Interview is another tool, which has been used in collecting the data of this study. When the procedure of data collection is multiple the data obtained are more accurate and reliable.

As far as, the interview is concerned, it has its own shortcomings as compared to the other instruments such as questionnaire. Interviews can be

costly, time consuming and often difficult to administer. They depend on good interviewing skills that might require extensive training. They may introduce elements of subjectivity and personal bias, and rapport may cause the interviewee to respond in a certain way to please the interviewer.

However, interview has its own great merits, which may not exist in other instruments. A major advantage of the interview is its adaptability. A skilful interviewer can follow up ideas probe responses and investigate motives and feelings, which the questionnaire can never do. The way in which a response is made (the tone of the voice, facial expressions, hesitation, etc.) can provide information, which a written response would conceal. Questionnaire responses have to be taken at face value, but a response in interview can be developed and clarified (Judith, 1987: 70).

Another advantage of interview is that, interviews are personalized and therefore permit a level of in-depth-information-gathering, free response, and flexibility that cannot be obtained by other procedures. The interview can probe for information and obtain data, which often has not been foreseen (Seliger and Shohamy, 1989:166).

Interestingly, interviews can be administered not only face-to-face, but also by other channels such as telephone or Internet.

4.2.2 Selection of the Procedure

As stated earlier, questionnaires can be varied in their type of explicitness, structured questionnaire, semi-structured questionnaire and unstructured questionnaire. The same procedure is applied to an interview. Thus, interview can be differentiated by the degree of explicitness from structured interview, semi-structured interview to very open interview (i.e. unstructured interview). In the situation of the current work, structured interview is preferred for obtaining data for this study.

Structured interview is the tool in which the organization and procedure of the interview, the topics to be asked, the questions and the order in which they will be presented have been determined in advance.

The structured interview has several advantages over the questionnaire. Firstly, since the interviewer will be asking the questions, none of them will be left unanswered as frequently happens in questionnaire.

Secondly, the interviewer can clarify any misunderstanding, which may crop up in the interpretation of the questions.

Thirdly, and perhaps most advantageously, the interviewer can follow up any avenue of interest which may arise during the question and answer session but which had not been foreseen during the designing of the structured interview (Mackay, 1978: 22).

Structured interview is one of the most effective procedures for data collection in use, because it generates both qualitative and quantitative data.

4.2.3 Rationale and Aims of the Structured Interview Instrument

The rationale of conducting the interviews is twofold:

Firstly, since teachers and learners constitute the main elements in any ELT situation, it is important to examine the perspective of teachers towards the issues being investigated as they represent the teaching process. The learners' perspective and views have been already examined in the questionnaire.

Secondly, by juxtaposing the students' responses in the questionnaire with those provided by the teachers in the interviews, the researcher would arrive at a more objective picture of the situation. In contrast, the responses of either group (student informants in questionnaire or teacher informants in interview) will give only a partial or probably a distorted picture.

The aims of the interviews in one way or the other are not different from those of the questionnaires; the questionnaire is designed to elicit the perspective of the students, whereas the interview is designed to elicit the perspective of the teachers. In short, the aims of the structured interview can be concluded in three parameters:

The first parameter concentrates on the difficulties that hinder the students in English communication, i.e. English usage and students' attitudes and motivation from the perspective view of the teacher informants.

The second parameter is concerned with the evaluation of the English materials in use.

The last part of the interview instrument is the most important one as it deals with needs; it requires the teacher informants to offer their views regarding the entire needs of the medical students for practical English communication.

4.2.4 Structured Interview Schedule

It is worth pointing out that the design of the interview in all developmental stages is based on several ethnographies of previous interview findings such as Mackay's structured interview (1978), Seliger and Shohamy (1989), Spradley's ethnographic interview (1979) and Christison and Krahnke's interview schedule (1986).

As stated earlier, structured interview is one of the instruments that have been adopted in collecting the data obtained in the current research.

The nature of the interview will determine the type of data obtained. Specifically, more structured interviews will elicit brief and concise data in the form of checks, marks and short responses; while open interviews will elicit generally more elaborated data in the form of impressions, descriptions and narratives obtained from interviews (Seliger and Shohamy, 1989:168).

The interview schedule consists of twenty-two items (referred to appendix 2), it is divided into four sections. Section one is a preliminary part as it elicited the subjects to introduce themselves and offer personal information about their qualifications (items 1,2) and their experience and training in ESP discipline.

Did you receive any training in the ESP field?

If affirmative mention:

- Place
- Period from to
(item 4)

Have you conducted research / studies in the ESP field?

If affirmative, mention:

- The title :
- Publishers
(item 5)

Section two (items 6-12) investigates English implementation and difficulties which hinder students to practise English (item 9) and students' attitudes and motivation from the viewpoints of the teacher informants. In this regard, the teacher is the only person who has authentic contacts with his students; therefore, he will perceive properly the students' difficulties and motivation regarding the learning of the target language. Lavery (1985) points out:

The teacher should provide his / her views as she / he sympathizes with the students and understands their difficulties.

The third aspect in structured interview (items 13-18) is concerned with the evaluation of the medical English materials in use as perceived by the teachers. In fact, English teachers actually apply the teaching materials; therefore, it is crucial that they are involved in the evaluation process, as they certainly will provide valuable perspectives for both researchers and course designers.

Materials evaluation is one of the important methods of framing a course design. The evaluation process should be systematic and is best seen as a matching exercise: matching your analyzed needs with available solutions.

The last aspect is concerned with the needs, which is the major aim of this study, it elicited whether the materials in use matched the academic needs (in-study) and professional needs (post-study) of the learners (items 20,21). The last item (22) can be described as the quintessence of the structured interview, it dealt with the entire needs of the learners for practical English communication either academic or career needs. Obviously, teachers are in a position in which they can perceive well what their learners accurately need. Therefore, ESP teachers should be included at all stages of investigation of the students' needs. As Swales (1985) puts it:

It is likely that in addition to the normal functions of a classroom teacher, the ESP teacher will have to deal with needs analysis, syllabus design, materials writing or adaptation and evaluation.

It may be necessary to clarify the structured interview schedule in the following figure (4.2).

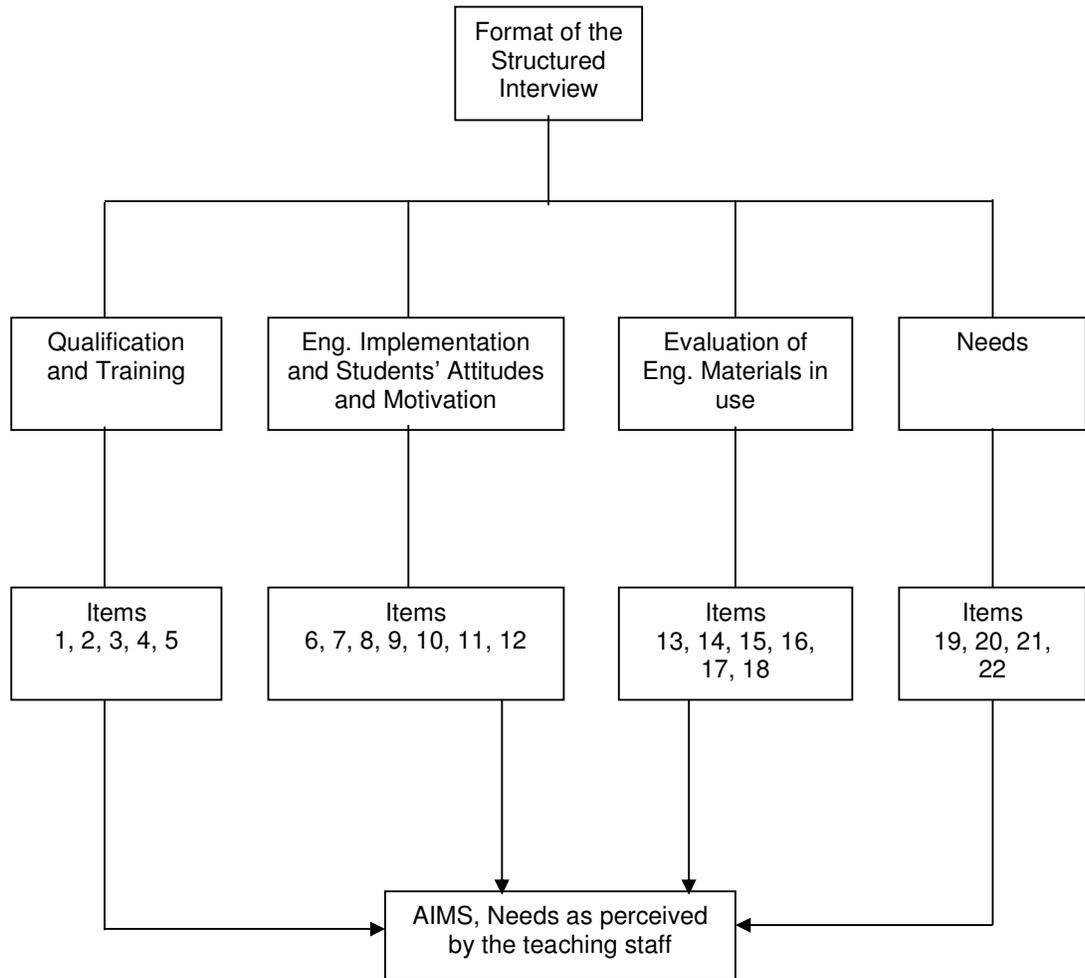


Figure (4.2) Format of the structured interview schedule

Figure (4.2) illustrates the four sections of the instrument, distribution of the items among the parameters and also presents the major aim of the present data collection procedure (structured interview).

4.2.5 Informants of the Structured Interview

The most important characteristic of the research is that, it should take into consideration all the relevant subjects and procedures. Therefore, logical research aims to investigate different perspectives regarding particular issues, then compares, juxtaposes and contrasts them with the data obtained in order to arrive at more objective and invaluable results.

In the situation of the present research, the researcher used triangulation method (4.0), i.e. two procedures of data collection methods are applied; a questionnaire is already administered to elicit the students' perspective regarding the current issues (4.1). Consequently, the second instrument (structured interview) is designed to elicit the teachers' perspective. The students and teachers are always considered as a complement to each other in any ELT situation (teaching/learning process).

Hence, ten members of the teaching staff who are involved in medical English teaching programmes have been selected to function as the subjects of the structured interview instrument.

Alderson (1979) states:

Teachers should be interviewed about their experience with the materials and the needs of the students. They can also be asked to annotate their copies of the materials used by them, so that any problems or suggestions for improvement are not forgotten.

4.2.6 Piloting of the Structured Interview

The interview should have a trial run with some colleagues in order to decide which items to be kept and which ones to be revised or eliminated.

Three teachers of the medical English course were interviewed individually (i.e. 30% of the population). The aim of the trial process was to measure the piloting of the instrument in use, of course, this procedure provided a valuable revision as some items were re-arranged and re-phrased, before putting the schedule in its last phase. Some items were also dropped, because they were considered as irrelevant to the aim of the instrument. Piloting is not an optional step; it is a necessary step to get results, to analyze, to help you decide which items to keep and which items to eliminate.

4.2.7 Validation Evidence

Validation is the process of item creation, piloting, and testing to determine whether the items are measuring up to the standard claimed. Validation should be built into the foundation of the instrument and not added on as an afterthought (Angoff, 1988:23).

The next step after piloting the instrument is to find out whether the revised items are functioning well, if they are not, the procedure should be revised and piloted again. In this respect, the interviewer had a trial run experiment on a sample of informants in order to check whether all the items were relevant to the aims of the present work, in addition to what extent, the

interview items could provide the information required and furnish the data, enrich, emphasize or strengthen the one obtained in the former instrument (questionnaire).

4.2.8 Reliability of the Interview Instrument

Reliability refers to a degree to which an instrument gives consistent results. A procedure of data collection is said to be reliable if it gives the same results when it is given on different occasions or when it is used by different people.

As pointed out earlier, the interview was conducted with three ELT teachers in the University of Aden, in order to check its piloting. After some time (more than a month) the instrument was re-administered with a sample of informants, this time to examine the accuracy and consistency of the data provided. Fortunately, more than 90% of the data obtained was consistent which indicated a high criterion of the reliability. Therefore, it is considered as adequate evidence for the reliability of the current instrument.

4.2.9 Carrying out the Structured Interview

As is well known, the administration process of the interview is the most difficult procedure amongst the different data collection methods, because it requires the interviewer to be more skilful, knowledgeable and

flexible in operating all the schedule items in a systematic sequence and gentle way in order to make the procedure more effective.

The interviews in the present study were conducted in an individual way. At the beginning of every process, the interviewer gave the informants a full idea about the aim of the study and the importance of their contribution, so that, they could be more subjective and avoid bias in their responses (op. cit).

It may be pointed out that some questions arose during the implementation of the procedure, for example in item 18:

In general, how did you find the medical English course, which you have taught at the Medical Faculty?

One of the interviewees replied just in one word.

Paralytic (medical term).

What do you mean by paralytic?

It is not practical or effective, which means that, it does not help the students to practice English sufficiently neither in the college, hospital nor in real life.

In fact, all the supplementary questions added invaluable information, which are closely related to the aim of the instrument.

Incidentally, it is worth stating that in order to make the procedure more formal and effective, the researcher had used two techniques in collecting the data of the instrument.

- a) Taking down the necessary information in the blanks of the interview forms.
- b) A type of recorder was applied to register and keep the data obtained for use at the analysis phase.

Actually, at the end of every interview, the interviewer thanked the interviewee and emphasized that his participation would provide valuable insights to the results of the present work.

It is very important to appreciate the co-operation extended by the informants and they should be thanked for their help (Evans, 1984:51).

4.3 Conclusion

In chapter four, the discussion was devoted to provide a full description of the methods used in collecting the data of this study. It attempted to reveal the criteria that were applied to measure the efficiency of each instrument such as validation, piloting and reliability evidence. In addition it defined the subjects of the instruments and provided a description of the administrative processes.

CHAPTER FIVE

DATA ANALYSIS AND REVIEW OF RESULTS

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5.0 Preliminaries

Chapter four described thoroughly the methods and procedures which were implemented in gathering the data of this study. Once the required information has been collected, the next step is to analyze and discuss the data obtained in order to arrive at the answers of some research questions, which are addressed on the basis of the general aims of the investigation. Accordingly, Chapter Five is concerned with the analysis of the data obtained. It could be said that, the current chapter (Five) can be considered as the outcome of the former chapter (Four).

Data analysis refers to sifting, organizing, summarizing and synthesizing the data so as to arrive at the results and conclusions of the research. Thus, data analysis becomes the product of all considerations involved in the design and planning of the research. It is worth pointing out that there are two major instruments used in collecting the information of the present work viz. a questionnaire and a structured interview. All the items of the two devices have emerged and emanated from the general aims and questions of the research. Before going deeper in discussing and analyzing

the data obtained, it will be worthwhile to shed some light on the criteria and devices, which are applied in the data analysis process.

5.1 Device Reliability of the Analytical Process

After the data required has been collected, the next step is to determine the techniques, which can be traced in the analysis of the data obtained. First and foremost, it is crucial to establish the coding system. The most commonly used system is the Statistical Package for Social Science (SPSS) and its updated version, which offers comprehensive and thorough details for the process of analysis (Nie et al., 1975).

Prior to the analytical procedure, the device should be examined to check the coefficient and reliability of the attained data analysis. During the developmental stages of the analytical device; several steps are administered in order to ensure reliable analysis and accurate results. Below is a description of some methods being applied:

5.1.1 Inter-rater Reliability

A random selection of some samples is given to a judge, who is specialized in the field of applied linguistics and is asked to analyze and categorize the responses. He then assesses inter-rater reliability. The results obtained are compared and contrasted with the researcher's analysis and categorization. If there is a good deal of agreement and correspondence

between the two comparative devices, i.e. the judge's analysis and that of the researcher's procedure, it indicates a high degree of the reliable analysis process (Mann, 1983; and Newell and Simon, 1982).

In the case of the process undertaken, three selected samples were given to an independent judge who was an expert in the applied linguistics stream, and he was asked to analyze all the responses involved in the three samples. The judge's results were then compared with the researcher's results. There was an agreement between the results of the two processes. Further, to ensure the reliability of the procedure, the two results were correlated to determine the extent of the agreement between the judge's results and researcher's results. The correlation coefficient was very high which indicated the positive criterion of the reliable analysis.

5.1.2 Statistical Techniques

Analyzing data with the aid of statistics usually makes the research more manageable and more efficient as there are many procedures available for doing so. Statistical process is the discipline, which has developed a variety of techniques for analyzing numerical data in an efficient and accurate way.

It is worth demonstrating that all the items of the questionnaire instrument are supported by multiple choices, because this type has many merits. It gives the informants the opportunity to respond confidently and

easily in contrast to the other kinds which may create some confusion among the informants, as that one in strongly agree, agree, undecided, disagree and strongly disagree.

In the analytical process, the items are categorized according to certain descriptive statistical techniques, where the data is summarized and described numerically within certain group of individuals. The types of the items determine the kind of analytical device, which can be applied to obtain the required results.

Accordingly, most of the items are analyzed on the basis of percentage (%) as items 8,9,10,11 and 12 in the questionnaire instrument (appendix 1) and items 10, 11, 12, 14, 17 and 18 in the structured interview instrument (appendix 2). Other items are categorized on the basis of frequencies as in the case of item 16 in the questionnaire and 17 in the structured interview. Whereas, some others are summarized according to the criterion of mean (\bar{X}) and standard deviation (henceforth referred to as SD). The mean is the sum of scores divided by the number of cases, which gives information about the main tendency of the scores. The standard deviation is a measure of dispersion, which gives information to the extent to which a set of scores varied in relation to the mean. It is always important to provide information about "average" score or scores which have been obtained (Richards et al., 1992: 349; and Harris, 1969: 142). In the case of the present procedure, the mean (\bar{X}) and SD were administered to describe

the difficulties which hinder the learners to use English effectively (English implementation), i.e. item 7 in the questionnaire.

The scores were divided on the basis of the following scale values:

- The most important reason (No. 1) was given the highest score: 5 marks.
- Second was given : 4 marks
- Third was given : 3 marks
- Fourth was given : 2 marks
- And the least one (No. 5) was given just one mark.

5.1.3 Group-wise Analysis

By group-wise analysis, it is meant that the results and findings of the two-group perspectives are compared and contrasted in order to find out the similarities and differences, which may arise between the responses of the two-party informants.

In the case of the present study, the results obtained from the student informants in the questionnaire device will be compared and juxtaposed with the teacher informant perspectives in the structured interview device. This procedure will address three of the research hypotheses viz.

1. There are no variables between the views of students and teachers regarding the students' attitudes and motivation towards the medical English course.

2. There are some variations between the perspectives of students and teachers in respect to the assessment of the medical English materials in use.
3. There are some similarities between the perceptions of students and teachers regarding the students' entire needs for practical English communication either in-study or post-study (i.e. present or future needs).

5.2. Questionnaire Analysis

5.2.1 Overview

As it is known that, the questionnaire is one of the major instruments used in collecting the data of this study, it is employed to collect information from the perspectives of the students regarding issues undertaken. The analytical process of the questionnaire device will be reckoned under four main headings.

- Background of the subjects.
- English implementation and students' attitudes and motivation parameter.
- Evaluation parameter.
- Needs parameter.

5.2.2 Interpretation of the Data Obtained

5.2.2.1 Background of the Subjects

Section one of the questionnaire is an introductory phase; it encouraged the informants to provide some personal information about

themselves and previous education received in English. “In the investigation of a certain issue, it is very important to constitute a wide picture about the background of the subjects of such research” (Evans, 1984).

The table below illustrates the distribution of the candidates according to sections, gender and area of previous education:

Section	Selected subjects No.	Gender		Area	
		Male	Female	Rural	Urban
Medicine	50	24	26	12	38
Pharmacy	50	18	32	7	43
Total	100	42	58	19	81

Table: (5.1) Distribution of the subjects of the study

The subjects of the current instrument (questionnaire) are 100 informants (50 subjects are selected from medical section and 50 subjects from pharmaceutical section), 42% males and 58% females. However, the same medical English course is taught in the two streams (Medicine and Pharmacy). As a matter of fact, there is a great correspondence among the responses of the informants regarding the evaluation of the medical English materials and learner needs. Therefore, the comparative process between section and gender is avoided, because there is a slight difference, which does not need a group-wise procedure.

The age of the candidates ranged between 19 to 22, the majority (74%) belonging to the age of 20 and 21 and minority (26%) belonging to the age of 19 and 22. Fortunately, the subjects of the present work under

investigation are adults, so such learners definitely perceive their precise needs.

A vast number (81%) came from urban areas, whereas a small number (19%) came from rural areas. Most of the participants finished their secondary education in the year 2000 - 2001; they studied English as a school subject for about six years in basic and secondary education. Whereas, the other subjects were taught in the student's mother-tongue instruction i.e. Arabic.

According to the rules of the Yemeni Universities Association, the secondary school students (pre-university applicants) must have at least one-year gap between secondary school education and the university stage (see 1.3.6). During this gap; most of the pre-university students (64%) join private and state institutes to improve their English language proficiency in order to cope with the requirements of the university studies. Unfortunately, all the students who came from rural areas (19%) did not undergo pre-study English programmes. This is due to the lack of foreign language teaching institutes in the rural provinces.

5.2.2.2 English Implementation and Students' Attitudes and Motivation Parameter

This parameter commenced by asking the informants about the medium of instruction and the language of the reference books in the Faculty

of Medicine. All the informants replied that English was the medium of instruction in the medical discipline and a large majority of the medical materials and reference books were in English too.

In fact, specialists of science and technology have great access to English, because it is accepted as the major medium of instruction in commerce, science and technology all over the world.

The next question put to the students was to express their difficulties in English conversation and the constraints, which hinder them chiefly in English communication. This question is based on Allwright's Deficiency Analysis (1979), which suggests, the eliciting of the learner difficulties as a source for establishing the learner's language needs. In this respect, the student informants were asked whether they always used English in the class. Their answer was as under:

- (a) Yes (00%)
- (b) No (100%).

In this context, the adverb of frequency 'always' means the opposite of 'never'. The subjects of the present study are learners of English as a foreign language to which they have a very limited exposure in practising the target language, hence, all the informants responded negatively. The negative answer was anticipated, therefore, they were asked to state the reasons for the deficiency in a proper sequence from the most important to the least as in the following: (appendix 1 item 7).

- (a) Because, I do not have enough knowledge of general English, which may help me to speak fluently. ()
- (b) Because, I do not have enough knowledge of medical English, which may help me to interact in the medical context. ()
- (c) Because, my pronunciation is not clear enough and the others may not understand me well ()
- (d) Because, I am shy of making mistakes ()
- (e) Other reasons (please specify) ()

The table given below shows the scores regarding the above-mentioned difficulties ranging from the most important constraint to the least one.

	1	2	3	4	5	Total	(%)
	- X5	-X4	-X3	-X2	-X1		
A	35/175	32/128	18/54	7/14	4/4	375	75.00%
B	28/140	42/168	26/78	7/14	3/3	403	81.00%
C	12/60	13/52	21/63	11/22	9/9	206	41.2 %
D	14/70	6/24	19/57	48/96	13/13	260	52.00%
E	11/55	7/28	16/48	27/54	16/16	201	40.2%

Table (5.2) : Distribution of the scores among the constraints of the English implementation.

There is a significant difference between reason No. A "General English" and No. B "Medical English". The former got the highest score (175) and the latter obtained the highest total score average (81%).

As shown in the above table, the need to be competent in general English proficiency seems to be most important in order to use English efficiently even in specialized disciplines such as the medical stream. Also, the lack of medical English language is another constraint that hinders the

medical learners to use English in medical contexts. This is ascribed to those learners who are in their first year and at this stage have not gained sufficient medical vocabulary to enable them to either properly comprehend or use medical terminology.

Subject – specific language enables students to express the linguistic elements and activities relevant to specific specialization (Hock and Chin, 1988: 99; and Dudley – Evans and Johns, 1991).

There is a correlation between the two language aspects, i.e. general English phase and medical English phase. They seem to be of equal importance for the learners of medical studies.

Some respondents added other reasons such as "I cannot grasp well the lectures, neither in English subject nor in specialized subjects". These constraints place such learners in a passive position of interactive English communication. The table (5.3) below illustrates the mean (X) and SD of the responses of the student informants towards the above five constraints which hinder their English communication. Consequently, it is worth pointing out that the average of the mean (X) value is (3.83).

Item No.	Mean (X)	S D
A	5	2.36
B	5.4	3.16
C	2.7	2.24
D	3.4	0.84
E	2.6	2.44

Table (5.3) : Mean (X) and SD of the difficulties as expressed by the students.

As regards difficulties, the respondents were asked whether the application of the mother tongue might help the learners to understand medical lectures, seminars and discussions in the practical field (see item 8, appendix 1). They had been given some options by using adverbs of frequency, which would determine the extent of the use of the mother tongue. It was explained to the questionnaire respondents that 'Always' refers to a wide use of the mother tongue, 'sometimes' indicates some application of the mother tongue, 'occasionally' demonstrates little use of the mother tongue, 'Rarely' is used to express the application of the mother tongue in very limited situations and 'Never' is referred to the use of simple English instead of the mother tongue translation.

It was anticipated that the students who have serious difficulties in understanding lectures and discussions in the medical context would select the option 'always' whereas those, whose English proficiency is fair, would prefer to choose the options 'rarely' or 'never'.

Table (5.4) illustrates the results of the preference for using the mother tongue in the teaching / learning process or discussion in field work and seminars:

Always	06%
Sometimes	09%
Occasionally	15%
Rarely	33%
Never	38%

Table (5.4) : Application of the mother-tongue.

A little above one-third of the subjects (38%) preferred to use simple English to overcome their difficulties instead of L1 application. Such learners perceived well the importance of English implementation in medical studies.

The learners of the medical discipline need great access to English in order to keep up with the new developments in medical field as English is accepted internationally as the language of science.

One third of the informants (33%) preferred to use the mother tongue, but in very limited situations where there was no other alternative.

The next section is concerned with attitudes and motivation. In this respect it is worth stating that the current work under investigation is concerned chiefly with the investigation of the learner needs. Consequently, there is a great correlation between students' attitudes and motivation on the one hand and their needs on the other.

When the learner is motivated by the language course, it indicates that the programme meets the learner needs, and if the learner is demotivated by the language course; it can be regarded as an evidence that such programme does not match the accurate needs of the candidates.

Moreover, there is a link between motivation and learning. Without motivation learning is not likely to take place. Casual relationship between motivation and learning is reciprocal (Mugglestone, 1977: 116). In the history of experimental psychology, the problem of motivation and the

problem of learning have been intimately linked. Motivation is highest when learning is seen to be great usefulness to the learners (Kadha, 2000:87).

Accordingly, students' attitudes and motivation should be investigated in relation to learning and needs. In this respect, the questionnaire instrument included three items (9–11) regarding the phenomena of attitudes and motivation.

- Do you like to attend ALL the English classes?
- (a) Yes (32)
- (b) No (68) (item No. 9)

The following table illustrates the negative response of the students and the reasons therefore:

English classes are very difficult	23%
English classes are boring	27%
English classes are not obligatory	00%
English classes are unnecessary	05%
Others (please specify)	13%

Table – 5.5 : Attendance in the English classes

From the table it is observed that above two thirds of the students (68%) do not like to attend English classes, almost a quarter (27%) responded frankly that English classes are boring. In addition, 13% added other reasons when they described the English course being not useful. This demonstrates that the current materials in use may not meet the entire needs of such learners and also that they are not interesting enough to attract the learners.

There is a correlation between items 9 and 10, as the latter is used to measure the reliability of the former. The coefficient instrument should involve some items to examine the reliability of the others within the same device (Allwright, 1983; and LeCompte and Goetz, 1982).

The following Table (5.6) describes the students' motivation towards the medical English course in use.

The students were asked to state how much they liked the medical English course in comparison to the subjects of specialization (item No. 10). Their response is given in the table below:

The most	30%
The same as the others	46%
Least of all	24%

Table (5.6) : Motivation towards the medical English course

Interestingly, there is a great correspondence among the responses of the two items (9 and 10). This can be established as a positive coefficient correlation between the items of the instrument.

The last question in this aspect is about the time allotted for the medical English course. More than half of the subjects (52%) like to retain the time, i.e. four hours per week. Unfortunately, a large majority of the students (52 + 19 = 71%) did not like to increase the time, which indicates that, the utilization of the course is not great. The table below (5.7) clarifies the results obtained regarding the allotted time.

- If the methodology of the teaching of English is changed would you like to:

Increase the time allotted for teaching English	29%
Retain the time as it is	52%
Decrease the time allotted for teaching English	19%

Table (5.7) : Time allotted for teaching medical English course

As shown above, there is an agreement among the responses of the three items (9, 10, 11), which establishes high constancy and accuracy of the data obtained.

5.2.2.3 Evaluation Parameter

In this aspect, the students were given a chance to evaluate the medical English materials, because it is very important to examine the students' views regarding the teaching material and to ascertain the extent to which they meet their needs. This will provide guidance to the researcher to place emphasis, prescribe, remove or substitute some parts of the teaching materials in use.

Mackay and Mountford (1978:10) suggest “materials, which do not take into account the learner group’s characteristics, definitely will have low motivation value”. As a prologue to this parameter, the following question was asked about the kind of English offered by the current medical English course.

- What does the current medical English course chiefly teach you?

Pure Medical English	100%
Semi-medical English	00%
General English	00%
Others (please specify)	00%

Table (5.8): Kind of English offered by medical English course

All the respondents (100%) reported that the medical English course in use teaches purely medical English topics (see section 1.3.4). But here the questions, which arise, are:

Do they need purely medical English?

Is it adequate for the learners?

Does it meet the learner's entire needs, i.e. in study (in faculty, practical field, hospital) and outside the discipline of specialization (social settings)?

All these questions and many related ones would be answered by the subjects of the study thoroughly as perceived by them in the next discussion.

The informants indicated that the English teacher teaches additional materials while discussing some points of grammar and some materials concerning general English (item 13). But, this is inadequate, and is also not prescribed in the curriculum of the medical English syllabus and does not directly help in the examination.

Then, the informants were asked to give their views regarding the utilization of the medical English materials in use. In this regard, four items are included (14-17) which proceed systematically from the more specific to

the more general. This phase begins by availing of the course in the academic domain (item 14). Then, it moves to the situational settings (item 15), after that, it shifts to the benefit it accrues for receptive and productive skills like listening, reading, speaking and writing (item 16). It concludes by asking about the usefulness of the course in general (item 17).

Table (5.9) illustrates the utilization of the medical English course for the requirements of the study in the medical field.

- Does the medical English course help you to follow the subjects taught in English in your academic study? (Taking notes, listening and understanding lectures and talking to lecturers and colleagues).

(a) Yes (68%)

(b) No (32%)

If affirmative, to what extent.

To a great extent	04%
To some extent	37%
To a limited extent	27%

Table (5.9): The utilization of the medical English course for the academic requirements

About one third of the informants (32%) pointed out that the medical English material in use did not help them in their academic studies and even the nearly two thirds (63%) who responded positively indicated that, the usefulness is not much which means that it is unsatisfactory.

The next item enquired about the implementation of the medical English course outside the medical discipline, i.e. in different situational settings.

- Does the medical English course help you to communicate outside your discipline? (i.e. in real life settings).

(a) Yes (00%)

(b) No (100%)

All the subjects stated negatively, giving the following reasons:

- Because it teaches purely medical English language.
- It focuses and moves around a limited domain of medicine.
- It does not teach any kind of common language that can be applied in social communication.

There is a clear contradiction between the proposed objectives of the medical English course and its authentic implementation. It claims that the student should be able to communicate intelligibly in different uses of English. But the responses to item 15 (appendix 1) revealed that, it does not offer that kind of English, which may help the learners to function effectively in such communicative situations. ESP programme is to be judged by what the students do outside of their ESP classes.

The next question is concerned with the practice of the language skills in relation to the different activities within the medical English topics. In this regard, it is worth pointing out that any foreign language cannot be learnt by teaching grammatical structures or lexical forms, but it can be acquired

through the application of the four language skills, viz. listening, speaking, reading and writing.

Table (5.10) explains the allocation of each skill as perceived via student informants. It indicates the percentage of the benefits of the medical English course for the following language skills.

Listening	07%
Speaking	15%
Reading	78%
Writing	26%

Table (5.10) : Application of the four language skills as perceived via learners

Reading skill has attained the lion's share (78%) in the materials of the medical English course, writing skill has gained its right proportion, i.e. about a quarter (26%), practical skills (listening and speaking) have obtained the least application. This is due to the fact that there is an agreement between the results tabulated above and the contents of the medical English course. Each unit consists of a passage followed by reading comprehension questions. Further, reading exercises to extract the meanings or opposites of the given words from the text, and sometimes to discuss a specific point of grammatical structure at the end of each unit were also given.

Unfortunately, there is poor implementation of the pragmatic skills viz. listening and speaking, though, they are regarded as the most important skills in language learning. Some language skills are over-emphasized and others are completely neglected, i.e. reading and writing are over-

emphasized whereas listening and speaking are minimized. ESP learners need access to listening and speaking, because these two language skills are extremely essential for the ESP learners to face exposure.

Given below is a frequency table, which describes the measurements of the four language skills within the medical English course as perceived by the subject receivers. Frequencies provide the researcher with meaningful information on the measures used in the research, showing the frequency of the phenomena, as well as initial insights, impressions and understanding of the data and the results. These can be reported through verbal description, tables, figures and graphs (Seliger and Shohamy, 1989: 215).

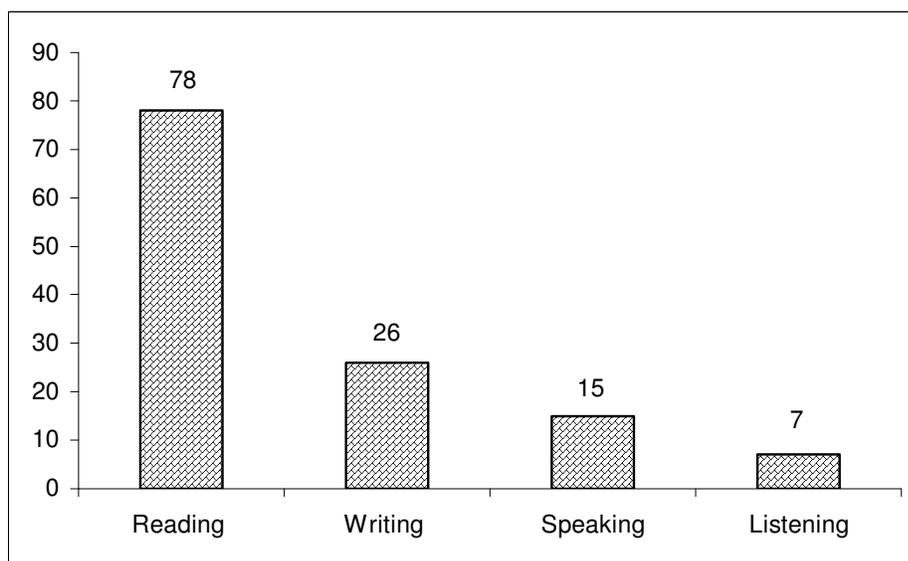


Figure (5.1) : Frequencies of the language skills as perceived via learners

In the medical context, each language skill device plays its own role in which it has its full rights in the implementation aspect, for instance:

- Listening to lectures, symposia, conferences, etc.
- Speaking in clinical discussions, case conferences, informal discussions and conversations, doctor patient discourse, etc.
- Reading textbooks, journals, papers, documents, etc.
- Writing examination papers, reports, articles and research material etc. (Khan, 1986).

Unfortunately, the frequency figure (5.1) reveals that there are significant differences among the application of the different language skills in the materials of the medical English course. The last item of this phase mentioned below is about the benefit of the medical English materials in general, i.e. its contribution to the learning of medical science and effective use of English in real life situations.

- How did you find the medical English course, which you studied in the Faculty of Medicine?

Very useful	21%
Somewhat useful	48%
Not useful	31%

Table (5.11): Usefulness of the medical English course in general

About half of the informants (48%) pointed out that it is somewhat useful, whereas over one fifth (21%) of the informants reported that it is useful. Meanwhile, about a third (31%) informed that it is not useful. In brief, if the above results are compared in an analogous way, the following results are obtained: "Somewhat useful" (48%) is a neutral average. It can be

divided between the two values, i.e. half goes to "very useful" (24 + 21 = 45%), and the other half goes to "not useful" (24 + 31 = 55%). Hence, the majority of the informants (55%) described the course as not useful. Further, there is a correlation and agreement between the results of items 14 and 17, which establish the high dependency and accuracy of the data obtained.

Eventually, this item (17) links the aspect "evaluation" and "needs". It works as a bridge between the two parameters, which helps the respondents to transfer gradually and smoothly from one to the other.

5.2.2.4 Needs Parameter

The needs aspect is the most important aspect; it investigates the accurate and thorough needs of the learners as expressed by their viewpoints.

It is very important to start the course-developing process with an analysis of the target group of students. Many problems arise in L2 classes because the teachers do not pay proper attention to the learners' interests and do not get feed back from the students which is a source of essential information. With the spread of communicative language teaching, much emphasis in second language methodology has been paid to the learner-oriented instruction. Thus, if you have a reasonably homogeneous group of learners and have to design an appropriate course for them, you might begin

by looking for answers to a logically–sequenced set of questions about their target needs.

As a preliminary step to examine the views of the students regarding their needs, they were asked whether they read English books/ materials other than those, which they studied in medicine. Actually, there is a correlation between this item and the learner needs. The students who responded positively, indicated that the current course did not meet their entire needs. Therefore, they try to improve their English proficiency through self-study in order to cope up with the requirements of their studies. ESP learners often need in-house materials because textbooks are increasingly less self-sufficient.

- Do you read English books other than those you have studied in the Faculty of Medicine?

(a) Yes (100%)

(b) No (00%).

If affirmative, which kind:

Medical books	53%
Grammar books	34%
Novels	05%
Others (please specify)	18%

Table (5.12): Reading other materials

Fortunately, all the informants responded positively, they perceived well the importance of reading as a self-study device at this stage, where

they need great access to other supplementary materials, which might help them to overcome some difficulties of the medical studies.

Reading is an active skill where the reader attempts to build up the meaning the writer had in mind when he wrote the text. Reading is a very important language skill. The student needs to develop his strategies to reach the advanced stage if he is to follow successfully the science course programme.

Some of the informants said that they practised reading skill in more than one area. More than half of the respondents (53%) pointed out that they read other medical materials such as medical science journals, articles, and other medical books. Roughly, a third (34%) indicated that they read grammar books. This group felt that grammar plays a very important role in improving their medical writing such as medical reports, research articles and writing examination papers. A very small number (05%) read English novels, which means that English stories are not important for these learners, because the benefit of this type of English is very limited at this stage. Definitely, they need other kind of English, which could help them to cope with the requirements of the medical studies.

The second item in the needs aspect is about preference of adding supplementary materials.

- Do you prefer adding supplementing material to the current medical English course?
 - (a) Yes (79%)
 - (b) No (21%)

If affirmative, which one do you prefer to add?

Pure Medical English	21%
Semi-Medical English	25%
General English	38%
Grammar	34%
Others (please specify)	18%

Table (5.13) : Preference of adding supplementary materials

An overwhelming majority of the informants (79%) preferred to add supplementary material to the current medical course. This group expressed the view that the medical English materials in use are inadequate and the utilization is very limited as stated by them in their responses to item 17. Therefore, they opted for addition of the supplementary materials in order to fill the deficiency of the current materials. Some of the ESP textbooks can be regarded as supplementary materials as they just focus on a specific area of language learning.

Some students preferred to add more than one kind of material as they ticked more than one option, whereas others preferred to add other materials, (18%) opting for conversation. This group liked to improve their speaking ability, because it plays a very important role in real life communication. Those who opted for general English language (38%) and grammar (34%) liked to have access to supplementary material. A quarter of the informants (25%) opted for adding semi-medical English selections, meanwhile one fifth (21%) asked for pure medical English passages.

The next question in this parameter is related to professional needs as the academic needs have already been examined in the evaluation aspect (item No. 14). In this regard, it is crucial to examine the materials in use with career needs, i.e. to what extent the medical materials match the future profession of the participants.

The course contents should be looked beyond the current needs of the learners (in-study), and professional needs (post-study) should also be taken into consideration.

Needs analysis therefore becomes a process of finding out as much as possible, about the learner's current and future language usage before actual learning begins. Hence, the question relevant to this aspect was put forth:

- Would the present medical English course match your professional needs in future?
 - (a) Yes (34%)
 - (b) No (66%).

If affirmative, to what extent.

To a great extent	02%
To some extent	22%
To a limited extent	10%

Table (5.14): Medical English course and professional needs

Almost one third of the learners (34%) pointed out that the present medical English course might help them in their future career, but not to a

great extent. About two thirds of the subjects (64%) said that it would not help them in their professional contacts. This group opines that the current course concentrates on a small segment of English viz. pure medical English, which covers just a part of their future professional needs. They need to have a greater access to general English in their practical profession, because they will not interact just with people of the medical field, but with people from different fields. Further, they will need general English even in their medical reports for taking case history, questioning about the symptoms and diagnosing the cases.

It therefore becomes imperative to take into consideration the in-study and post-study needs of the learners. Accordingly, the needs section in the questionnaire includes an item to elicit information as to whether the current medical English course meets the entire needs of the learners either concurrent needs of the medical studies or further needs of the profession and 'post-graduate education.

- Does the medical English course meet your entire needs "in-study and post-study for further education or future profession"?
- (a) Yes (24%)
- (b) No (76%)

If affirmative, to what extent.

To a great extent	02%
To some extent	17%
To a limited extent	05%

Table (5.15): Medical English course and entire needs of the learners

In reply to item 21, an overwhelming majority of the learners (76%) stated that the medical English course in use does not meet their entire needs neither academic nor professional needs. About a quarter of them (24%) stated that it matches their needs, but not to a great extent and just 02% responded positively.

As stated earlier, there is a correlation between the different items of the instrument, consequently, the former item relates systematically to the latter one. For instance, there is a great correspondence among all the responses to item 21 and item 20 (see tables 5.14 and 5.15). This can be used as a positive indication that the results obtained are reliable, accurate and constant.

In conclusion to the questionnaire, the informants were asked an open-ended question about the kind of English which they need in order to function effectively for practical English communication, either as a means of learning medical science, or as a medium of communication in different applications of English in real life situations, the question asked was:

- In your view, what do you need in order to function effectively in practical English communication? (In medical discipline or in different situational settings).

Pure Medical English	00%
Semi-medical English	21%
General English	17%
All the three	72%
Others (please specify)	06%

Table (5.16): Needs as perceived via learners

Some students opted to have both semi-medical English and general English. A minority (06%) emphasized the need of conversational practice within the topics of the medical English course. This group perceives that conversation may help them to use English effectively in real life contacts. Conversational activities help the learners to develop their speaking skill.

None opted to have pure medical English. It is due to the fact that ESP in its own right seemed to be inadequate. It is not correct to regard ESP as a phenomenon isolated from the rest of EGP. Accordingly, a majority of the respondents (72%) opted to have a combination of pure medical English, semi-medical English and general English.

5.2.3 Discussion of the Results of the Questionnaire

In the following few pages, it is proposed to discuss and diagnose the findings of the field survey conducted by the questionnaire instrument.

The diagnostic device relies to a large extent on a specially devised questionnaire and structured interview, which reveal the prospective learners' perception of their needs and communicative difficulties.

As pointed out earlier, the subjects of the questionnaire device are the students of the first year at the Faculty of Medicine, Aden University. So, the discussion of the findings will be concerned with particular reference to three aspects as mentioned in the aims of the instrument (4.1.2) viz. English implementation and students' attitudes and motivation, evaluation of the medical English materials in use and needs.

With regard to English implementation and difficulties, which hinder the learners in the application of English, the student informants stated that they do not totally use English or practise it, though, it is the means of instruction in their specialized field viz. 'medicine'; to which they have great access as the target language.

The fact well known is that they study English as a foreign language in their motherland in which they have Arabic as the first language. Therefore, implementation of English is very limited in such a situation.

As regards the difficulties, they mentioned the following as the most important constraints:

Firstly, they do not have enough knowledge of general English which may enable them to speak fluently (reason No. A, item No. 7, questionnaire instrument). Secondly, they do not have sufficient medical vocabulary, which

may help them to interact easily in medical contexts (No. B). Thirdly, they are very shy of making mistakes (No. D). Finally, their pronunciation is not clear enough and the others may not understand them well (No. C).

There is a significant difference between the reasons of A and B. The former occupies the first place (175) as the most important one with total scores of 375 and average (75%), whereas the latter occupies the second place (scores 140), but it has obtained a total score of 403 with an averaging of 81% (See Table 5.2).

In short, the lack of general English language and medical lexicon can be described as the most important constraints. The former is ascribed to the insufficient English education of those learners in basic and secondary schools. They are weak in English because they had studied English as a single foreign subject as compared to all the other subjects which were taught in their mother tongue i.e. Arabic. Moreover, they found the study of English very difficult and arduous. The latter is ascribed to the fact that the medical terminology is very difficult to comprehend since it is derived from Latin and Greek and has very complicated, lengthy words. For example words like hysteroplasty, hemangioma, polyneuropathy, electroencephalography, etc. The learners of English as a foreign language cannot learn such words easily, particularly in their first year of medical studies.

In order to overcome the difficulties in understanding the lectures of English and other specialized subjects a good number (38%) opted to use

simple English to overcome such difficulties, whereas 33% preferred to use their mother tongue but in very limited situations. Zoghoul and Hussen (1985) point out:

It is a tradition that, in many Arab universities, Arabic is used to explain the difficult points and concepts, particularly scientific and technical terms.

As regards the attitudes and motivation of the learners towards the medical English course, two thirds of the learners (68%) did not like to attend the English classes, but the attendance was made obligatory. Further, more than a quarter of the learners (27%) obviously found the English classes boring. This group is verified in the next item (10) when nearly a quarter (24%) pointed out that they like the medical English course, least of all the other subjects. This can be made clear by two interpretations; firstly the students have serious difficulties in understanding English in their classes. "Difficulties affect the learning process and students' motivation" (Wilkins, 1974: 48). Secondly, the current medical English course may not meet the wants and needs of the learners. Mead (1980) states:

Learners will be demotivated by the language programme when there is no match between the course content and learners' needs and desires.

Regarding the evaluation of the medical materials in use, the student informants said that the medical English course teaches purely medical English topics, this kind of English helps them in their medical studies to

follow up the lectures, take notes, etc. but they emphasized that it did not help to a great extent. Further, they said that the current course does not help them in their real life situation communication outside the discipline of the study. Moreover, the informants reported that the medical English course focuses on one kind of English that is medical language. Surprisingly, it concentrates on just one of the four-language skills viz. reading, whereas the other skills are totally neglected. Pragmatic skills such as listening and speaking are considered to be the most important devices as viewed in the students' perspectives.

Regarding the assessment of the medical English course in general, nearly half of the informants (48%) described it neutrally as somewhat useful. About a fifth (21%) considered it as very useful particularly in the medical context, whereas nearly a third (31%) regarded it as not useful, because it cycles around a very limited domain.

As for the needs aspect, a great majority (79%) preferred to add supplementary materials as they felt that the medical materials in use as inadequate.

A group of informants (38%) have expressed the need to include grammar in their medical English programmes. They felt that they could not use the language properly either in spoken or written form without proper grammar. ESP learners need correct grammar in different stages of their academic studies, for writing articles, for research, seminars, written examinations, conferences, etc.

About two thirds (66%) stated that the current course does not meet the professional needs, some of them (18% item 10, 06% item 22) desired to add conversational materials in order to practise the productive skill "speaking". Further, roughly one third (32%) expressed that the course does not even help them in their academic studies.

Moreover, all the informants pointed out that the medical English course teaches purely medical passages. Therefore, it does not meet their communicative needs, i.e. outside the medical discipline in "real life situations". They stated frankly that the medical materials do not meet their total needs. ESP course can be regarded as an additional component; it cannot replace the EGP as the latter helps the learners to express themselves in their daily routine and also for various other purposes.

5.2.4 Learner Needs as Perceived via Learners

One of the principal questions that the study sought to answer was:
What are the learners' needs as perceived via students?

In this respect, it is worth pointing out that through the different items of the questionnaire instrument, the student informants provided their perspectives regarding their entire needs for practical English communication either as a means to learn medical science or a medium of communication in different situational settings. The proposed medical course, in order to be more effective and to sufficiently meet the academic

and professional requirements of the participants, should consider the following needs of the students:

Firstly, they want to introduce some conversational activities in order to improve the productive device "speaking", which is regarded as the most important skill.

Secondly, the student informants want to include some grammatical applications.

Finally, they emphasized the need of pure medical English not detached from semi-medical English and general English. They state that they do equally need all the three constituents.

In conclusion, the student informants opine that there is no fair match between the current course contents and their wants and needs.

5.3 Structured Interview Analysis

5.3.1 Overview

Structured interview is the other tool used in collecting the data of the present work. The subjects of this device are the members of the teaching staff who are involved in the teaching process of the medical English programmes (see 4.2.5). The procedure of analysis of the structured interview instrument was conducted under the following heads:

- Qualifications and training of the subjects.
- English implementation and students' attitudes and motivation aspect.

- Assessment aspect.
- Needs aspect.

5.3.2 Interpretation of the Data Collected

5.3.2.1 Qualification and Training of the Subjects

In the investigation of the learner needs, it is important to take into consideration all the related behaviours. These include the qualifications, teaching experience and training of the teachers. Therefore, the first aspect of the structured interview can be described as a preliminary phase, as it introduced those interviewed, and elicited some personal information about their background, degree in science, academic designation, experience and training in the field of ESP.

In Yemeni universities, according to the academic rules, the members of the teaching staff are designated on the basis of degree and experience, these academic designations are in the following sequence (from the lower post to the higher post): Instructor/tutor, assistant lecturer, assistant professor, associate professor and professor.

A majority of the medical English teachers (80%) are holders of B.A. Degree obtained from Yemeni universities. Although, some teachers have good experience of teaching general English courses, this is not sufficient to qualify them to teach ESP courses. It is improper and somewhat deficient for a teacher holding a B.A. Degree to teach ESP programmes, because teaching ESP requires higher qualifications and greater experience and

specialization. Untrained teachers may not have the sensitivity needed for conducting such programmes.

A small minority of the medical English course teachers (20%) has an M.A. degree, also received from the University of Aden. Unfortunately, all the practitioners of the medical English course at the Faculty of Medicine do not receive any training in the ESP field. They have not even conducted any research in the area of ESP.

As a matter of fact, teacher training for ESP or EGP is problematic. It can be considered as the most acute problem in different parts of the world in general, and in the Third World Countries in particular.

5.3.2.2 English Implementation and Students' Attitudes and Motivation

Aspect

In spite of, English being the medium of instruction in the Faculty of Medicine, the students do not use it frequently, either in the English subject classes or in the specialized subjects classes such as anatomy, histology, embryology, biochemistry, etc. One of the teacher informants reported.

We always encourage the learners to practice English conversation and use it at least in the English classes, but most of them hesitate, therefore, we sometimes prefer to use the students' mother tongue in order to enable them to understand the lectures.

A large number of the teacher informants (60%) pointed out that they use the students' L1 in very limited situations, particularly, when they find it necessary to explain a certain point or argument. Whereas, the remaining (40%) stated that they never use the students' mother tongue, instead they opt to use simple English especially in teaching the medical English subject.

One of the important benefits of this enquiry was that it gave an opportunity to the teachers to put forth their most common difficulties, which hinder their students to use English properly (refer to appendix 2, item 9).

The first difficulty, which all the informants mentioned is that, the English of the learners is very poor. Interestingly, this is the same constraint as expressed in the student informants instrument "questionnaire", i.e. they do not have enough knowledge of general English (constraint No. A item 7, questionnaire). Although, the interviewees used different expressions, but all those expressions amounted to a single notion, i.e. lack of sufficient knowledge in English.

Most of the informants interviewed ascribed the students' weakness in English to their previous English education in basic and secondary schools. In Yemen, English is taught, as a foreign language to which there is a limited exposure, lack of adequate textbooks, incompetent teachers, inefficient methods and techniques of teaching.

The second difficulty, which the teacher informants referred to, is the limitation and complexity of the medical terms. The first year medical

students are at their starting point, therefore, they do have serious difficulties in handling the complicated medical lexicon, which has come from foreign languages. In short, they do not have sufficient medical terminology, which may help them to communicate effectively in the medical context. Savory (1953) supports this view, when he says:

Among the specialized users of English, medical English holds a distinctive position. Medical vocabulary relies heavily on a specialized lexicon a great deal of which is not native but Latin and Greek. With a growing tendency towards specialization, medical lexicon has a huge stock of technical terms used by specialists, encompassing multifarious disciplines and specialties that lie within the orbit of medical science.

In this respect, the teacher informants were asked about the students' attitudes and motivation towards the English subject. In the investigation of the learner needs, it is important to examine all the related aspects such as difficulties encountered, attitudes and motivation, etc. One of the items, which was used to check, was the attendance rate of the students in the medical English classes.

The students' attitudes and motivation towards the English subject and the teacher of English too can be observed by examining the attendance of the students in the English classes. The attendance though being obligatory is poor, not all the students attend the English classes. About a quarter of the students (24%) do not attend the English lectures, in

spite of the fact that attendance is taken regularly in order to control absenteeism among the students.

Then, the teachers were asked to state frankly whether the students were adequately motivated or not by English. Sixty percent of the interviewees informed that the students' motivation is higher (positive sign), whereas 40% reported that it is low, i.e. a negative sign for learning a foreign language.

In conclusion, the teacher informants were asked whether the time spent in teaching medical English subject (4 hours per week) was sufficient or not. Interestingly, 50% stated that it was enough and the remaining 50% wanted to increase the time allotted for teaching English.

5.3.2.3 Assessment Aspect

Teachers are the best persons to evaluate the teaching material. Therefore, it is crucial to take into consideration the subject teachers' views in any evaluation process.

Prior to the evaluation, the teachers were asked about the availability of the ESP textbooks and references. All the informants agreed about the lack of reference books in the field of ESP in general, the situation being worse in the area of medicine.

One of the informants said:

The situation is very difficult due to the lack of textbooks for students and references for practitioners. We have never attended any training, workshop or conference in the ESP field. Therefore, it is very difficult to provide appropriate materials, which would meet the needs of the learners appropriately.

Regarding the utilization of the current medical English course for the academic needs of the learners, the informants informed that, the course teaches purely medical English materials. This type of English would definitely help the learners to follow up their studies in English, but not to a great extent, because of the reasons just mentioned above.

Then, the interviewees were asked about the benefit of the medical English course regarding the four-language skills, viz. listening, speaking, reading and writing. Table (5.18) states the views expressed by the teachers of the English subject.

Listening	03%
Speaking	28%
Reading	63%
Writing	16%

Table (5.17) : Utilization of the medical English course for teaching the language skills as viewed by teachers

The teaching staff was of the opinion that reading skill has the greatest implementation 63% in the medical English course. Some of the informants pointed out that they try to expose the students to practical

conversation while teaching different exercises of each unit. Therefore, speaking skill has a fair application (28%). Unfortunately, listening skill has obtained the poorest implementation (03%), despite its importance as a productive device. "Listening nowadays is considered as the most important skill in learning any language, because it provides impetus for the learning of other skills" (Shayea, 2004:18). The following figure illustrates the frequencies of the four language skills in the medical English course as perceived via the practitioners of that course.

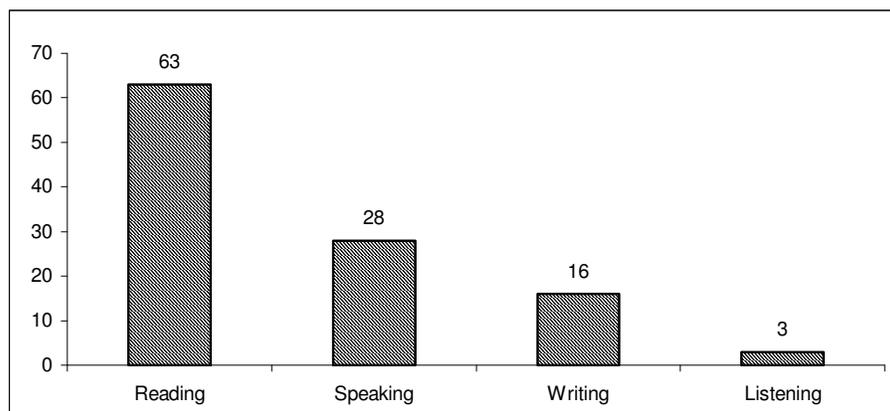


Figure (5.2): Frequencies of the language skills as perceived via teachers

In this section, the interviewees were asked about the application of general English language in the current course, i.e. to what extent, the medical English materials help the learners to communicate outside their specialization (i.e. social life situations). All the informants replied that the medical English course concentrates on pure medical English language. Therefore, the usefulness of this kind is very poor outside the medical cycle.

In fact, social settings need a different type of English, which is totally different from the variety applied in medical studies.

Finally, the last item in the evaluation parameter is about the benefit of the current course in general. In this respect, the responses varied from one group to another. Thirty percent teachers said that it is useful, whereas 40% reported that it is somewhat useful, meanwhile 30% stated that it is not useful.

5.3.2.4 Needs Aspect

This part is concerned with the investigation of the needs of medical learners as viewed by the teacher informants. Since the subject practitioners are in close proximity of the students and are familiar with their environment, they will be in a far better position to provide proper insights into the needs of the learners. The teachers approach to 'needs' will be greatly influenced by their practical experience as well as by their own philosophy and conception of their role.

The needs aspect was initiated by an item to elicit information about the necessity of adding supplementary material to the medical English materials in use (refer to appendix 2, item 19). All the informants strongly stressed the need to add intensive additional materials, particularly, in English for general purposes. Moreover, some of the informants described

the current materials as inadequate. Interestingly, they used some medical terms such as 'paralyzed', which expressed the shortcoming of that course.

Regarding the students' future career, a question is designed to examine to what extent the current medical English course may help the participants to communicate effectively in their profession. Most of the informants (60%) said that it would meet the occupational needs of the learners, because it teaches purely medical language, which constitutes the major feature of the professional contacts, viz. "English in the medical context". The remaining number (40%) indicated that it would not match successfully that kind of needs, because it does not involve general English language, which is an equally important constituent.

"It would be a pity if ESP programmes were treated as an independent aspect of language teaching, which would not be appropriate because language teaching is indivisible" (Brumfit, 1977).

The subjects of the structured interview were asked to state whether the medical English course met the thorough needs of the learners, i.e. in-study "academic needs" and post-study "further education and future profession needs".

Interestingly, half of the informants (50%) responded positively, they stated that the current course taught purely medical English to learners of medical discipline, therefore, it met the complete needs of such learners. Whereas, the other half (50%) responded negatively, they stated that it circled around a limited sphere, i.e. medical orbit, therefore, it just taught

only a small segment of English, hence, it did not meet the entire needs of the participants. They said that the course should be re-designed in order to match the precise needs of the candidates.

One of the fundamental principles underlying learner centered systems of language learning is that teaching/ learning programmes should be responsive to learners' needs. It is now widely accepted as a principle of programme designing that needs is a vital prerequisite to the specification of language learning objectives (Brindley, 1989: 63).

The last question is the most important one; it can be regarded as the core of the structured interview instrument. It sought information from the teacher informants regarding the needs of medical learners in order to function effectively in practical English communication either in the specialized discipline "medicine", or different situational settings. In response to this item, 40% of the informants suggested that, since these learners are specialized in medical stream and since they are in the initial stages (i.e. first year), they do need to pay much attention to that kind of English, which is closely related to their field. Therefore, pure medical English is relatively needed at this stage. Meanwhile, another group (40%) opined that medical English and ordinary English are equally important. The former helps the learners to meet the requirements of the medical studies and the latter has good utility in real life situations, not only for the learners of medicine, but for the learners of English as a foreign language in general. The remaining number of the interviewees (20%) opted for a combination of pure medical

English, semi-medical English and English for general purposes. They pointed out that this combination would meet the different types of needs, i.e. academic and communicative requirements.

5.3.3 Discussion of the Results of the Structured Interview

In the next few pages, the discussion will be devoted to examining the findings of the structured interview. The interviewees are the practitioners who are involved in the programmes of teaching medical English courses. The major aims of the interviews as stated earlier were to elicit the interviewees' perspectives regarding three main aspects: English implementation and students' attitudes and motivation, assessment of the medical materials in use and learner's needs for practical English communication.

As regards the first parameter especially English implementation and its difficulties, the teacher informants indicated that since English was the medium of instruction, therefore, they preferred to use English intensively in the teaching process, even though the mother tongue was widely used according to the tradition of the teaching/ learning process in the Arab states.

One of the common difficulties that hinder the learners in practising English as expressed by the teacher informants is that, the students' English proficiency is not good. The interviewees ascribed it to the students' previous education in the former stages of learning.

Employing the sophisticated medical terminology is another constraint. Length of the words and the texts are a great obstacle in handling and understanding the medical lexicon, in addition to word-formation having irregular prefixes e.g., abdomen (o) - as in abdomenoscropy, bronch (o) – as in bronchgenic, etc. as well as suffixes like –blepsia as in psendoblepsia, -genesis as in thrombogenesis, --malacia as in nephromalacia, etc. (Lado, 1955).

In short, deficiency of the general English language and use of the complicated medical terms, which have come from foreign languages, are the most serious constraints. The former is needed in order to communicate in different social situations and the latter is required to express scientific concepts in medical contexts.

With reference to the students' attitudes and motivation, a large majority of the informants (60%) perceive that, the students' motivation was high which indicated a positive sign towards the learning of English. The remaining number (40%) viewed that the students' motivation was low, because of the constraints just mentioned above and the most important factor was that, the current course did not exactly match academic and professional needs of such learners. Unfortunately, this demonstrates a negative barrier in learning the target language.

Prior to the assessment parameter, the interviewees complained about the insufficiency of ESP textbooks and references for both ESP practitioners and learners. In respect to the benefits of the medical English

course in-study, and outside the discipline of the subject specialization, the respondents stated that it helped the learners in their medical studies, but not much. Meanwhile, the utilization was very limited in social life communication, because the course did not include the kind of English, which is used in such situations.

In brief, they described the course as somewhat useful for medical study requirements, but not helpful to the participants to gain proficiency in English, which is needed outside the discipline of the students' specialization. The ESP courses teach a specific segment of English that enables the learners to inter-act in a small area of their subject specialization.

In respect to the needs parameter, which is the most important section in both the instruments of the study, discrepancies were found among the responses of the informants. Variations were reflected in the assessment of the medical materials in use in relation to academic and professional needs as well as the entire language needs of the subjects of the present study.

Considering the academic needs, some informants asserted that, the current course emphasized pure medical language, which is the scope of the students' major stream and certainly it meets the academic requirements. Another group stated that it matches the future career needs, but not to a great extent. Meanwhile, the other group complained that, it does not meet

the entire needs of the learner neither in-study needs nor post-study requirements.

In conclusion, the informants were asked to give their opinion in order to narrow down the accurate learner needs, i.e. which kind(s) of English do those learners precisely needed?

The teacher informants reported that the current course comprises pure medical language, which meets a part of the students' academic and professional needs. Nevertheless, General English and Medical English are equally important, because each one has its own role in the two areas of science and communicative situations.

Edwards (1974) describes general English language as the base or foundation of ESP communication.

5.3.4 Needs as Perceived via Teaching Staff

One of the central research questions that the present work attempts to answer was: What are the learners' needs as perceived via the members of the teaching staff?

The structured interview was chiefly administered in order to answer thoroughly the above addressed question. So, the teacher informants' perception towards the entire needs of the first year medical students can be summarized as under:

Firstly, they (here teachers) emphasized that the learners were at their rudimentary stage in the medical field where they are mobbed with strange unfamiliar medical terms. Therefore, such learners needed great access to familiarize themselves with the long complicated lexicon.

Medical Lexicon, which is the accepted international terminology of the discipline and the profession, is the prime need of the ESP learners of medicine irrespective of whether his/her own language is Arabic.

Secondly, some informants claimed to focus thoroughly on pure medical language in addition to medical terminology.

Some ESP practitioners have suggested the use of subject specific materials for the English programme so that the students can get some practice as to how to tackle their specific materials in the field of their specialization (Tickoo, 1988; and Dudley – Evans, 1984: 296).

Thirdly, another group suggested that general English material be introduced as this type of English has twofold utilization. On the one hand, it enables the ESP learners to operate smoothly in their subject of specialization, because EGP is the foundation of ESP (Edward, 1974). On the other hand, it helps the ESP learners to inter-act outside the field of their discipline where day-to-day English is required. (Mountford, 1988: 78).

Finally, a combination of pure medical English, semi-medical English and English for general purposes was recommended by some teacher

informants as they felt that combination of these three would meet the total academic, professional and further educational needs of such learners.

In conclusion, different perspectives were provided. One group wished to focus mainly on pure medical English, the other suggested general English language and yet another recommended a combination of the three constituents "pure medical English, semi-medical English and general English".

5.4 Juxtaposition of the Results of the two Instruments of the Study

It would now be feasible to compare and contrast the instruments of the data collection methods, the means to examine the similarities and differences between the results of the two methods of investigation used in the study, i.e. questionnaire and structured interview. Analogy and juxtaposition of the results obtained from the data by the triangulation procedure enrich and strengthen the reliability of the findings and conclusions reached

As stated earlier (5.1.2), group-wise analysis would be administered through comparison and contrast between the perspectives of the two parties (teacher informants and student informants) so that the results obtained would be more objective and reliable. Brindley (1989) states:

Teachers and learners are likely to have differing expectations about what should be learnt and discrepancies are likely to arise if the information is not shared by both parties

about their expectations. Such information can form the basis on which agreement can be arrived at between what learners want and what teachers think they need.

As regards implementation of English, there is a significant difference between the responses of the teacher and student informants. The teachers would like to make frequent use of English by the two constituents of the teaching and learning processes (i.e. teacher and learners). One third of the students prefer rare implementation of the mother tongue, particularly, in the clarification and interpretation of the difficult concepts. In Arab universities, many lecturers of English use the mother tongue to clarify difficulties of their subjects.

There is a total concord between the two groups of informants concerning the students' weak standard of English. One of the most common constraints in the situation of learners of English as a foreign language is the lack of proficiency in English as reported by the teacher informants. Comparatively, the student informants expressed the most serious issues in the following manner: They did not have enough knowledge of general English, which would enable them to speak fluently.

The other constraint, which is stated by both the parties, is the limitation and complexity of the long medical terminology borrowed from different foreign languages such as Latin, Greek, Arabic, French, Spanish, etc. Such learners have serious difficulty in grasping and handling such unfamiliar lexicon (Hemangioendotheliosarcoma), especially, when the

learners are beginners in the medical discipline as in the case of the present study.

With respect to the students' motivation phase, the responses revealed some interesting results in their variations. Exactly, three fifths of the teacher informants (60%) reported that the students were motivated by the medical English course. Comparatively, nearly three quarters of the students (74%) responded positively. Two fifths of the teachers (40%) stated that the students did not like English classes (i.e. negative attitude towards learning a foreign language). Whereas, just above a quarter of the students (26%) reported that they liked the English subject least of all the other subjects.

In the assessment of the medical English materials in use in relation to the different levels of needs, starting by academic standards, there seemed to be some agreement. The teachers reported that medical English course concentrated on medicine. Therefore, this type of English would meet the academic needs of the learners. Whereas, a good number of the students (68%) pointed out that it met a part of their academic needs, but not to a great extent. Meanwhile, nearly a third of the student informants (32%) mentioned that it did not meet their study requirements.

All the teacher and student informants stated that the medical English course did not help the learners to communicate outside the discipline of the study (i.e. social settings), because it taught only pure medical English which moved around the limited field of medicine.

As regards the benefit of the current course for productive and receptive language skills, some interesting results have been received from the responses of the two groups. There is some agreement on the one side. All the respondents stated that reading skill was over-emphasized and practised, whereas the other three skills were badly ignored. On the other side, variations were found regarding the practice of the other language devices viz. listening, speaking and writing. In brief, Table (5.19) illustrates the similarities and differences between the responses of the two groups.

Language skill	Students' responses	Teachers' responses
Listening	07%	03%
Speaking	15%	28%
Reading	78%	63%
Writing	26%	16%

Table (5.18): Application of the language devices as concluded by the two instruments of the study

Finally, the kind of English needed by the students was focused on, as it is one of the principal questions addressed by the researcher. In this regard, all the students (100%) desired a combination of pure medical English, semi-medical English and general English language. Discrepancies have arisen among the responses of the teacher informants. Some teachers favoured pure medical English, while others indicated their preference for the combination of the two types (medical English and ordinary English). Interestingly, the two groups are equal in number (40%). The remaining

number of the teacher informants (20%) reaffirmed the students' desires and wants, i.e. opted for a combination of the three constituents.

5.4 Conclusion

Chapter Five has been devoted to analyze and discuss the data collected. Prior to the interpretation process, the analytical devices were examined by some measurements as inter-rater reliability and group-wise analysis in order to ensure the accuracy and reliability of the results reached.

Inter-rater reliability procedure has indicated a great correspondence between the researcher's analysis and the judge's results. It was thus established as a positive criterion of the reliable analysis.

Group-wise analysis (comparison and contrast) between the data obtained from the two research instruments (questionnaire and structured interview) have revealed agreement among some aspects of the research levels regarding the difficulties which hinder the learners to use English effectively, the application of the medical English course outside the students' stream, the benefits of the current course for academic and professional needs as well as the entire needs of the learners. However, some disagreements have cropped up concerning the frequent use of English, students' attitudes and motivation towards the medical English classes and the implementation of the four language skills in the course.

Further, Chapter Five can be considered as one of the most important chapters, because it has answered most of the research questions such as:

- What kind of English does the course teach?
- Can the current course achieve its proposed objectives?
- Does it match the academic needs of the learners?
- Does it meet the professional needs of the learners?
- To what extent does it help the learners to communicate outside the discipline of the subject specialization?
- To what extent does it meet the students' entire needs (in-study and post-study)?

Furthermore, this chapter has answered two of the principal research questions addressed by the researcher viz.

- What are the needs of the medical learners for practical English communication as perceived by the fellow students?
- What are the needs of the medical learners for practical English communication as perceived by the teaching staff?

Most of all, this chapter addressed one of the most important research hypotheses from the perspectives of teachers and students viz.

Pure medical English in its own right does not satisfy the adequate needs of the learners. Such learners need a combination of pure medical English, semi-medical English and general English.

CHAPTER SIX

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

CHAPTER SIX

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Chapter Six is the last chapter of this work. It presents a brief review of the survey conducted and summarizes the results arrived at in the analytical procedure. In addition, it presents in brief the proposed schemata, conclusions and recommendations and finalizes this study with a concluding word for further researches.

6.1 Summary and Review of the Survey Conducted

As already pointed out earlier that the present work under investigation has made an initial attempt in an area, which is crucial for the learners of English either as a foreign or second language. In brief, it investigates the needs of ESP learners for practical English communication with reference to the learners of medical discipline. No doubt, this field is vital in which it merits great attention, as it is closely related to human health.

In the process of data collection methods, systematic and rigorous procedures as piloting, validation and reliability criteria had been followed to avoid any guess-work and ensure reliable results, which may provide

valuable insights for course designers, researchers, ESP teachers and learners altogether.

The most common instrument of the questionnaire contained twenty two items (see Appendix 1) which was administered to one hundred (100) student informants and a structured interview consisting of twenty two items (see Appendix 2) was given to ten teacher informants who are actually involved in the teaching of the concerned students. The major aim of the two instruments was to gather information from the two different perspectives (i.e. students and teachers) regarding three aspects: English implementation and students' attitudes and motivation, evaluation of the medical English materials is use and needs (referred to in 4.1.2 and 4.2.3).

Considering the first phase, there is a significant difference between the responses of the two groups viz. all the teacher informants opted for the frequent use of English at least in the area of the study. While, a small minority of the student informants (33%) opted for a rare application of the mother tongue, particularly, in the clarification of the difficult points and of the new conceptions in scientific studies.

Regarding the students' attitudes and motivation towards the medical English course, obviously, there are some variations; most of the student (74%) and teacher (60%) informants reported positively "a positive attitude towards learning a foreign language", whereas the remaining number (40% of the teacher informants and 26% of the student informants) stressed negatively "a negative attitude towards learning a foreign language".

As regards the second phase (evaluation aspects), all the student and teacher respondents asserted that the medical English materials in use taught pure medical English. Though, considered a truism it has to be said time and again that medical English constitutes an essential component of the students' subject-specialization. But this kind of English does not help the students to function effectively in other major areas such as practical work, occupation and social life settings. In short, it meets just a small area of the learners' entire needs.

6.1.1 Needs Aspect

The analyses of the data obtained concluded that, there are no limited or specific situations in which the students need to use English, i.e. there are no mono-needs for the learners of English as a foreign or second language. The ESP learners of the medical discipline do need to implement English for multi-applications, i.e. poly-needs; to use English as a means of learning medical science, in research, reading medical journals, attending seminars, etc. (i.e. academic needs). Academic needs therefore refer to the university requirements or study prerequisites. The proposed course should involve some material, which would assist the students to cope with university study requirements as mentioned above. In other contexts, they need to apply different types of English as in practical fields, hospital and occupation (i.e. practical needs). Practical needs indicate the prerequisites of the medical students in the practical field either in the area of Medical Faculty or in the

hospital, which is in addition to the occupational needs. The medical students have to be exposed to some applicable programmes during the entire years of study, as they have to meet and interview patients in the hospital, carry out experiments and note down or talk about the results in English. In such situations, the students need the type of English, which helps them to communicate and convey scientific ideas in the practical field. Such prerequisites are known as practical needs. While yet in other contexts, they may need to employ another kind of English, i.e. outside the discipline of the medical specialization as in social settings, which could be termed as general or sociolinguistic needs. Sociolinguistic needs are the social needs, ordinary needs or general needs. They consist of the type of English, which is required in social life settings.

So, the medical learners of English as a foreign or second language like the learners of the other disciplines, do need to use English not only in the subject of specialization (i.e. medicine), but they need to communicate in English in external situations outside the medical field such as using the internet, traveling abroad, filling in the forms and even having informal contacts between the colleagues of the same stream.

Therefore, the medical learners do not only need one kind of English, i.e. pure medical English, but they require English to satisfy poly-needs like English as a pre-requisite for higher studies, practical application, and for inter-action in society.

The needs aspect therefore is the major concern of the present work and one of the principal research questions addressed by the researcher. However, some variations arose among the teacher informants; regarding their perspectives. One group opted for medical English; while another group indicated its preference for a combination of medical English and general English, however, the third group of teacher informants said that the learners of medical discipline in order to function effectively in English as a means of learning medical sciences and as a medium of communication in the situations of practical work, occupation and social settings, should be exposed to the integrated model of medical English, semi-medical English and general English. Fortunately, all the student participants reaffirmed the suggestion of the third group of teacher informants.

6.2 Proposed Schemata

It can be concluded that, the results of the data analysis process have shown that, the subjects of the present study need a combination of pure medical English, semi-medical English and general English, in addition, some respondents desired improvement in grammar (referred to in 5.4).

On the bases of the findings of the study, a proposed schemata is prepared to adequately meet the entire needs of such learners. It consists of a course book in a form of eighteen units and a textbook of supplementary grammar in the medical context in a condensed form of six units (see Appendices 3 and 4).

The learners are exposed to practise all the language structures, respectively, listening comprehension, conversation practice, reading, writing skill, grammatical usage and medical terminology.

The selection of the topics and activities are proposed to be introduced and practised not only for learning theories of a foreign language as communicative approach and functional–notional approach, but also on the basis of recent methods as genre-based approach and integrated skill approach which requires proportionate attention and practice to be given to speaking, reading, listening and writing in all or most of the projects and activity work. The same skill-based approach also takes into account the basics of organizational skill and develops cognitive skills.

Abdulla (1987:110) points out that in using the integrated approach the students have the chance to be exposed to a model, which provides them with a context that makes clear certain forms of the language and the communicative functions characteristic of academic writing.

6.2.1 Objectives

As a matter of fact, the well-planned ESP course should be designed in order to achieve particular objectives; and such objectives should be well defined and directly related to the accurate needs of particular learners. “Clear objectives make programme designing much easier” (Orr, 1998: 2).

Accordingly, the proposed scheme is prepared to achieve some general objectives and some academic.

6.2.1.1 General Objectives

- To develop the students' listening comprehension skill in order to cope with the communicative needs of the different social settings.
- To encourage and promote oral interaction and communication in English between the learners of the same discipline, particularly, in informal contacts.
- To encourage the students to use English effectively with the people of other disciplines and social communities in general.
- To develop the students' confidence in their use of English by regular practice by introducing them to formal and informal styles, greetings, giving and responding to instructions, asking and answering questions in oral performance, etc.
- To develop extensive and intensive reading skills through the implementation of reading comprehension texts accompanied with the recommended references.
- To develop the students' writing device by general practice as filling in forms and applications, writing formal and informal letters and writing reports and topics in ordinary English.
- To develop the students' personal information storing and locating skills.
- To improve the students' level of proficiency in the social aspects of language which are needed in real life communication.

6.2.1.2 Academic Objectives

- To grasp the general theme of lectures presented in English either in the specialized subjects or faculty and university subjects.
- To develop the device of listening comprehension so that the students can follow the lectures, participate in scientific discussion and projects carried out in English.
- To encourage the students to speak effectively in seminars and summarize scientific medical notions orally.
- To encourage the students to describe orally the results of the practical work projects, experiments, etc.
- To interact with peers, workshop instructors, tutors, lecturers and administrative staff in the area of the medical discipline.
- To gain knowledge of note-taking techniques and summaries.
- To write assignments, practical work reports, examination answers and case history reports of the patients.
- To understand and use basic grammatical structures related to his/her subject specialization.
- To have primary ideas about principles of a small-scale research project.
- To raise the overall performance level of the students so as to enable them to function successfully in their future careers.
- To expose the students to as many relevant learning opportunities as possible so that students get used to the language need on the job.

6.2.2 Constituents of the Course Book

As already mentioned earlier, the proposed schema constitutes three main phases in addition to the textbook of supplementary grammar in the medical context. It could be said that each version has its own function. For

instance, the pure medical English constituent or registered English is designed to meet the academic needs of the learners. The semi-medical English constituent is prepared to match the needs of the practical work and occupation. The general English constituent is prepared to meet the requirements of the sociolinguistic situations. In addition, a supplementary grammar is annexed, because the tertiary learners of scientific disciplines are expected to deal with a high level of grammatical accuracy (Dudley – Evans, 1985) (refer to Appendix 3).

6.2.2.1 Registered English

Registered English refers to specialized English, the type of English, which is used for particular learners in specific area of subject specializations (Firth, 1959:106). In the present context, it demonstrates pure medical English. The subject-specialized data is essential for the learners of the medical field. At this stage, the students need to gain some pure medical information, which is relevant to the discipline of the study.

The students of the medical discipline are expected to be exposed to some topics of pure medical English in order to match their academic needs. The proposed course book contains six units of pure medical English topics. Each unit of this type is annexed by a section of medical terminology, because the students are expected to tackle unfamiliar medical lexicon, which has come from foreign languages like Latin, Greek, etc.

6.2.2.2 Semi-medical English

Semi-medical English is the language which is taken partly from scientific English and partly from ordinary English; it is a combination of these two components. It could be pointed out that this type of English is designed to meet the needs in the areas of occupation, practical work and general scientific knowledge. In the above situations, the medical students cannot function effectively by application of only pure medical English, though this type is fundamental, but it cannot match adequately the whole needs of such learners. Accordingly, the medical students need to use integrated combination of scientific English and general English. Therefore, the proposed scheme includes six units of semi-medical English (a third of the course contents).

6.2.2.3 Ordinary English

Ordinary English is known as General English or English for General Purposes. Medical learners like all the other learners of English as a foreign and second language; need to use EGP in many communicative situations, because ESP cannot be applied in various social settings as it is designed and defined to meet specific needs of the learners. Hence, the proposed scheme involves six units of general English topics (a third of the course contents).

6.2.3 Supplementary Grammar in the Medical Context

In basic and secondary education, the students need to have great access to vocabularies, but at the university stage a great deal of accuracy in grammar is needed. Therefore, the learners of the medical discipline require to be exposed to the practical usages of grammar in relation to the field of the specialization. Hence, a supplementary grammatical material is offered to promote the proposed course book. This textbook is a collection of selected grammatical topics commonly used in academic scientific writings. It is an extra developmental skill designed for intermediate and advanced levels for the learners of English as a foreign and second language, which focuses on a high level of grammatical content. In addition, it promotes the development of all the language skills in general, and writing device in particular. Further, supplementary grammar in the medical context encourages the students to practise authentic topics relevant to the subject–specialization of such learners, i.e. medicine.

Pedagogically, the proposed textbook produces grammar not as separate rules, i.e. forms and traditional way of a structural method, but it provides grammatical usages in the common core approach (Kennedy and Bolitho 1991:50) and a learner–centred approach (Hutchinson and Waters, 1987: 92), through a combination of rules, uses, meaningful forms and analytical structures altogether.

The supplementary grammar textbook comprises six units; each unit discusses more than one grammatical structure, but in an authentic

application to the subject-specialization of the learners. A sample unit is selected to explain the sequence of the grammatical structures, techniques of presenting the usages and checking the students' comprehension (see Appendix 5).

6.2.4 Course Features and Language Structures

6.2.4.1 Receptive Skills

The proposed scheme lays great emphasis on the receptive language skills "listening and reading" as they play a very important role in developing self-study techniques and keeping up with the prerequisites of the medical studies. Further, some attention is also paid to listening comprehension through intensive activities performed by native speakers of English. In contrast to the former courses which focused only on the reading device (referred to in 5.2.2.3 and 5.3.2.3). Therefore, the students are expected to practise a variety of listening comprehension activities from the course book (see Appendix 3 Unit 12). A useful exercise is to make the students listen to taped lectures, which help them to improve their listening ability.

Equally, important is the reading device in the academic field, because it is regarded as a long-term skill, which is also very essential for the students and helps them not only during their academic period but also throughout their life (Bin Taya'a, 1996: 80). Accordingly, some reading comprehensive passages are introduced in some sections of the proposed schemata.

What is really beneficial to the students in this regard is the authenticity of the activities. For developing of the reading skill it is necessary to provide the students with suitable reading material of their level either pertaining to their subject of specialization or even outside the area of specialization (Greenwood, 1981).

6.2.4.2 Productive Skills

Speaking skill is an important device commonly used in the authentic communication of the target language in social settings and conveys the intended ideas orally in the academic situation (Littlewood, 1981: 20). Some studies regard speaking device as the least needed skill in most needs analysis (Robinson, 1991: 105). However, the medical students are exposed to practise conversation in groups, pairs and individuals, because it is needed in the applications of practical work, occupation and in real life situations.

Writing is needed to take notes from the lecturers, answering examination papers, writing a case history, medical reports and research papers. Hence, the proposed course provides insights in writing variety as note-taking techniques, medical abbreviations and principles of research writing (see Appendix 3. Units 11 and 17).

6.2.4.3 Medical Lexicon

“Specialist vocabularies are essential for an ESP learner to acquire them systematically” (Khan, 1986:286). Accordingly, each unit of the registered English component is appended by a section of medical terminology, because the students are expected tackle unfamiliar complicated medical lexicon, which is not English in origin. This part is presented on the basis of the analytical approach (Allwrights, 1977) in which it analyses the long medical terms (Hysterosaplingooophorectomy) into its constituent units, the meaning of each unit listed separately and then the meanings of all the units are combined in order to arrive at the definition of the whole term.

6.2.4.4 Grammar

The results of the data analysis process revealed that some respondents opted to have some materials in grammar, about a third of the student informants (34%) preferred to have a large access to grammar in supplementary materials (see 5.2.2.4). Such learners perceive the importance of the usage of grammar correctly in the scientific academic writings as the field of the medical studies.

Therefore, a textbook of grammatical supplementary material has been proposed in order to promote the course book. In addition, grammatical

concepts are briefly dealt with in the three constituents of the course book viz. registered English, semi-medical English and ordinary English.

6.3 Conclusions

To sum up we can then say that in the present study learner needs have been the main focus. Each type of need is defined and determined to match a particular area of application, i.e. academic requirements, practical requirements and social requirements. There are certain areas in which this work seems to have made a modest contribution. Several conclusions can be drawn from the descriptive analysis of the data obtained; the following are the main ones arrived at in the present study.

1. The results of the study have already shown that the medical English materials in use at the Faculty of Medicine, University of Aden do not match the entire needs of the learners.
2. Medical English alone does not satisfy the needs of such learners.
3. Semi-medical English and general English are also needed to express basic functions in the practical work, occupation and even the daily communication with colleagues as well as lecturers and the medical staff in the hospital.
4. Along these lines, the present work presented a proposed schemata for a medical English course in the form of a dosage "Eighteen units of a course book" and a capsule form "Six units of supplementary grammar in the medical context.

As discussed earlier, the course book comprises three varieties of English:

- (a) **Registered English:** This type provides the learners with the academic needs, which qualify them to cope with the requirements of the study in medical discipline.
- (b) **Semi-medical English:** This variety is prepared to meet the pre-requisites in the practical work and occupation.
- (c) **Ordinary English:** It is designed to match the sociolinguistic needs, i.e. to help the students to function effectively in different social settings.

In addition to the above three constituents, a supplementary grammar textbook is proposed to up-date the course book in order to improve the students' writings while writing medical reports, attending seminars, answering examination papers and writing small scale research projects, because the tertiary learners need a high accuracy of grammar at this stage.

The study has therefore successfully answered the three principal research questions viz.

- How can the learners use English effectively to pursue their medical studies?
- How can the learners use English effectively in their field of work / occupation?
- What do the learners need in order to use English effectively as a medium of communication in different social settings and situations?

Eventually, this chapter addressed the last research hypothesis, that is: Pure medical English in its own right does not satisfy the adequate needs of the learners. Such learners need a combination of pure medical English, semi-medical English and general English.

6.4 Recommendations

Several recommendations emanating from this study, can be summarized briefly in the following:

- It is recommended that medical English should be taught in combination with semi-medical English and general English.
- The present writer strongly recommends the inclusion of materials drawn from students' culture, particularly, those related to the scientific discoveries revealed in the Holy Book "Qurán" and Islamic achievements in the field of medicine.
- ESP courses offered at the University of Aden in general and the Faculty of Medicine in particular, should be based on an assessment of the learners' entire needs.
- The perspective of the learners should be taken into consideration in the evaluation process or designing any ESP materials.
- It is highly recommended that an intensive ESP training for the teaching staff is absolutely essential.
- Refreshment courses, session workshops and conferences should be conducted from time to time; in addition, the latest ESP references should be readily available so that the ESP practitioners get acquainted with the latest innovations in the field of ESP.

Finally, Chapter Six is considered as the most important one, it can be described as the core contribution of the present work. In this chapter, the learner needs are well defined and determined, further they are specifically subdivided on the basis of the applicative features viz. academic needs, practical needs and sociolinguistic needs. Most of all, the proposed schemata of this study is provided in this chapter, which consists of a course book of eighteen units and a textbook of six units (supplementary grammar

in the medical context). The schematic schedule of the course book is presented to match adequately the entire needs of the learners (i.e. academic, practical and sociolinguistics). Hence, three constituents of English implementation are integrated viz. registered English, semi-medical English and ordinary English. The selection of the topics has been equally distributed among the three components (i.e. six units for each). Pragmatically, each constituent is prepared to meet a particular type of need, i.e. registered English matches academic needs, semi-medical English matches practical needs and ordinary English matches sociolinguistic needs.

Moreover, each type of need is defined and determined to match a particular area of application, i.e. academic needs refer to the requirements of the university studies, practical needs indicate the prerequisites of the practical work and occupation, while sociolinguistic needs demonstrate the requirements of the social settings.

6.5 Concluding Word

ESP is a recent phenomenon as it emerged just in the 1960's, therefore, great importance should be given to cover various aspects of this science in different parts of the world in general and the Arab World and Third World countries in particular.

Although, medical discipline is vital, nevertheless, the researches in this field (English for medical studies) are very few and it could be said that

they are very rare. It is fervently hoped that the results of the present study will give valuable insights to the learners of English as FL and L2. However, this study has made a beginning and does not claim to be a final comment on most of the issues. Certainly, there will be further research in this very important area for the benefit of medical students especially in under-developed countries in general and particularly the countries of the Arab world.

Definitely, there are issues in the field of English for medical studies that are still needed to be researched. Hence, further researches are seriously needed to investigate this crucial area by comparative procedures or other perspectives in order to reaffirm the results arrived at or to give a clearer picture of such variables, if any. Furthermore, the present study can serve as a platform for the other closed disciplines as pharmacy and dentistry, which need to be investigated thoroughly.

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APPENDICES

APPENDIX – 1

QUESTIONNAIRE

This questionnaire is one of the instruments which is being used to collect data regarding the needs of ESP (English for Specific Purposes) learners for practical English communication, particularly, the needs of the first year students at the Faculty of Medicine, University of Aden. Below are four sections. In section one, you are kindly requested to give some personal information. In section two and three, you are asked some questions relating to your motivation and attitudes towards English and your views about medical English materials in use. Finally, in section four, you are expected to give your perception about your needs for practical English communication. Your cooperation in filling this questionnaire as accurate as possible will be highly appreciated.

=====

Date : _____

Put a tick () mark or fill in what is appropriate.

Section – I : Personal Information and Previous English Education.

1. Sex : (a) Male ()
 (b) Female ()

Age () Years Old

2. When did you finish your secondary education ?

----- ; in which place?

- (a) Urban ()
(b) Rural ()

3. For how many years have you studied English in basic and secondary stages of education?

(----- years)

4. Have you studied any English course / courses after you finished your secondary education?

(a) Yes ()

(b) No ()

If affirmative, mention :

(a) Place _____

(b) Duration : from _____ to _____

If possible mention :

The title of the course : _____

The author's name : _____

=====

Section – II : English Implementation and Students' Attitudes and Motivation :

5. What is the medium of instruction in your special field at the Medical Faculty?

(a) English ()

(b) Arabic ()

(c) Both ()

(d) If (c) which one is used more.

6. The reference books for your medical studies are in :

(a) English

(b) Arabic

(c) Both

7. Do you always use English in the class?

- (a) Yes ()
- (b) No ()

If negative, number the following reasons from most important to least :

- (a) Because, I do not have enough knowledge of general English, which may help me to speak fluently. ()
- (b) Because, I do not have enough knowledge of medical English, which may help me to inter-act in the medical context. ()
- (c) Because, my pronunciation is not clear enough and the others may not understand me well. ()
- (d) Because, I am very shy of making mistakes. ()
- (e) Other reasons (please specify) : -----

8. How often would you like your teacher to use your mother tongue in the lectures? (Either English subject teacher or the other specialized subject teachers).

- (a) Always ()
- (b) Sometimes ()
- (c) Occasionally ()
- (d) Rarely ()
- (e) Never ()

9. Do you like to attend all the English classes?

- (a) Yes ()
- (b) No ()

If negative, tick (_/) the appropriate reasons :

- (a) English classes are very difficult. ()
- (b) English classes are boring. ()
- (c) English classes are not obligatory. ()

(d) English classes are unnecessary. ()

(e) Others (please specify). ()

10. Compared to your other subjects of specialization, you like medical

English course:

(a) The most ()

(b) The same as the others ()

(c) Least of all ()

11. If the methodology of the teaching of English is changed would you like to :

(a) Increase the time allotted for teaching English ()

(b) Retain the time as it is ()

(c) Decrease the time allotted for teaching English ()

=====

Section – III : Medical English Materials in Use :

12. What does the current medical English course chiefly teach you?

a. Pure medical English ()

b. Semi-medical English ()

c. General English ()

d. Others (please specify) ()

13. Does your English teacher give you supplementary material in addition to your medical English textbooks?

(a) Yes ()

(b) No ()

If affirmative, which kind of English:

(a) Pure medical English ()

(b) Semi- medical English ()

(c) General English ()

(d) Grammar ()

(e) Others (Please specify) : -----

14. Does the medical English course help you to follow the subjects taught in English in your academic study? (Taking notes, listening and understanding lectures and talking to lecturers and colleagues)

(a) Yes ()

(b) No ()

If affirmative, to what extent:

(a) To a great extent ()

(b) To some extent ()

(c) To a limited extent ()

15. Does the medical English course help you to communicate outside your discipline? (i.e., in real life settings).

(a) Yes ()

(b) No ()

If negative, can you mention some reasons:

16. Indicate the percentage (%) of the benefits of the medical English course for the following language skills:

- (a) Listening (%)
 - (b) Speaking (%)
 - (c) Reading (%)
 - (d) Writing (%)
-

17. How did you find the medical English course which you studied in the Faculty of Medicine?

- (a) Very useful ()
 - (b) Somewhat useful ()
 - (c) Not useful ()
-

Section – IV : Needs :

18. Do you read English books other than those you have studied in the Faculty of Medicine?

- a. Yes ()
- b. No ()

If affirmative, which kind :

- (a) Medical Books ()
- (b) Grammar Books ()
- (c) Novels ()
- (d) Others "please specify" : ()

19. Do you prefer adding supplementary material to the current medical English course?

(a) Yes ()

(b) No ()

If affirmative, which one do you prefer to add?

(a) Pure medical English materials ()

(b) Semi- medical English materials ()

(c) General English materials ()

(d) Grammar ()

(e) Others "please specify" ()

20. Would the present medical English course match your professional needs in future?

(a) Yes ()

(b) No ()

If affirmative, to what extent:

(a) To a great extent ()

(b) To some extent ()

(c) To a limited extent ()

21. Does the medical English course meet your entire needs "in-study and post-study for further education or future profession"?

(a) Yes ()

(b) No ()

If affirmative, to what extent?

(a) To a great extent ()

(b) To some extent ()

(c) To a limited extent ()

22. In your view, what do you need in order to function effectively in practical English communication? (In medical discipline or in different situational settings) :

- (a) Pure medical English ()
- (b) Semi-medical English ()
- (c) General English ()
- (d) All the three ()
- (e) Others "please specify" ()

“Thank you”

APPENDIX – 2

STRUCTURED INTERVIEW

Lecturer's name : _____

Academic designation : _____

Special field : _____

Section – I : Qualification and Training :

1. What is your qualification :

- (a) B.A. ()
- (b) M.A. ()
- (c) Ph.D. ()

2. When did you get your last degree? And where?

- Mention: (a) Country
- (b) University:

3. For how many years are you teaching ESP course?

4. Did you receive any training in the ESP field? If affirmative, mention:

- 1. Place
- 2. Period

5. Have you conducted research /studies in the ESP field? If affirmative

mention:

- 1. The title :
- 2. Publishers :

SECTION – II : English Implementation and Students’ Attitudes and Motivation.

6. What is the medium of instruction in the Medical Faculty?
7. How often do your students use English in the medical classes?
8. How often do you use student’s mother tongue in the medical English classes?
9. Do your students have serious difficulty in English? If affirmative, can you mention the most common difficulties?

10. Indicate the percentage (%) of the students’ attendance in the medical English classes?
11. Compared to the specialized subjects, do you think that your students are motivated or not by the medical English course?
12. What proportion of time is spent in teaching medical English course per week? ----- hours.

Is the time adequate?

SECTION – III : Medical English Materials in Use :

13. Are the ESP textbooks / references available in your faculty?
14. What does the medical English course chiefly teach?

15. Does the present medical English course help your students to follow subjects taught in English in their academic studies? (i.e. to take notes, understand lectures, etc.).
- If affirmative to what extent?
16. Indicate the percentage (%) of the benefits of the medical English course for the following language skills :
- (a) Listening (%)
 - (b) Speaking (%)
 - (c) Reading (%)
 - (d) Writing (%)
17. Does the medical English course help the students to communicate in social situations (outside their discipline)? If affirmative to what extent?
18. In general, how did you find the medical English course, which you have taught at the Medical Faculty?
-

SECTION – IV : Needs :

19. Is it necessary to add supplementary materials to the medical English course? If affirmative, which kind of materials?
20. Would the medical English course meet the students' professional needs in future? If affirmative, to what extent?
21. Does the medical English course meet the student's entire needs? (i.e., in–study, and post-study for further education and future profession).
22. In your opinion, what do your students need in order to function effectively in practical English communication (either in their discipline or in different situational settings)?
-

“ Thank you”

Appendix 3

Contents of The Course Book

Unit One	Taking a History <ul style="list-style-type: none"> - Asking Basic Questions about systems and symptoms. - Reading skills: Noting information from a textbook. - Case History: William Hudson - Terminology
Unit Two	Water Pollution <ul style="list-style-type: none"> - Word study - Questions and Answers - Sentences and Paragraphs - Connectives - Further Discussion.
Unit Three	Memories <ul style="list-style-type: none"> - Past Experience - Improving Your Memory - Childhood, Environment, Transport, Foreign language learning - Words relating to Sound and Music. - Grammar: Adverbs of Frequency - Writing: Planning and Writing an Essay - Conversation: Role-play
Unit Four	Investigations <ul style="list-style-type: none"> - Explaining and Discussing Investigations - Using Medical Documents - Reading Skills: Reading Article - Case History: William Hudson - Terminology
Unit Five	Qura'nic Achievements in Medicine (I) Breast feeding and Bottle feeding <ul style="list-style-type: none"> - Pre-reading Task - Fast Reading - Comprehensive Questions - Vocabulary - Grammatical Activity - Guided Writing
Unit Six	What is the Normal Condition? <ul style="list-style-type: none"> - Idioms: Words with Similar Meanings - Synonyms - What is Normal Behaviour? - An Interview with the Writer and Raconteur. - An Essay about an Unusual Situation/ Happening in your Life. - Further Discussion.

Unit Seven	<p style="text-align: center;">Drugs and Medicines</p> <ul style="list-style-type: none"> - Before Reading - Classification - Word Study - Grammar Points: Talking about Results, Cause and Effect - Further Practice - Terminology
Unit Eight	<p style="text-align: center;">How Do Scientists Work?</p> <ul style="list-style-type: none"> - Word Building - Questions and Answers - Grammar Reference: Tense Practice - Guided Writing - Numbers and Measurements
Unit Nine	<p style="text-align: center;">Technology</p> <ul style="list-style-type: none"> - Smart Staff - Future Forms: Error Correction - Multiple Matching: Essential Technology - Collaborative Task and Discussion: Invention - Grammar Reference: Phrasal Verbs - Report: Causality
Unit Ten	<p style="text-align: center;">Drugs Testing and the Placebo Effect</p> <ul style="list-style-type: none"> - Fast Reading - Grammar Practice: Conditional Situations - Close Exercise - Flow – Charts - Further Reading - Medical Specialists.
Unit Eleven	<p style="text-align: center;">Abbreviations and Note-taking Techniques</p> <ul style="list-style-type: none"> - Initial – letter Abbreviations and Acronyms - Letter – by – letter Abbreviation: Mixed Use - A List of Common Medical Abbreviations - Note- Taking - Principles and Techniques of Note-taking - Further Discussion
Unit Twelve	<p style="text-align: center;">The Brain</p> <ul style="list-style-type: none"> - Problem Solving - Vocabulary - Pre-reading Task – Scan Reading - Pre-Listening Task – Listening and Checking - Language Study - Grammar Reference - Informal Speech
Unit Thirteen	<p style="text-align: center;">Making a Diagnosis</p> <ul style="list-style-type: none"> - Discussing a Diagnosis - Explaining a Diagnosis - Reading Skills: Reading Article 3. - Case History: William Hudson - Terminology

Unit Fourteen	<p style="text-align: center;">Qura'nic Achievements in Medicine (II) Embryo Development</p> <ul style="list-style-type: none"> - Pre-reading Task - Fast Reading - Comprehensive Questions - Word – building - Speaking Activity – Role-play - Guided Writing
Unit Fifteen	<p style="text-align: center;">Education</p> <ul style="list-style-type: none"> - A Model Student - -ing Forms and Infinitives - Transformations - Multiple Matching Shakespeare - Collaborative Task: Ways of Learning - Informal Transactional Letter - Conditionals
Unit Sixteen	<p style="text-align: center;">Malnutrition</p> <ul style="list-style-type: none"> - Pre-reading Task - Comprehensive Questions - Word Guessing - Back Reference - Classification - Terminology
Unit Seventeen	<p style="text-align: center;">Principles of Research Writing</p> <ul style="list-style-type: none"> - Types of Research - Preliminaries to Research - Selecting the Topic - Instruments of Data Collection - Analysis - Concluding - Writing a small Scale Project Research
Unit Eighteen	<p style="text-align: center;">A Helping Hand</p> <ul style="list-style-type: none"> - Guest Relations - Emergencies - Unlawful Action - Grammar Reference: Adjectives Formed from Adverb + Past Participate - Reading and Writing: A Questionnaire - Listening and Speaking: Discussing a Questionnaire

Appendix 4

Contents of the Supplementary Grammar in the Medical Context

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Unit Two	<p style="text-align: center;">Present Simple, Progressive and Perfect Aspects</p> <ul style="list-style-type: none">- Characteristics of Present Simple- State- Single Event- Habitual- Features of Present Progressive- Temporary- Temporary Habit- Features of Perfect Aspect- State up to Present Time- Indefinite Events- Unfinished- Habit up to Present Time- Variations and Similarities- Implementation of Present Simple, Progressive and Perfect Aspects in the Medical Context- Checking Comprehension

*Unit Three	<p style="text-align: center;">Impersonal Passive and English Verbs</p> <ul style="list-style-type: none"> - Definition - Passive Forms - English Verbs in Passive - Spelling Rules - By and the Agents - Uses of the Passive in Scientific English - List of Lexical Passive Verbs that commonly occur in Scientific and Academic Writings - Stop and Check
Unit Four	<p style="text-align: center;">Future Time</p> <ul style="list-style-type: none"> - Forms of Expressing Future in Modern English Grammar - Future Time (Neutral), Will/Shall - Future Time (Arising from Present Time) Be Going to - Future Time (Plan or Arrangement), the Present Progressive - Future Time (as fact) the Simple Present - Future Time (as matter of course temporary) Will/Shall + the Progressive - Past in Future Time, Will/Shall + the Perfect - Future Time in the Medical Context - Checking Comprehension
Unit Five	<p style="text-align: center;">Adjuncts</p> <ul style="list-style-type: none"> - Indicating Attitudes - Indicating Reality or Possibility - Productive Feature - Indicating an Addition - Indicating a Parallel - Contrasts and Alternatives - Indicating Sequence in Time - Indicating Change in a Conversation - Emphasizing - Indicating the Most Relevant Thing - Checking Comprehension
Unit Six	<p style="text-align: center;">Adjectives and Adverbs</p> <ul style="list-style-type: none"> - Forms of Adjectives - Attributive Adjectives - Predicative Adjectives - Types of Adverbs - Adverb of Manner – How - Adverb of Place – Where - Adverb of Time – When: Definite Time, Indefinite Time and Sequence of Time - Adverb of Degree – To What Extent - Positions of Adverbials: Front, Mid or End - Adjectives or Adverbs

	<ul style="list-style-type: none">- Implementation of Adjectives and Adverbs in the Medical Context- Checking Comprehension
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* Introduced as a sample text of Supplementary Grammar in the Medical Context (refer to Appendix 5)

APPENDIX – 5

A Sample Text of Supplementary Grammar in the Medical Context

Unit Three

IMPERSONAL PASSIVE AND ENGLISH VERBS

Compare the following:

1. The nurse administered the injection with a sterile syringe.
2. The injection was administered with a sterile syringe (by the nurse).

Sentence 1 is an active, it tells us what the subject does (the nurse).

Sentence 2 is a passive it tells us what happens to the subject (the injection).

However, the two sentences have the same meaning, but the form is different in the following features.

- The object of the active sentence becomes the subject of the passive sentence.
- The subject of the active sentence becomes the optional object (commonly in science) of the passive in "by phrase".
- Passive is formed by an AUXILIARY VERB + PAST PARTICIPLE.

Passive forms

(a) Present and Past Tenses

Be = am	was
is	
are	were

3. I am injected by an HB vaccination.

4. All the volunteers in the chest ward were vaccinated by an antibiotic dose.
5. Analgesics are used to relieve pain.
6. Alkaloids are extracted from a solution by means of special reagents
7. Water is composed of hydrogen and oxygen.
8. Thalidomide was extensively promoted by the manufacturers as a safe sleeping – pill and tranquillizer.

(b) Present and Past Progressives

Be + Being + Past Participle

9. The penicillin injection was being administered by the student while the doctor supervised him carefully.

(c) Model Auxiliaries

(Modals = can, could, would, should, may, might etc.)

Modal verb + Be + Past Participle

10. The survey will be completed next year.
11. Heat may be generated in several ways.
12. Acids should be handled with great care.
13. AIDS can be transmitted between heroin addicts who share the same syringe.

(d) Perfect Aspects

Have

Has + been + past participle

Had

Read the following text

Research into the chemistry and pharmacology of Qat has been conducted since the early 1970s mainly at the United Nations Narcotics Laboratory, at the University of Berne in Switzerland, and at Nottingham University in the UK. It has been established that Qat contains a variety of phenylalkylamines, polyester-type alkaloids and neutral substances, and several of the principal chemical compounds have now been isolated and identified and had their structures described. However, the research is still far from complete and many of the chemical constituents of Qat have not yet been identified.

- Which grammatical form is mostly used in the above text?
- Write down three sentences in the perfect aspect of passive?
- Write down the sentence of the present simple form?
- Write down a negative sentence in the perfect aspect of passive?

Negative Statements and Questions in Passive

14. Antibiotics should not be administered for common cold.
15. Can atoms be seen under a microscope?

English Verbs in Passive

(a) Transitive Verb

It is a verb which needs a complement to an object, it cannot stand in its own right beside the subject to form a full English sentence.

Examples: write, provide, etc.

16. A graduation research should be provided by all the students.

(b) Intransitive Verb

An intransitive verb does not need a complement to an object; it can stand in its own right to form a full sentence beside the subject.

Intransitive verbs are used only in the active and they cannot be used in the passive, because they do not have an object form in the active, in which it becomes the subject form in the passive, therefore, the English sentence cannot be formed correctly without a subject, as it is the most important part.

Examples : sleep, die, etc.

- 17. Patient No 13 died last night.
- *18. Patient No. 13 was died last night.
- 19. She always sleeps early.
- *20. She always is slept early.

(c) Ditransitive Verb

It is a verb which needs a complement of two objects "Direct and indirect". Ditransitive verbs can have two forms in passive, examples: give, introduce, etc.

- 21. All the chest patients are given antibiotic medicine.
- 22. Antibiotic medicine is given to all the chest patients.

(N.B.: Some verbs can be used in the two forms transitive or intransitive and transitive or ditransitive, for more details refer to the recommended references).

* *This asterisk refers to a mistake or wrong use.*

Spelling Rules

- (a) The past participle of regular verbs is formed by adding '-ed' to the base form, or by adding only '-d' to the base form if the verb ends in 'e' e.g.

heat	heated	cause	caused
boil	boiled	close	closed
visit	visited		

- (b) Verbs ending in 'consonant + y' drop 'y' and replace it by '-ied'

apply	applied
carry	carried
occupy	occupied

- (c) Verbs ending in vowel + 'y' follow the normal rule in 'a'.

delay	delayed
employ	employed
play	played

- (d) Verbs ending in a single vowel + single consonant follow a rather complicated rule :

- I Verbs of three or more syllables are regular:

develop	developed
deposit	deposited

- II Verbs of only one syllable double the final consonant

plot	plotted
slip	slipped
stir	stirred.

- III Verbs of two syllables double the final consonant if the second syllable carries the stress :

unstressed second syllable.

answer	answered
cover	covered

stressed second syllable

pre'fer	preferred
ad'mit	admitted

This last rule has no exceptions in American spelling. In British spelling, however, verbs ending in single consonant + `L' double `L' although the stress is on the first syllable

label	labelled
level	levelled
chisel	chiselled

However, many of the commonest and most useful verbs in scientific English have irregular past participle.

By and the Agent :

The `by phrase' is used in passive sentence when it is important to know who performs an action, e.g.

23. Fatty foods should be avoided by patients with hepatitis or other impairments of liver function.

Usually, there is no `by phrase' in a passive sentence. The passive is always used when it is not known or not important to know exactly who performs an action as in the situation of scientific English (medicine, engineering, etc.). It can be noticed that up till now there is a very limited use of `by' in this discussion, there are two good reasons for this. Firstly, it is very important to realize that `by + agent' is not necessarily a part of a passive sentence. Secondly, a large majority of passive sentences in scientific English have no agent. In fact, who-agents (i.e. who it was done by) are rare and mainly used with the past tense. What – agents are mainly used with the present tense and modals, it can be said that most of the scientific language is applied in present tense and modals.

Use of the Passive in Scientific English

As pointed out earlier that in any scientific textbooks of medicine, engineering, etc., most of the finite verbs will be in the passive. Further, most of these passive verbs will be either in the present simple or will be used with modals like will, can, should or may. Therefore, it is clear that scientists use the passive much more frequently than many other kinds of writers; why is it so?

In order to explain it clearly, first read each pair of the following sentences about **when not to give an injection**.

24. (a) Never give an injection if you can get medical help quickly.
(b) An injection should never be given if medical help can be got quickly.
25. (a) Never give an injection for a sickness that is not serious.
(b) An injection should never be given for a sickness that is not serious.
26. (a) Never give an injection for a cold or flu.
(b) An injection should never be given for a cold or flu.
27. (a) Never inject a medicine that is not recommended for the illness you want to treat.
(b) A medicine should never be injected if it is not recommended for the illness requiring treatment.
28. (a) Never inject a medicine unless you know and take all the recommended precautions.
(b) Medicine should never be injected unless all the recommended precautions are taken.

It is worth mentioning that the sentence 'A' in each pair is imperative and sentence 'B' is passive, each pair have similar meanings but the passive sentences are clearer. The first reason for this is that the passive sentences do not mention people. For scientists many references to people are unnecessary and confusing. The second reason is that the mention of the pronoun 'You' in most of the sentences 'A' does not give the reader any useful information. It is true that the passive sentences do not actually state who the people are, but it can easily be guessed who they are, from the context in which the sentences are used. The third reason is that the passive is stronger than the other forms when expressing danger. (Compare each pair of the above sentences).

List of particular lexical verbs that commonly occur with passive form in scientific and academic writings

Be+

Absorbed	Done	Observed	Taken
Acclaimed	Drawn	Paid	Thought
Administered	Established	Paralyzed	Told
Alleged	Estimated	Pensioned off	Treated
Annihilated	Expected	Pointed out	Understood
Asked	Explained	Prepared	Used
Based	Forced	Prescribed	
Born	Found	Proved	
Bowled over	Given	Put	
Brought	Held	Reported	
Called	Involved	Required	
Carried out	Kept	Revealed	
Caught up	Known	Said	
Concerned	Left	Scaled down	
Considered	Lost	Seen	
Discovered	Made	Sent	
Described	Mesmerized	Set	
Determined	Needed	Shown	

Stop and Check

Exercise 1 : Complete the following chart :

Infinitive	Past tense	Past participle
Bleed	-----	-----
-----	Gotten / got	-----
-----	-----	Fed
Bind	-----	-----
Freeze	-----	-----
-----	Bent	-----
-----	-----	Burnt
-----	Slew	-----
-----	-----	Besought
Swing	-----	-----
-----	Moused	-----
-----	-----	Stridden
Shake	-----	-----
-----	Wrung	-----
-----	-----	Crept

Exercise 2 : Rewrite the following text and put the verbs in parentheses in their correct forms.

Oxygen (be breath) in and (absorb) by the blood through the lungs. It (be) then (carry) through the blood vessels to the tissues of the body. Carbon dioxide (be pass) from the blood into the lungs and (breath out).

Exercise 3 : Change the possible sentences into passive. Some sentences cannot be used in the passive indicate which are ones and write them in active.

- (a) The Human Immunodeficiency Virus (HIV) causes Acquired Immune Deficiency Syndrome (AIDS).
- (b) The risk of heart attack increases when the blood contains high level of carboxyhaemoglobin.
- (c) A doctor has examined the sick child.
- (d) Deformed child in pediatric ward died last week.
- (e) Patient no 10 in orthopedic ward did not sleep well last night.
- (f) The presence of carbon, hydrogen and nitrogen composes of alkaloids.
- (g) Tobacco smoke contains carcinogens.
- (h) Dentists use parenteral local anesthesia when extracting teeth.
- (i) The HIV virus attracts to the cells of the spinal cord and liver.
- (j) Pharmacists should not dispense powerful drugs without a prescription.
- (k) Doctors should avoid prescribing sleeping-pills because of their habit-forming potential.

Exercise 4 : Complete the following sentences with the correct form of the verbs (Active or Passive) in parentheses :

- (a) Aluminum is a valuable metal that (can use) ----- again and again. Because this metal (can recycle) ----- , aluminum cans (should throw away, not) -----.

- (b) Household cleaning agents (must use) ----- with care. For example, mixing chlorine bleach with ammonia (can produce) ---- toxic gases.
- (c) What products (manufacture) ----- in your country?
- (d) This book (have to return) ----- the library today.
- (e) The 't' in "asthma" (pronounce, not)It is silent.
- (f) Frostbite may occur when the skin (expose) ----- to extreme cold. It most frequently (affect) ----- the skin of the cheeks, chin, ears, fingers, nose and toes.
- (f) Since the beginning of the modern industrial age, many of the natural habitats of plants and animals (destroy) ----- by industrial development and pollution.

Exercise 5 : The following sentences are about avoidance of serious reactions to penicillin. Rewrite them to form an acceptable paragraph. Use passive forms where they are appropriate. Some parts of the text should not be changed into the passive. Which parts? Keep these in the active?

- (a) For mild to moderate infections, give penicillin pills instead of injections
- (b) Before injecting ask the person "Have you ever had hives, itching, swelling or troubled breathing after taking an injection of penicillin?" If the answer is affirmative, do not use penicillin or ampicillin. Use another antibiotic like erythromycin or a sulfonamide.

- (c) Before injecting penicillin always have ampoules of Adrenalin ready.
- (d) After injecting, stay with the person for at least 30 minutes.
- (e) If the person becomes very pale, his heart beats very fast, he has difficulty in breathing, or he starts fainting, immediately inject into a muscle half an ampoule of Adrenalin (a quarter of an ampoule in small children) and repeat in 10 minutes if necessary.