

**Absence of English in the Presence of English: The Need for EMP  
Courses in Pakistani Medical Colleges**

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**Abstract**

*The present study aimed at the identification of the opinions about learning English at medical colleges in Pakistan in order to recommend a course of English for the medical learners in Pakistan. The empirical research was conducted in the two medical colleges of Rawalpindi city by means of survey questionnaires. The sample for the study consisted of 203 medical students, 95 teachers of medicine and 101 medical trainees. Data were analyzed quantitatively. The findings revealed that the amount of English taught before joining medical college is not adequate to meet academic and professional medical needs of the medical learners. Therefore a serious need for course of English has been felt that should be urgently implemented in the medical colleges of Pakistan.*

**Keywords:** English for specific purposes, needs analysis, English for medical purposes

**Introduction**

English is of fundamental significance for medical students, as they need to use English in their studies, which are for reading journals and textbooks when preparing for exams, or for discussion in class or at medical meetings. Furthermore, they have to learn to write patient charts, medication sheets, prescriptions and orders in English during their training and in their future medical careers. Thus, learning English is indispensable for medical professionals as the world has become internationalized and almost all the medical information which medical students and

researchers need to access is found in English (Kang, 2004). In modern age, English for Medical Purposes (EMP) has become important. English language that medical professionals need in their medical career is not only English for General Purposes but also EMP, a kind of English for Specific Purposes (ESP). A large number of medical students pursue their postgraduate studies in the advanced countries like UK or the US, and work in hospitals where English is the first language or the lingua franca, it becomes essential for them to have sufficient competence in EMP (Kurfürst, 2005).

### Medical Education in Pakistan

It has been viewed that more than 80% of the nine million referenced articles are written in English. Furthermore, it has been reported that citations added during the years 1995 to 2003, 88% of them were published in English and about 76% have English abstracts written by authors of the articles (Elizabeth, 2012). Similarly, Pakistan is one such country where generally, the medical literature is published in English. The supreme authority, which regulates the medical field in Pakistan, is known as Pakistan Medical and Dental Council (PM&DC). The council determines set criteria for basic and higher qualifications in medicine and dentistry.

**Table 1**

*Total Number Of MBBS (General Physicians with Basic Degrees) and Specialist Doctors Registered Up to 27 September, 2012 in Pakistan*

Province	Male		Female		Total	
	MBBS	Specialists	MBBS	Specialists	MBBS	Specialists
Punjab/Federal area	28456	10507	24030	3743	52486	14250
Sindh	28260	5851	25208	2367	53468	8218
KPK	10110	3008	4712	724	14822	3732
Baluchistan	2351	764	1485	188	3836	952
AJK	1394	484	954	126	2348	610
Foreign nationals	2460	75	800	18	3260	93

Total	73031	20689	57189	7166	130220	27855
	Total (N=93720)		Total (N=64355)		Total (N=158075)	

*Note.* MBBS= Bachelor of Medicine, Bachelor of Surgery

KPK= KhyberPakhtunkhwa AJK= Azad Jammu and Kashmir

The curriculum of medical colleges is designed and implemented under the supervision of both the Higher Education Commission (HEC) and PM&DC. The need for the effective communication skills has been emphasized in the preface to the curriculum guide of medical education but no specific measures have been taken in the light of research. A flexible space has been given to the additional courses like English and other languages however, the authority has been given to the universities to introduce them as optional subjects. It shows predilection towards the probable need of English in the curriculum of medical professionals. The university awards a degree of MBBS after successful completion of five years of MBBS in a medical college. Besides having MBBS, some universities award the postgraduate research based degrees, which are MPhil and PhD. Universities conduct examination for the programs offered by medical colleges and thus award degrees. Examinations are conducted in the English language. In Pakistani hospitals and medical colleges, doctors use both English and Urdu. At times regional languages are also spoken at workplace. A good command in English is always a positive point of a doctor as English creates a good impression. Since the language of medicine is English in Pakistan, medical students /doctors are regularly required to read medical literature written nationally and internationally which is always in English. Understanding complex structures of medical literature requires a certain level of linguistic adequacy. Although it is not mandatory to write medical prescriptions in English, yet most of the prescriptions are written in English. Thus, English has attained an indubitable status in Pakistani medical settings (“Curriculum of M.B.B.S”, n. d.).

**Table 2**

*Recognized Medical Colleges and Affiliated Teaching Hospitals in the Provinces of Pakistan*

Province	Public Sector		Private Sector		Total	
	Medical college	Affiliated teaching	Medical college	Affiliate d	Medical college	Affiliated teaching

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		hospitals		teaching hospitals		hospitals
Punjab	13	20	22	33	35	53
Sindh	08	10	12	23	20	33
KPK	07	07	08	13	15	20
Baluchistan	01	01	0	0	01	01
Total	N=29	N= 38	N=43	N=69	N=72	N=107

*Note.* N=Total Number of      KPK= Khyber Pakhtunkhwa

### Statement of the Problem

The medical students in Pakistan are not taught English language courses in medical colleges therefore they are generally not well equipped to deal with functional nature of English. In few medical colleges, a course related to behavior studies taught which is misperceived as communication skills however; this does not deal with the improvement of English language skills. There is no teaching faculty available particularly trained in the area of EMP to improve students' knowledge of English. Students face difficulties in understanding the contents and the subject matter at subsequent stages where they seek help of other fellow students or invest extra effort and time in order to get through the examination. Few students fail at later stages as for not being familiar with the medical English. Majority of them feel hesitated when they have to creatively reproduce contents in English specifically when it comes to speaking or writing in actual situations. Before entering medical colleges, the students are taught a course of English based on the areas of General English at higher secondary level, which does not incorporate the knowledge of target language situations according to future medical needs of students. The medical learners in Pakistan have strong needs and motivation to learn EMP. There are no English courses available in Pakistani medical colleges to improve the English language proficiency of medical students specifically related to their certain medical needs. Hence a dire need has been felt for the English language contents and materials

specifically devised on the basis of academic and occupational needs analyses of medical students.

### **Present Study**

In this study, ESP needs analysis approach has been applied in order to gather opinions and perceptions of members of different groups of medical discourse community about learning English at medical college. The study aims to recommend a course of English for the medical students studying in MBBS based on their specific needs.

### **Literature Review**

EMP is a subset of ESP education that most often focuses on teaching aspects of medical English, particularly terminology. Often referred to, as ESP but the language of medicine is quite unique. It is fraught with technical, academic language and replete with slang, colloquialisms, abbreviations and acronyms. It has its own rules and structure. Health professionals must read, write, interpret, give directions, etcetera using a wide variety of abbreviations and acronyms that are extremely career-specific (Hull, 2004). There are many words, which are used in everyday life, but have a special meaning when they are used in the hospital. It is halfway between general usage and highly technical medical language (Arakelian, Bartram, & Magnall, 2003, p. 55). The curriculum design for medical English (ME) course should be based on ME, not on the structure or rules of English language. It has primarily followed an 'A'-'B' format. Lesson 'A' has found its focus on vocabulary presentation and acquisition. Lesson 'B' provides opportunities to apply learning from the previous lesson into context. Learning activities in Lesson 'B' can include using actual hospital charts and forms, role-playing assessment, use of medical equipment, open exploration of treatments and interventions related to the main subject. Understanding that all students study medicines at the same time as well, discussions are enhanced as health professionals attempt to confer and consult; sometimes debate medical-health conditions and can be practices. Broken English is accepted. It is necessary to reinforce vocabulary acquisition, grammar and structure. Teacher-tutors are required to be health professionals as well as language instructors. However, lessons,

interactions, and case studies have represented simple and complex medical practices, pharmacology, anatomy and physiology, pathology, treatment, etc. well beyond entry level English. Goals are set to prepare students for continuing studies in English, as preparation to licensing exams, and for English language competency at work that can be career-specific. Feedback from graduates of the medical faculties and the related students who have studied ME can be very helpful in regard to designing the new ME programs and applying the most proper approaches of teaching ME accordingly. ME language teaching requires a new and modern approach. Research has shown that teaching ME should be different from teaching basic and GE language. Medical students accumulate a wealth of medical knowledge and skills in their medical education. The goal of learning English at this level is not to learn grammar and structure primarily, but to acquire and use the language in their medical studies. In order to help non-native English speaking, medical students acquire English medical jargon therefore, information about medical register and discourse should be combined with pedagogical skills of a language teacher (DuGas, Esson, & Ronaldson, 1999). EMP courses – like all kinds of ESP should be tailor-made to the learners' purposes and needs, that is by first thinking about who these medical learners can be and what their purposes are. He has also pointed out the need for a specific syllabus that will enhance the communicative effectiveness of an English language course. For example, attempts to develop courses using instructional methodologies such as content-based learning and problem-based learning have been made. In addition, the use of technological equipment has been regarded as an important aspect in EMP courses to bring real life communication into the classroom. Various projects have also been undertaken to explore different ways of teaching medical terminology. Structural and traditional methods such as teaching term formation of medical terminology as a vocabulary teaching strategy and grammar translation have also been found in the literature (Maher, 1986a). The course should enable medical students to read general and specific information, make conclusion from the given texts, find the synonyms and /or antonyms of the words, guess the meaning of any unknown word by using the context clues, distinguish and/or choose the correct lexical item related to medicine, make translations about medicine from both languages at the sentence level

and paragraph one, get familiar with basic word parts in medicine, prefixes, suffixes, abbreviations, get familiar with medical topics and specialists, use translations in their special area, medicine, use the grammatical structures for communicative purposes and get familiar with medical terminologies. When the curriculum designer begins to develop a course or series of courses in ME, s/he must consider who the students are, what their motivations are, and identify which perspective they wish their teachers to have (Shirvan, 2008). According to the general division of ESP, EMP can be taught to medical students for an academic purpose at university. On the other hand, ME is transmitted in work or pre-work situations, for example to practicing doctors. It is therefore, very important to differentiate between the various needs of these groups. Medical students mainly need to read textbooks and articles, write essays and short clinical reports, whereas doctors need it to be able to read specialist articles, prepare papers and presentations for conferences, and interact with colleagues and patients when they will work in a foreign country (Dudley-Evans & St. John, 1998, pp.06- 49).

### **Methodology**

This research was based on the purpose to gather opinions and perceptions of members of different groups of medical discourse community about learning English at medical college. Therefore, the objective was to recommend a course of English for Medical Purposes. The main research question was:

1. How is it important to recommend a course of English in the Pakistani medical colleges?

The subsidiary research questions were:

1. How do the medical learners compare their existing proficiency in English before and after joining medical college?
2. How do the medical learners compare their existing proficiency in English before and after graduating from medical college?
3. What are the perceptions of students of medicine, teachers of medicine and medical trainees regarding learning English at medical college?

The quantitative methods were opted to carry out this research. Purposive sampling and stratified random sampling were chosen as sampling methods. Three different questionnaires for three population groups of this study were designed. A pilot study was also conducted.

### **Research Sites**

Rawalpindi Medical College (RMC) Rawalpindi and its associated teaching hospitals represented the public sector. Islamic International Medical College (IIMC) Rawalpindi and its associated teaching hospitals represented the private sector. The study was delimited to two campuses of RMC, including Tipu Road (Old Campus) and New Teaching Block, Holy Family Hospital. The associated teaching hospitals of RMC included Holy Family Hospital and Benazir Bhutto Hospital. Similarly, data were collected from two campuses of IIMC comprising IIMC Campus Rawalpindi Cantonment and IIMC Campus Pakistan Railway General Hospital (PRGH) Rawalpindi. The associated teaching hospital to carry out this study in IIMC was only PRGH.

### **Participants**

The data were gathered from the students of 2<sup>nd</sup> year, 3<sup>rd</sup> year, 4<sup>th</sup> year and 5<sup>th</sup> year of MBBS classes. Teachers from both pre-clinical and clinical campuses were included. House officers and postgraduate trainees (i.e., postgraduate residents and training medical officers etc.) were selected as medical trainees. 77(37.9%) male respondents and 126(62.1%) female respondents belonged to students of medicine. 48(51%) male respondents and 47(49%) female respondents represented teachers of medicine. 44(43.6%) male respondents and 57 (56.4%) female respondents belonged to medical trainees. 148(72.9%) respondents from students of medicine belonged to RMC while, 55(27.1%) respondents from students of medicine were from IIMC. 66(68.8%) respondents from teachers of medicine belonged to RMC and 29(30.2%) respondents from teachers of medicine belonged to IIMC. 70(69.3%) respondents were from medical trainees belonging to RMC while, 31(30.7%) respondents from medical trainees represented IIMC. Out of a total number (N= 640) distributed questionnaires, 399(62.34%) returned questionnaires were completely filled.

## Data Analysis

The results were presented in the form of tables indicating frequencies and percentages of respondents for each question. Data were further analyzed in the form of graphs by means of using excel sheet.

### *English Proficiency Before and After Joining Medical College*

**Table 3**

*Frequencies and Percentages of Students' Perceptions Regarding Comparison of English Language Proficiency Before and After Joining Medical College*

Proficiency	Frequency	Percent
Much worse	44	21.7
Somewhat worse	57	28.1
About the same	61	30.0
Somewhat better	34	16.7
Much better	07	3.4
Total	203	100.0

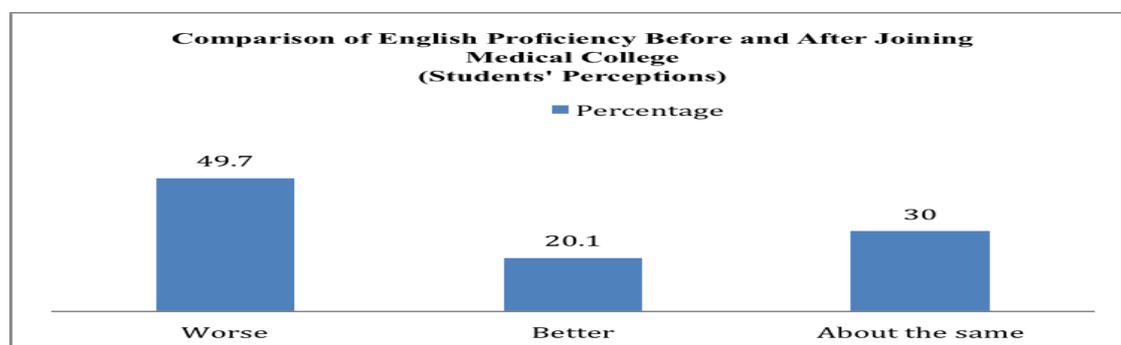


Figure 1. Percentages of students' perceptions regarding comparison of English language proficiency before and after joining medical college.

### *English Proficiency Before and After Graduating from Medical College*

**Table 4**

*Frequencies and Percentages of Trainees' Perceptions Regarding Comparison of English Language Proficiency before and after Graduating from Medical College*

Proficiency	Frequency	Percent
Much worse	12	11.8
Somewhat worse	29	28.7
About the same	34	33.6

Somewhat better	16	15.8
Much better	10	9.9
Total	101	100.0

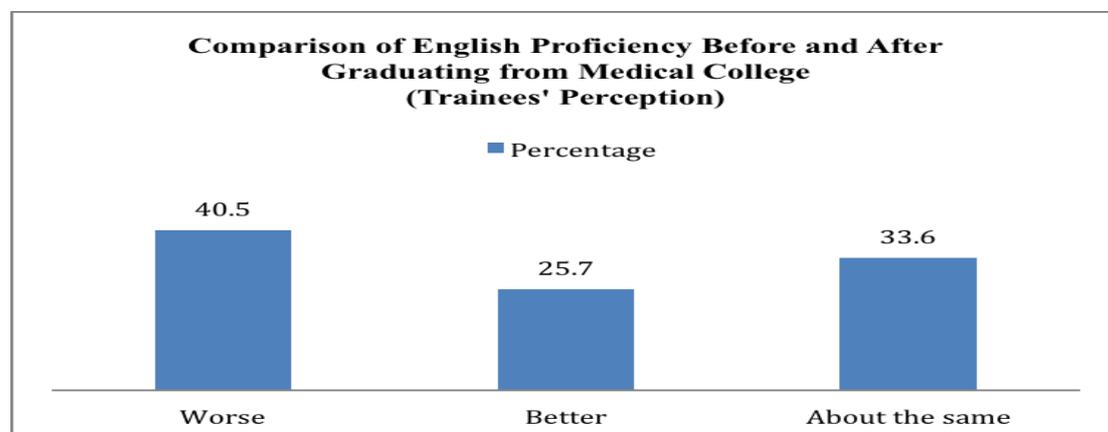


Figure 2. Percentages of trainees' perceptions regarding comparison of English language proficiency before and after graduating from medical college.

*Relevancy of English Language Courses Before Medical College*

**Table 5**

*Frequencies and Percentages of Students' Perceptions Regarding Relevancy of English Language Courses before Medical College*

Relevancy	Frequency	Percent
Extremely	06	2.95
A lot	30	14.7
Somewhat	48	23.6
A little	54	26.6
Not relevant at all	65	32.01
Total	203	100.0

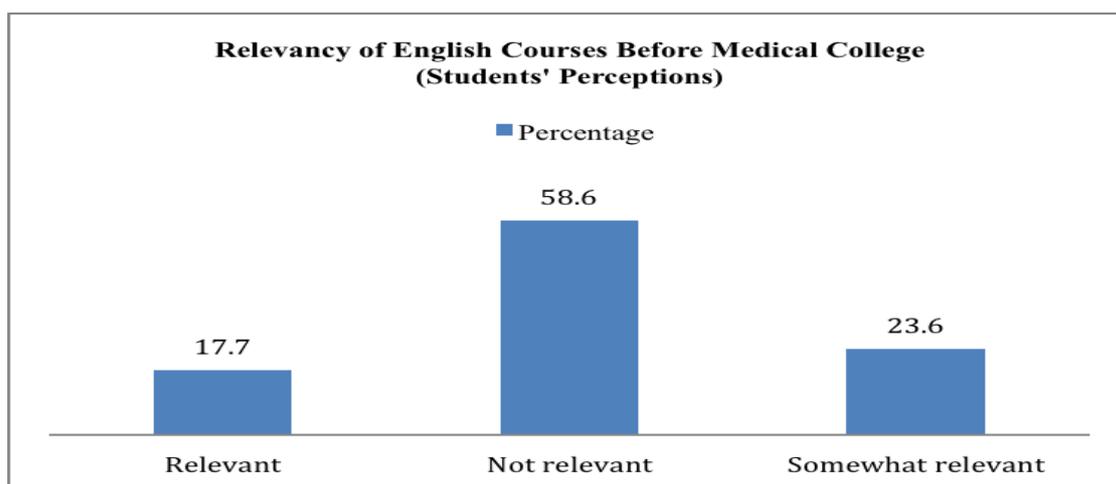


Figure 3. Percentages for comparison between scales of relevancy regarding students' perceptions for English courses before medical college.

*Importance of General Purposes English(GPE)*

**Table 6**

*Frequencies and Percentages of Combined Groups' Perceptions Regarding Importance of GPE*

Respondents	Strongly disagree		Disagree		Not sure		Agree		Strongly agree		Total N
	F	P	F	P	F	P	F	P	F	P	
Students	12	5.9	13	6.4	15	7.4	82	40.4	81	39.9	203
Teachers	01	1.1	03	3.2	05	5.3	47	49.5	39	41.1	95
Trainees	09	8.9	06	5.9	11	10.9	40	39.6	35	34.7	101
N	22	+	22	+	31	+	169	+	155	=	399

Note. N= Total Number of Respondents      F= Frequency      P= Percentage

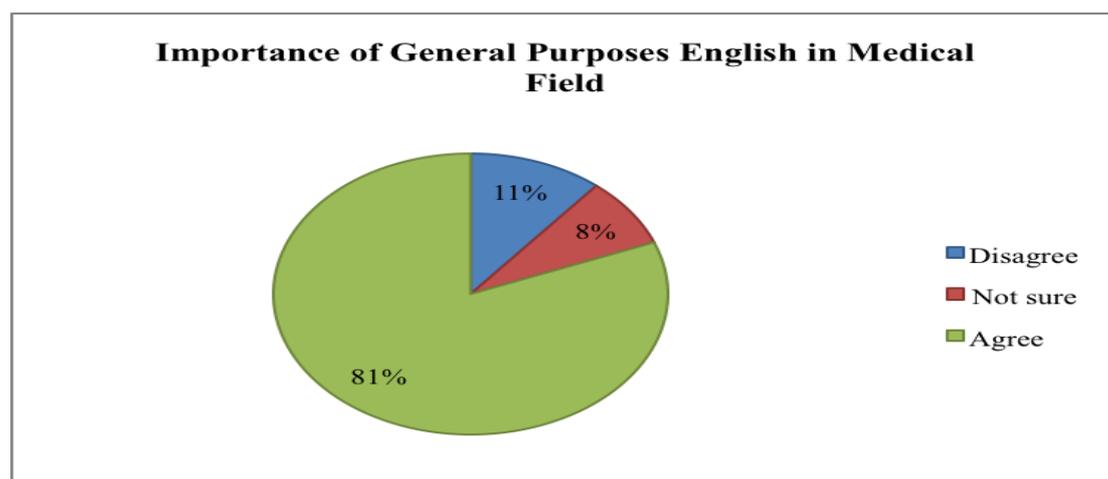


Figure 4. Percentages of combined groups' perceptions for importance of GPE in medical field.

*Importance of English for Medical Purposes (EMP)*

**Table 7**

*Frequencies and Percentages of Combined Groups' Perceptions Regarding Importance of EMP*

Respondents	Strongly disagree		Disagree		Not sure		Agree		Strongly agree		Total N
	F	P	F	P	F	P	F	P	F	P	
Students	02	1.0	06	3.0	15	7.4	79	38.9	101	49.8	203
Teachers	01	1.1	01	1.1	04	4.2	41	43.2	48	50.5	95
Trainees	02	2.0	02	2.0	09	8.9	44	43.6	44	43.6	101
N	05	+	09	+	28	+	164	+	193	=	399

Note. N= Total Number of Respondents      F= Frequency      P=Percentage

*General English (GE) Instruction from 1<sup>st</sup> Year of Medical Classes*

**Table 8**

*Frequencies and Percentages of Combined Groups' Perceptions Regarding GE Instruction from 1<sup>st</sup> Year*

Respondents	Strongly disagree	Disagree	Not sure	Agree	Strongly agree	Total
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	F	P	F	P	F	P	F	P	F	P	N
Students	13	6.4	15	7.4	46	22.7	56	27.6	73	36.0	203
Teachers	08	8.4	-	-	15	15.8	37	38.9	35	36.8	95
Trainees	13	12.9	08	7.9	12	11.9	37	36.6	31	30.7	101
N	34	+	23	+	73	+	130	+	139	=	399

Note. N= Total Number of Respondents F= Frequency P= Percentage

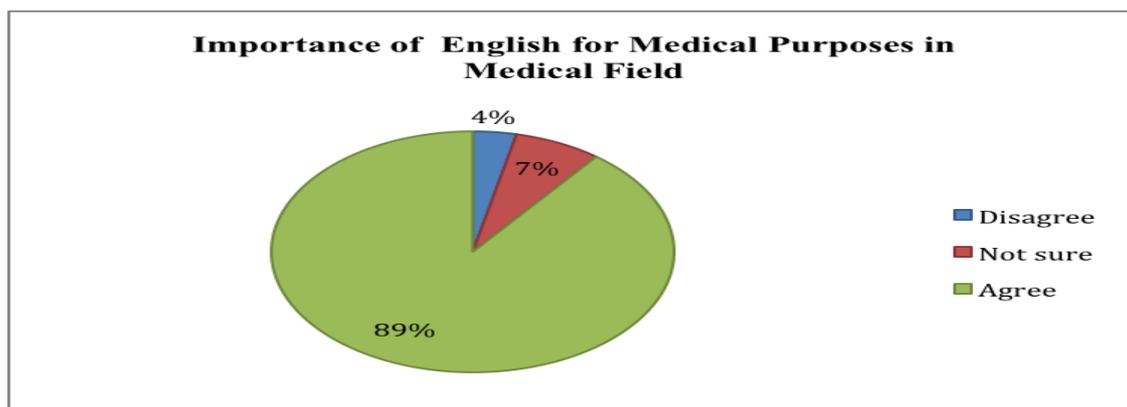


Figure 5. Percentages of combined groups' perceptions for importance of EMP in medical field.

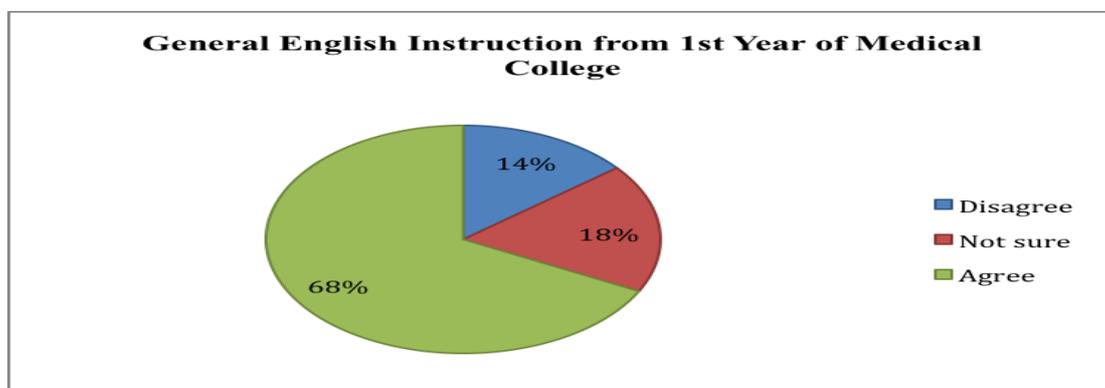


Figure 6. Percentages of combined groups' perceptions for General English Instruction from 1<sup>st</sup> year of medical college.

*Medical English Instruction from 1<sup>st</sup> Year of Medical Classes*

**Table 9**

*Frequencies and Percentages of Combined Groups' Perceptions Regarding Medical Instruction from 1<sup>st</sup> Year*

Respondents	Strongly disagree		Disagree		Not sure		Agree		Strongly agree		Total N
	F	P	F	P	F	P	F	P	F	P	
Students	03	1.5	06	3.0	11	5.4	71	35.0	112	55.2	203
Teachers	02	2.1	01	1.1	13	13.7	47	49.5	32	33.7	95
Trainees	11	10.9	05	5.0	10	9.9	39	38.6	36	35.6	101
N	16	+	12	+	34	+	157	+	180	=	399

Note. N= Total Number of Respondents F= Frequency P= Percentage

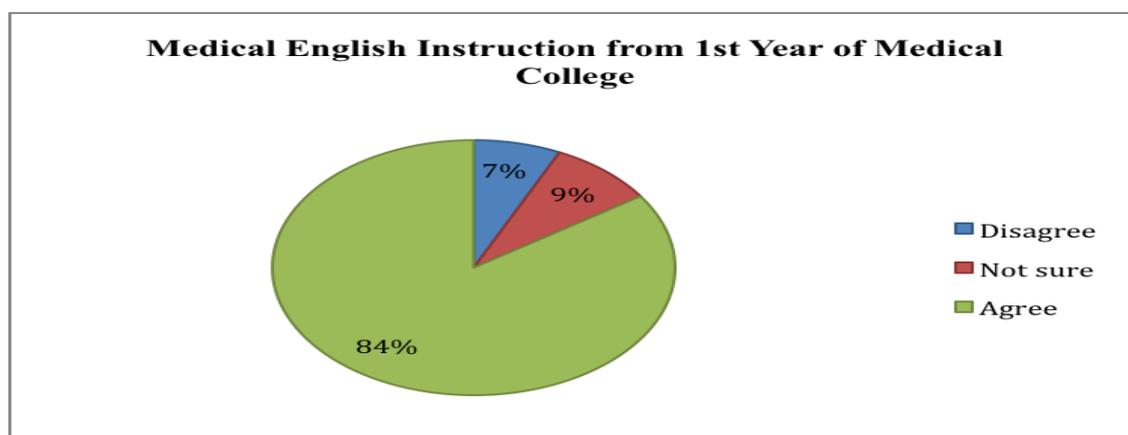


Figure 7. Percentages of combined groups' perceptions for medical English Instruction from 1<sup>st</sup> year of medical college.

**Results**

The overall results indicate that 101(49.7%) respondents believed that their proficiency in English became worse, 61(30%) respondents perceived that their proficiency remained about the same, 41(20.1%) respondents believed that their proficiency became better in regard to their comparison before and after they had

joined medical college. 41(40.5%) respondents believed that their proficiency in English became worse, 34(33.6%) respondents perceived that their proficiency in English remained about the same whereas, 26(25.7%) respondents believed that their proficiency in English became much better in regard to their comparison before and after they had graduated from medical college. 324 (81.20%) respondents agreed and 44(11.02 %) respondents disagreed that general purpose English was important for medical studies. 357(89.4%) respondents agreed and 14(3.50%) respondents disagreed that EMP was important for medical students. 269(67.4%) respondents agreed and 57(14.3 %) respondents disagreed that general English instruction should start from 1<sup>st</sup> year of medical classes. 337(84.4%) respondents agreed and 28(7.01%) respondents disagreed that medical English instruction should start from 1<sup>st</sup> year of medical classes. 36(17.7%) respondents believed that the courses of English before joining medical college were relevant, 119(58.6%) respondents believed that the English courses were not relevant whereas 48(23.6%) respondents indicated that the English courses were somewhat relevant to their medical field before entering medical college.

## **Discussion and Conclusion**

The overall findings provide strong grounds for recommendation of course of English in medical colleges of Pakistan as the existing proficiency level of medical learners is not adequate to meet their language needs in medical field. The respondents strongly agree to the need of course of English at medical college suggesting it to be initiated in the first year of medical college. The study indicates that medical learners are aware of importance of medical English in their field and they can differentiate well between purposes of general and medical English therefore, they regarded medical English as more important than general purpose English. One reason for agreeing to the need of course of English at medical college could be that when new entrants join a medical college, they face numerous linguistic problems regarding English language in medical education. They have to put extra efforts to understand medical jargon. It takes them a long time to adapt within the

specific linguistic environment of medical education. If they are taught a course of English prior to or simultaneously when they get formally/actually involved in medical studies, they might be able to deal with linguistic challenges easily. Both the contents of general and medical English would facilitate them for performing their medical studies more proficiently and accurately. English courses should provide extra help to carry out medical studies that is only possible when the courses are specifically designed focusing on the needs of medical students within a certain environment of medical field. The majority of respondents strongly disagree that the amount of English taught to medical students before joining medical college is adequate to meet their academic and occupational English language needs. This is explicit here that a considerable amount of work has been done in the area of EMP whereas this study is a beginning point with regard to needs analysis of medical learners in Pakistan with an intention to recommend a course of English for its implementation in the medical colleges. The findings of present study unfold the need for ample research in the field of EMP in Pakistan at various levels and thus for designing of such specific courses of English that could be taught either in medical colleges or at higher secondary school level of education prior to getting admission in a medical college. However, it may not be possible for the government of Pakistan to design materials and courses of medical English in pre-medical education at F. Sc. level due to certain financial and logistic constraints. Similarly, trainings of instructors of medical English at this level may not be viable specially when there are no adequate resources available to improve situation of general English in the country. Hence, it appears to be more appropriate and effective to initiate specific medical English training courses in medical colleges where students in specified number, qualify for merit to get admission. The study suggests that medical students are not satisfied with their current English language proficiency as there are no courses of English taught in medical colleges. The amount of English given to them at higher secondary level of education (i.e., F. Sc. Pre-medical studies) is not sufficient to cater to their English language needs at medical college. English has acquired a status of lingua franca in the medical field. A grave need of EMP course has been felt in this research. The course should target specific needs of medical learners in

Pakistan. The cooperation of various related groups under the patronage of PM& DC is critical to successful EMP course design. A robust collaboration of English language instructors, English language text material designers, ESP practitioners, teachers of medicine, medical administrators and other related groups of medical discourse community is necessary to reach a mutual consensus in this regard. The previously designed ESP course contents at national and international levels related to different fields (e.g., science and technology, business, hotel management and tourism) can lend invaluable help in regard to EMP course design.

EMP Research Center can be established in liaison with International communities by PM&DC and Higher Education Commission of Pakistan. The students coming from different mediums of instruction at school level may have different English language needs in a medical college. In addition, their diverse linguistic, cultural and regional backgrounds also complicate the situation. The needs based course of English in medical college can play remedial role in such situation. The needs of students may vary in each class of MBBS studies. The related language contents can be devised in EMP curriculum considering individual English language needs of the students according to their respective levels of study in medical college. The EMP course should incorporate contents from general English (GE) to provide students with due assistance in terms of learning medical English to fulfill their academic and occupational needs. Both general and medical English should start in the first year of medical college. These courses can be introduced as pre –sessional/preparatory courses prior to have medical students actually involved in their medical studies. As the findings suggest that the amount of English instruction given to medical students before joining medical college is not sufficient. Further needs analyses research on formal grounds can be conducted to explore specific areas regarding language needs of medical students for a proper design of English language course. ESP research at larger scale can be conducted at countrywide level where ESP practitioners (i.e., teachers and researchers) can be allowed to keep regular records of academic and occupational needs related to English language of the medical students. This practice may help in devising future teaching plans and task ideas for design of effective course contents. The professors of medicine can help in providing materials

(e.g., publications, periodicals, books, contents, journals and magazines) for adapting to different strategies. The findings suggest that there are similarities and dissimilarities between academic and professional needs of medical learners therefore, the language courses should be tailored in such an order as to prioritize individual needs of the learners keeping in view different stage/s of their medical careers. Their individual needs can be different according to their multiple roles (e.g., as student, teacher, trainee, practitioner, and administrator etc.) in medical discourse community. Hence, a thoroughly generic course of English cannot be recommended. A further research can be carried out at varied levels of medical education and career. For example, course contents can be devised aiming at target situation needs of medical students related to each professional of MBBS studies. The course of English may be divided between pre-clinical and clinical groups according to their specific needs. Similarly, for different fields of medical profession, specialized language contents can be included. Thus, in this situation it is highly essential to implement a course of English on urgent basis in the medical colleges of Pakistan.

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