

English Language Needs of Medical Students for their Professional Careers

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Abstract

Effective communication in English is crucial for medical students, as it directly impacts their academic success, clinical training, and future professional practice. This study aims to identify the specific English language needs of medical students, focusing on speaking proficiency, grammar and pronunciation, cultural competence, and real-life exposure. Using a needs analysis approach, data was collected from 45 medical students through surveys and assessments. The findings indicate that while students demonstrate moderate proficiency in some areas, significant challenges persist in cultural competence and real-life communicative practice. The study highlights the necessity for tailored language training programs to bridge these gaps and enhance students' communicative competence in clinical settings.

Keywords: Medical Communication, Needs Analysis, Cultural Competence, Professional Language Proficiency, Clinical Communication

Introduction

The role of the English language in medical education is undeniable, as it serves as the primary medium for medical literature, international collaborations, and patient interactions (Turk et al., 2018). English proficiency is essential for medical students, enabling them to comprehend complex medical texts, communicate effectively with patients and colleagues, and participate in global research initiatives (Garcia, Patel, & Wong, 2022). With the increasing globalization of healthcare, medical professionals are required to engage with international medical communities, making English a vital tool for professional success (Molina & Kasper, 2019). The ability to communicate medical information accurately and confidently is fundamental to delivering quality patient care. Many studies indicate that language barriers can result in miscommunication, leading to diagnostic errors, reduced patient trust, and compromised healthcare outcomes (Abdullah & Chaudhry, 2022). Medical

students often struggle with speaking fluency, medical terminology pronunciation, and adapting their language use to different professional contexts. These challenges created a need for English language instruction that aligns with the communicative demands of medical professionals (Zhou & Watanabe, 2021).

While general English courses provide foundational skills, they do not sufficiently address the specialized linguistic needs of medical students. Medical training involves frequent interactions with patients, colleagues, and multidisciplinary teams, requiring precise and confident articulation of medical information. Many students find it difficult to transition from academic language to professional clinical discourse, which is crucial in ensuring patient safety and effective teamwork (Smith & Hall, 2023). Addressing these challenges requires a targeted approach to language training that focuses on practical communication skills relevant to the medical field. This study seeks to explore the specific English language needs of medical students, identifying key areas requiring intervention. By understanding students' linguistic strengths and challenges, educators can design more effective curricula that enhance the readiness of students for clinical practice and professional medical communication.

Background

Linguistic competency, such as simple subject-verb agreement, among Malaysian university students has been lacking when writing narrative and argument essays (Stapa et al., 2010). Nevertheless, English majors in Thailand also make mistakes in subject-verb agreement and other grammatical features such as articles, verb tenses, word choice, sentence structure, prepositions, and modal/auxiliaries when writing descriptions and narratives (Watcharapunyawong et al., 2013). Even though there is an opportunity to rectify grammatical errors in writing tasks due to linguistic incompetence, they are more likely to appear in spoken English. Students graduating from a university in Malaysia in accountancy and administrative science show problems with their language skills, as seen in their missing words, unnecessary words, and wrong word choices (Hassan et al., 2009). The findings of another study (Ting et al., 2010) concur with the lack of oral linguistic competence among Malaysian university students. Their common errors are in prepositions, question formation, articles, the plural form of nouns, subject-verb agreement, and tenses. In Asian countries like Indonesia, Hong Kong, Thailand, Vietnam, and Japan, schools emphasize teaching English grammar, but students have few prospects to use the language outside the classroom in their home countries (Sawir & Erlenawati, 2005). In another study (Ruble et al., 2013), the findings indicate that the lack of daily conversation in English among students from China studying in the United States could be a reason for their poor communicative skills. Problems with linguistic competency already exist among secondary school students, according to a study (Mohamad Nor et al., 2015), because the students' difficulties with productive skills overwhelm their receptive skills since their problem with vocabulary triggers their inadequacies in the productive language skills component.

Students' proficiency in English is one of the most important factors that influence their success both in high school and on their university entrance exam (Dixon, 2004; Esmaeili & Haghdooost, 2008). There are many factors that can be considered predictors of students' achievement in different exams, such as their gender and personal characteristics (Buddeberg-Fischer et al., 2003), but in the achievement of medical students in Malaysia, the

role of language proficiency was not thoroughly studied before and needs to be considered before any curriculum reform, although globally, rapid changes and developments in the different fields of medicine, technology, science, and business have resulted in radical calls for changes in the learning and teaching process (Hutchinson & Waters, 1987). Many employers and market forces are challenging employees to be equipped with specific knowledge and capabilities that satisfy the needs of market labour, and in Malaysia, many have criticized the lack of English language proficiency, especially among doctors.

A study by Shaalan (2020) showed that the English course offered to the native students at the College of Dentistry, Al-Azhar University, is not compatible with the Malaysian dental students studying in the same college; secondly, it was also evident that the course would not help develop the English dental vocabulary of the students. Therefore, an English course along with project-based learning (PBL) techniques was chosen for the English language needs of Malaysian dental students. The evidence collected during the study suggests that a patient-centered approach to communication in the clinical consultation improves health outcomes, reduces costs, and leads to higher patient satisfaction. This leads to the research topic, which is relevant to identifying medical students' communicative ability among their peers. Various studies (Stewart M, et al., 2000; Beck Takemura et al., 2008) found that doctors need to master strategic skills in patient-centered communication, which are essential for effectively addressing patients' problems, expectations, and concerns. This is because communication skills can benefit doctors by stimulating and prioritizing patients' problems, expectations, and concerns; exploring their ideas, and recognizing and responding to their cultural background.

Moore (2008), based on his work in rural Nepal clinics, had, however, raised the apprehension that culture and language may be contextually bound to patient-centred communication. Even though research into patient-physician communication in the Arab setting is limited, social sciences literature does explore cross-cultural communication in such a background. (Dwairy, 2006; Nasir & Abdul-Haq, 2008) Additionally, patterns of assimilation to a different culture differ from those in Western societies (Al-Krenawi & Graham, 2000). These studies reflect the need for the development of a feasible model for teaching enhanced communication skills among the medical students in Malaysian universities to assimilate themselves and build their confidence before they immerse themselves in the medical cultures.

Findings of Shaalan (2020) highlight the critical gap in addressing the specific English language needs of Malaysian dental students at Al-Azhar University's College of Dentistry. This underscores the necessity of tailored courses that integrate Project-Based Learning (PBL) to enhance domain-specific vocabulary and practical communication skills. The importance of patient-centred communication in medical contexts is widely recognized for its role in improving health outcomes, lowering costs, and fostering patient satisfaction (Stewart et al., 2000; Beck et al., 2002; Takemura et al., 2008). Such skills enable doctors to identify and address patient priorities, expectations, and concerns effectively. However, Moore's (2008) observations in rural Nepal remind us of the contextual and cultural complexities inherent in patient-centred communication, emphasizing the variability in communication practices across different cultural settings. In the Arab world, limited research into patient-physician communication (Dwairy, 2006; Nasir & Abdul-Haq, 2008) coupled with unique patterns of

cultural assimilation (Al-Krenawi & Graham, 2000) further underscores the need for a context-sensitive approach. These findings call for a comprehensive, culturally adaptable model of communication skills training for medical students in Malaysia. Such a model would not only address linguistic proficiency but also build confidence and cultural competence, equipping students for effective integration into diverse medical environments.

Turning to medical students' exposure to learning English, Kang (2004) noted that learning English is essential for medical professionals because most of the medical literature for medical professionals is available in the English language (Kurfurst, 2004). This information leads to a study by Lodhi et al. (2018), who examined the communicative needs of doctors at academic and professional levels in survey-based research. The data was compiled, evaluated, and interpreted quantitatively by administering questionnaires among doctors and medical students. The study discovered that there is a giant gap between the doctors' desired level of English proficiency skills and their acquired competencies. Their study concluded that the respondents emphasized the need to introduce English language courses and workshops for medical students and doctors, respectively, so that they may fulfil their communicative needs effectively so they strongly recommended the introduction of the English for Medical Purposes (EMP) syllabus.

To track medical students' English language courses offered in Malaysian universities, this study browsed the University of Malaya's medical faculty's undergraduate guidebook (<https://medicine.um.edu.my/ug>). The course 'The Language in Medicine' offered to the medical students covers an intensive 8-week program that aims to equip students with the necessary language skills to pursue studies and careers in medicine. The Medical Language program offers a curriculum designed to furnish students with the requisite language proficiencies vital for both academic pursuits and professional undertakings in the medical field. Emphasizing the human aspect inherent in medical practice, this program integrates a thematic syllabus that encompasses listening, speaking, reading, and writing skills. Employing authentic audio and written materials pertinent to medicine, students engage in exercises aimed at generating various oral and written compositions commonly encountered within the medical domain. Additionally, students partake in site visits to observe firsthand the interactions among medical professionals and allied health practitioners in clinical settings. Encouraging peer evaluation of assigned tasks and the maintenance of reflective journals fosters a culture of self-directed learning, which is indispensable for aspiring medical professionals. Throughout the program, emphasis is placed on achieving linguistic precision and sociocultural appropriateness in both language forms and vocabulary. Successful completion of the Medical Language program is a prerequisite for admission to the Foundation Block curriculum.

While the described medical language program offers valuable components aimed at enhancing students' language skills within the medical context, it may not be sufficient to fully develop communicative proficiency for several reasons. Although the program includes authentic materials and site visits, the duration and depth of exposure to these experiences may be limited. Developing robust communication skills often requires sustained and immersive engagement with language in various contexts over an extended period. Although we encourage peer review and reflective journals, they might not offer the individualized feedback required for focused improvement. Personalized feedback from instructors or

language experts can pinpoint areas of weakness and provide tailored guidance for improvement (Pysarchyk, 2024). While the program integrates listening, speaking, reading, and writing skills, the degree of interconnection and practice of these skills in authentic contexts may vary. The seamless integration of these skills is often necessary for effective communication, as their isolation may not provide adequate attention. While the medical language program described provides useful components for improving language skills within the medical field, additional measures may be necessary to fully develop communicative proficiency (Santos Franco et al., 2018).

Next, another leading university, the National University of Malaysia, offers the medical students the LMCE2022 Workplace Communication II and LMCE 2042 Oral Communication subjects. This course is offered to students who have passed the LMCE1022 Academic Communication II course or the LMCE1032 Academic Communication III course. This course provides students with the oral and written communication skills. This course requires students to improve their creative and critical thinking skills, as well as their ability to handle meetings and presentations, through class activities, simulations, and fieldwork. Students from the Faculty of Medicine, Pharmacy, and Dentistry who have passed LMCE1012 Academic Communication I or LMCE1022 Academic Communication II are eligible to enroll in this course. Besides fostering the spirit of cooperation and creativity, this course is expected to improve students' skills in discussion and presentation through simulations, task-based activities, and autonomous learning. Nevertheless, effective communication in the medical field encompasses a broader range of skills, including patient interaction, interdisciplinary collaboration, and conveying complex medical concepts to diverse audiences. The description of the courses mentions fostering confidence, fluency, clarity, and cooperation, but it lacks specificity regarding how these skills will be developed within the context of medical communication. Medical communication involves unique challenges such as conveying sensitive information to patients, understanding medical terminology, and adapting communication styles to diverse cultural backgrounds (Santos Franco et al., 2018).

The courses strive to equip students for both academic and post-academic settings, which encompass international work environments. In medical communication, there is insufficient focus on English for Medical Purposes (EMP) that is specifically designed for the medical field, since this type of communication has special language requirements that general communication courses might not cover well. Limited studies on language proficiency needs among medical students in Malaysia indicate a lack of empirical evidence that guides the development of communication courses tailored to their specific needs. Without a thorough understanding of these needs, course content and delivery methods may not effectively address the challenges faced by medical students in their communication aspirations. The described courses may provide useful components for improving communication skills. There is a need for greater specificity, contextualization, and emphasis on English for Specific Purposes (ESP) tailored to the medical field, but the current courses may only partially address the communication skills of medical students. Smith and Hall (2023) reveal that there are only a few studies addressing language proficiency in relation to language differences among medical students, and this issue is even more pronounced in Malaysia.

Methodology

A structured questionnaire was employed as the primary instrument to assess the English language proficiency needs of medical students. This tool was adapted from the framework developed by Lodhi et al. (2018) and was administered to a sample of 45 medical students enrolled at a private university in Malaysia. The questionnaire consisted of items rated on a five-point Likert scale, allowing participants to express their level of agreement regarding various aspects of language use in academic and clinical settings. The collected data were processed using the Statistical Package for the Social Sciences (SPSS), where mean scores were computed for each item to determine the relative importance of different language skill areas. This methodological approach enabled a systematic exploration of students' communicative needs, providing valuable insights into the specific linguistic competencies required in the medical field and highlighting areas in which further language support may be necessary.

Results

Effective communication in English is a cornerstone of medical education and professional practice, facilitating students' engagement with academic content, clinical training, and global medical discourse. In today's interconnected healthcare environment, English proficiency is indispensable for interpreting medical literature, conducting patient consultations, participating in international conferences, and disseminating research findings. In the present analysis, medical students demonstrated a moderate speaking proficiency (Figure 1), with an average score of 3.03. This indicates a foundational ability to communicate, yet highlights the need for further development, particularly in clinically oriented speaking tasks. Activities such as medical consultations, case presentations, and patient interactions require clear, confident, and precise articulation of medical information, which many students continue to find challenging. Fluency and clarity in spoken English are often hindered by limited exposure, insufficient training, and a lack of real-world practice opportunities. Moreover, the specialized and technical nature of medical terminology can discourage spontaneous communication, affecting students' capacity to conduct thorough patient assessments and contribute meaningfully to clinical discussions. Addressing these challenges necessitates a curriculum that prioritizes speaking proficiency through practical, interactive strategies such as role-playing, simulated patient interviews, and structured oral assessments. Embedding such activities into the learning process can significantly enhance students' confidence and communicative competence. As Garcia et al. (2022) underscore, effective communication among healthcare professionals is vital for improving decision-making, minimizing clinical errors, and ensuring optimal patient outcomes. Figure 1 below illustrates the needs analysis for speaking skills among medical students based on key categories:

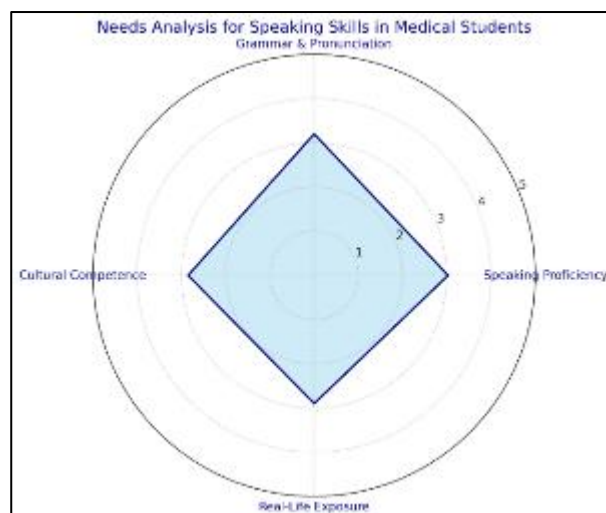


Figure 1: Needs Analysis for speaking skills in medical students

Grammar and pronunciation are essential components of effective communication in the medical field. In this needs analysis, medical students achieved a relatively higher score of 3.20 in this category, indicating moderate competence. However, despite their general proficiency, specific grammatical issues and challenges with medical term pronunciation remain areas of concern. Medical terminology often includes complex and unfamiliar words derived from Latin and Greek origins, making pronunciation particularly challenging for students who are non-native English speakers. Incorrect pronunciation of medical terms can lead to miscommunication, affecting patient safety and professional credibility. Furthermore, grammatical errors, such as incorrect verb tense usage or sentence structure inconsistencies, can compromise clarity in verbal communication. Addressing these challenges requires targeted interventions, including pronunciation drills, phonetic training, and grammar workshops focused on medical discourse. Additionally, integrating voice-recording software and AI-based pronunciation tools into learning modules can provide students with immediate feedback, allowing them to refine their spoken language skills. Faculty members should also encourage peer-to-peer speaking exercises, where students can practice medical dialogues and receive constructive feedback, further enhancing their grammatical accuracy and pronunciation precision.

Cultural competence is a critical aspect of communication in the medical field, as doctors frequently interact with patients from diverse backgrounds. The analysis indicates that medical students scored 2.85 in this category, reflecting notable difficulties in cross-cultural communication. Limited exposure to multicultural patient interactions can hinder students' ability to navigate linguistic and cultural differences, which is essential for providing patient-centred care. Effective communication extends beyond language proficiency; it also involves understanding cultural norms, respecting patients' beliefs, and demonstrating sensitivity in medical consultations. For instance, different cultures have varying perspectives on illness, treatment options, and doctor-patient relationships, which medical professionals must acknowledge and address to ensure positive health outcomes.

This challenge is particularly relevant in Malaysia's multicultural healthcare environment, where medical professionals must navigate linguistic and cultural diversity to

provide patient-centred care. Abdullah and Chaudhry (2022) found that a lack of intercultural competence often leads to misunderstandings in patient-provider interactions, which can compromise the quality of care and patient satisfaction. Similarly, Zain and Manan (2018) reported that Malaysian medical students face difficulties in understanding accents and colloquial expressions, which can hinder effective communication in multilingual settings. The low score in this category suggests a need for enhanced training in cultural competence through workshops, patient interaction simulations, and exposure to real-world clinical environments that involve diverse patient populations. Medical schools should consider integrating cultural sensitivity modules within their curricula, incorporating role-playing exercises where students practice communicating with patients from different cultural backgrounds. By fostering cultural competence, medical students can develop a more inclusive and empathetic approach to patient care, ultimately improving the quality of healthcare delivery.

This finding aligns with Ursa's (2018) study, which emphasized that limited vocabulary is a major barrier to comprehension and communication, particularly in high-stakes medical contexts. Similarly, Zhou and Watanabe (2021) highlighted that a lack of familiarity with medical terminology can lead to misunderstandings and errors in clinical practice, underlining the importance of targeted vocabulary instruction in English for Medical Purposes (EMP) modules. A significant challenge identified in this needs analysis is the limited real-life exposure medical students have to clinical speaking environments, with a score of 2.90. Practical experience is essential for developing strong speaking skills, yet many students lack opportunities to engage in authentic medical conversations outside of classroom settings. Theoretical knowledge alone is insufficient for mastering oral communication in clinical contexts; students must actively participate in patient interactions, hospital rounds, and medical team discussions to enhance their verbal skills. The restricted access to clinical settings can be attributed to various factors, including institutional policies, limited availability of training programs, and logistical constraints in hospital environments. To bridge this gap, medical schools should prioritize experiential learning by incorporating more clinical rotations, patient simulation exercises, and shadowing opportunities with practicing physicians. Additionally, telemedicine and virtual patient consultations can serve as alternative platforms for students to practice real-life communication skills in a controlled environment. Enhancing real-life exposure will allow medical students to apply theoretical knowledge in practical situations, refine their speaking abilities, and gain confidence in handling diverse medical scenarios.

Based on the analysis, as seen in Table 1, the hypothesis that medical students have specific English language needs closely tied to their professional careers is strongly supported. The findings indicate that students prioritize English proficiency for mastering medical terminology, conducting effective patient communication, and participating in professional discourse. High ratings for English in academic and professional contexts, with mean scores of 4.45 for both, reflect its critical role in understanding medical literature, engaging in clinical training, and contributing to international collaborations.

Table 1

Distribution of participants' response on the importance of English

	English for medical academic studies	English for medical profession	EMP course	English language skills	Understanding medical terminology	Malay medical discourse
N	45	45	45	45	45	45
Median	5.00	5.00	4.50	5.00	4.00	3.00
Mode	5	5	5	5	4	3
Mean	4.45	4.45	4.13	4.10	4.07	3.13
Std. Deviation	.770	.968	1.106	1.242	.785	.937

Figure 2 below presents a comparison of key descriptive statistics, median, mode, mean, and standard deviation across six categories related to English for Medical Purposes (EMP). The categories "English for medical academic studies" and "English for medical profession" exhibit the highest central tendency, with mean and median scores of 4.45 and 5.00 respectively. This suggests that students perceive these areas as highly important in their academic and professional development. In comparison, the "EMP course" and "English language skills" categories show slightly lower mean scores, around 4.1. While still considered important, these areas may reflect more varied experiences among students, possibly due to differences in course design or instructional quality. "Understanding medical terminology" received a median and mode of 4, indicating a moderate level of perceived proficiency or significance. This may reflect the inherent difficulty of technical vocabulary in the medical field. "Malay medical discourse" scored the lowest among the six categories, with a mean of 3.13 and a median of 3. This suggests that it is either less emphasized in the curriculum or presents greater challenges for students, potentially due to limited integration in medical training conducted primarily in English. The standard deviation provides additional insight into the variability of responses. For instance, "English language skills" has the highest standard deviation (approximately 1.24), indicating a wide range of student perceptions and experiences. In contrast, "Understanding medical terminology" shows more consistency among respondents, suggesting a shared understanding or similar exposure.

Overall, the graph highlights which areas students feel more confident in and which areas may require targeted support or curricular enhancement. It also draws attention to disparities in student experience that educators may need to address to ensure balanced language development in medical education.

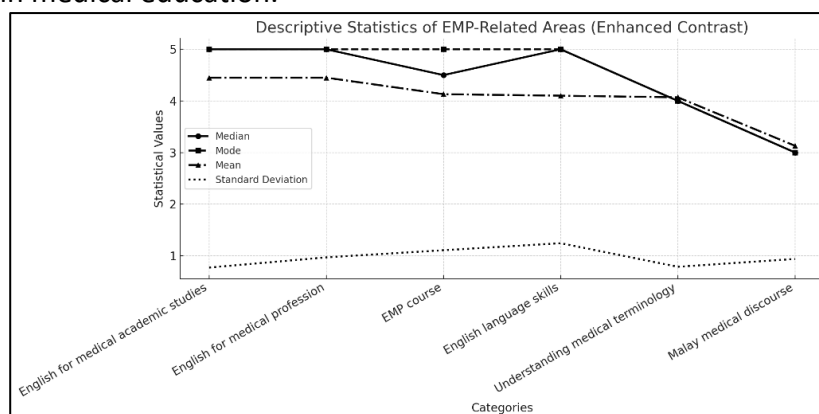


Figure 2: Description of students' needs analysis

Conclusion

This study emphasizes the importance of targeted English language instruction for medical students, particularly in areas of cultural competence and real-life medical communication (Turk et al., 2018). The findings suggest that structured language training should incorporate speaking exercises, simulated patient interactions, and interdisciplinary communication practice to enhance students' proficiency (Garcia, Patel, & Wong, 2022). Future research should explore the long-term impact of such interventions on students' professional competencies (Molina & Kasper, 2019).

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