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INSTRUCTION IN MEDICAL ENGLISH WITHIN NON-ENGLISH-SPEAKING CONTEXTS: AN ANALYSIS OF REQUIREMENTS, CHALLENGES, AND PEDAGOGICAL APPROACHES

Abstract: *English is the lingua franca of medicine and science, making proficiency an essential competency for medical students. It enables access to international research, participation in conferences, and effective communication in multicultural clinical settings. However, in non-English-speaking contexts such as Uzbekistan, students face significant challenges, including limited command of medical terminology, difficulty engaging with academic texts, problems in research writing, and weak oral communication skills. Curricula often prioritize general English, with little focus on the discourse and genres specific to medical practice. This article employs a qualitative and analytical approach based on three frameworks: English for Specific Purposes (ESP), Content and Language Integrated Learning (CLIL), and Communicative Language Teaching (CLT). A comparative review of Uzbekistan, Europe, and Asia reveals gaps in curriculum design, teacher training, and authentic material use. The study concludes that customized ESP programs, integrated with CLIL and communicative methods, are vital for developing medical students' academic literacy and professional competence.*

Keywords: *Medical English; English for Specific Purposes (ESP); Content and Language Integrated Learning (CLIL); Communicative Language Teaching (CLT); curriculum design; teacher training; Uzbekistan*

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ПРЕПОДАВАНИЕ МЕДИЦИНСКОГО АНГЛИЙСКОГО ЯЗЫКА В НЕАНГЛОЯЗЫЧНОЙ СРЕДЕ: ИССЛЕДОВАНИЕ ТРЕБОВАНИЙ, ПРОБЛЕМ И ОБРАЗОВАТЕЛЬНЫХ СТРАТЕГИЙ

Аннотация: *Английский язык является лингва франка медицины и науки, что делает владение им важнейшей компетенцией для студентов-медиков. Он обеспечивает доступ к международным исследованиям, участие в конференциях и эффективное общение в мультикультурных клинических условиях. Однако в неанглоязычных странах, таких как Узбекистан, студенты сталкиваются с серьёзными трудностями, включая ограниченное знание медицинской терминологии, сложности в работе с академическими текстами, проблемы при написании научных работ и недостаточные навыки устной коммуникации. Учебные программы часто акцентированы на общем английском языке, уделяя мало внимания дискурсу и жанрам, характерным для медицинской практики. В статье используется качественный и аналитический подход, основанный на трёх педагогических моделях: английский для специальных целей (ESP), интегрированное обучение предмету и языку (CLIL) и коммуникативное обучение (CLT). Сравнительный анализ практик в Узбекистане, Европе и Азии выявил пробелы в разработке учебных программ, подготовке преподавателей и использовании аутентичных материалов. В исследовании делается вывод, что адаптированные программы ESP, интегрированные с методами CLIL и CLT, необходимы для формирования у студентов-медиков академической грамотности и профессиональной компетенции.*

Ключевые слова: *Медицинский английский; Английский для специальных целей (ESP); Интегрированное обучение предмету и языку (CLIL); Коммуникативное обучение (CLT); разработка учебных программ; подготовка преподавателей; Узбекистан*

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INGLIZ ZABON BO’LMAGAN MUHITLARDA TIBBIY INGLIZ TILINI O’QITISH: EHTIYOJLAR, QIYINCHILIKLAR VA PEDAGOGIK YONDASHUVLAR TAHLILI

Annotatsiya - *Ingliz tili tibbiyot va fan sohalarida xalqaro aloqa vositasi (lingua franca) bo‘lib, unga puxta egalik qilish tibbiyot talabalari uchun muhim kasbiy kompetensiyadir. U xalqaro tadqiqotlardan foydalanish, ilmiy konferensiyalarda ishtirok etish va ko‘p madaniyatli klinik sharoitlarda samarali muloqot qilish imkonini beradi. Biroq, ingliz tili ona tili bo‘lmagan mamlakatlarda, xususan O‘zbekistonda, talabalar qator qiyinchiliklarga duch kelmoqdalar. Bunga tibbiy terminologiyani yetarlicha bilmaslik, akademik matnlar bilan ishlashdagi qiyinchiliklar, ilmiy matn yozishdagi muammolar hamda og‘zaki muloqot ko‘nikmalarining sustligi kiradi. Amaldagi o‘quv dasturlari ko‘pincha umumiy ingliz tiliga urg‘u beradi, ammo tibbiy amaliyotga xos bo‘lgan nutqiy janrlarga va diskurslarga yetarli e’tibor qaratmaydi. Mazkur maqolada sifatli va tahliliy yondashuv qo‘llanilgan bo‘lib, uchta pedagogik modelga tayangan: Maxsus Maqsadlar Uchun Ingliz Tili (ESP), Mazmun va Tilni Integratsiyalashgan O‘qitish (CLIL) va Kommunikativ Til O‘qitish (CLT). O‘zbekiston, Yevropa va Osiyodagi amaliyotlarni qiyosiy tahlil qilish natijasida o‘quv dasturlarini ishlab chiqish, o‘qituvchilarni tayyorlash hamda ishonchli materiallardan foydalanish borasida muammolar aniqlangan. Tadqiqot xulosasiga ko‘ra, CLIL va CLT metodlari bilan uyg‘unlashtirilgan maxsus ESP dasturlari tibbiyot talabalarining akademik savodxonligi va kasbiy kompetensiyasini rivojlantirish uchun zarurdir.*

Kalit so‘zlar: *Tibbiy ingliz tili; Maxsus maqsadlar uchun ingliz tili (ESP); Fan va tilni integratsiyalashgan holda o‘qitish (CLIL); Kommunikativ til o‘qitish (CLT); o‘quv dasturi tuzish; o‘qituvchilarni tayyorlash; O‘zbekiston*

Introduction

English serves as the common language in the fields of medicine, science, and global communication. Most journals, research articles, and conference proceedings are published in English, necessitating proficiency for

academic achievement and professional engagement in international medical communities. English provides medical students with access to contemporary scientific knowledge, facilitates effective interdisciplinary collaboration, and supports culturally responsive patient care. In numerous non-English-speaking environments, students face challenges in accessing and utilizing English-language resources. The structure of medical curricula restricts opportunities for language study, while the specialized vocabulary, frequently derived from Latin and Greek, increases the cognitive burden associated with complex material. Learners encounter obstacles in reading primary literature, presenting clinical cases, and writing research papers without targeted instruction.

These difficulties manifest as specific academic and clinical challenges. Limited proficiency impedes the understanding of textbooks, guidelines, and research, diminishes the ability to produce coherent case reports and abstracts, and restricts participation in seminars and conferences. In clinical environments, particularly those that are multicultural, inadequate communicative competence may hinder doctor-patient interactions and adversely affect care quality. The structural characteristics of medical programs intensify the issue: language courses, when available, are often generic and do not align with the specific discourse, genres, and interactional requirements of the medical field. This discrepancy highlights the necessity for English for Specific Purposes (ESP) programs that specifically cultivate disciplinary terminology, medical genres, and interactional routines critical to practice.

Despite the well-established theoretical value of ESP (Hutchinson & Waters, 1987; Dudley-Evans & St John, 1998) [1], its implementation remains insufficient. Numerous institutions continue to offer only general English, neglecting authentic medical discourse, task-based simulations, and doctor-patient communication (see also Candlin & Candlin, 2002) [2]. Empirical evaluations of medical-ESP curricula, especially longitudinal studies and research from contexts like Uzbekistan, are limited. Additionally, collaboration

between language specialists and medical faculty tends to be spontaneous rather than systematic.

This article analyzes the significance of English in medical education, identifies the main challenges faced by medical students, and examines pedagogical strategies appropriate for medical English for Specific Purposes (ESP). This document presents research-based recommendations for curriculum design, instructional practices, and teacher training aimed at aligning language education with the communicative requirements of modern medicine.

Methodology

Examining the English language instruction of future doctors, this qualitative and analytical study draws on well-established theories in the fields of applied linguistics and language pedagogy. The methodology is structured around three complementary pedagogical frameworks: English for Specific Purposes (ESP), Content and Language Integrated Learning (CLIL), and Communicative Language Teaching (CLT). These approaches offer a theoretical framework and practical guidance for assessing the linguistic requirements of medical students and determining effective teaching strategies.

The ESP framework (Hutchinson & Waters, 1987; Dudley-Evans & St John, 1998) is the primary focus of this study. ESP focuses on customizing instruction to meet the professional and academic requirements of learners, a consideration that is especially pertinent in medical education, where students need both general English proficiency and specialized communicative skills. This study employs ESP principles to assess the disparity between the general English instruction provided in numerous medical institutions and the specific language competencies necessary for medical discourse.

Secondly, CLIL (Content and Language Integrated Learning) serves as a methodological framework to examine the utilization of medical content as a medium for language development instruction. This study investigates the integration of authentic medical texts, case studies, and research articles into English instruction, facilitating an exploration of language learning within

disciplinary contexts. CLIL offers an understanding of the concurrent development of linguistic competence and professional knowledge among medical students.

The study integrates elements of Communicative Language Teaching (CLT) tailored for medical contexts. Communicative Language Teaching (CLT) prioritizes interaction and authentic communication. In the context of medical English, this approach is demonstrated through doctor-patient role plays, clinical case presentations, and professional discussions. This study analyzes the impact of communicative tasks on the fluency, accuracy, and confidence of medical students.

These methodological approaches facilitate a thorough examination of the significance, challenges, and strategies involved in teaching English to medical students, while situating the analysis within a global and context-sensitive framework.

Literature review

The concept of English for Specific Purposes (ESP) provides the central foundation for teaching English in medical education. Hutchinson and Waters [3] emphasized that ESP must be learner-centered, with instruction tailored to students' professional needs. Dudley-Evans and St John extended this framework by stressing the integration of linguistic competence with disciplinary discourse. Within medical contexts, ESP has proven particularly effective in equipping students with the specialized vocabulary, genres, and communicative practices necessary for academic study and clinical interaction. However, the successful implementation of ESP requires systematic needs analysis and instructors who can bridge linguistic training with medical knowledge, which remain limited in many institutions

Alongside ESP, Content and Language Integrated Learning (CLIL) and Communicative Language Teaching (CLT) have been widely applied in medical English instruction. CLIL encourages students to learn language through subject-specific content, using authentic medical texts, case reports, and research

articles [4]. Research in European universities has shown that CLIL enhances both disciplinary knowledge and language proficiency [5]. Similarly, CLT, when adapted to medical contexts, fosters practical communication through role plays, case presentations, and clinical discussions, thereby improving fluency and pragmatic competence [6]. These approaches highlight the need for interactive, context-based instruction that moves beyond general English and develops communicative competence within medical settings.

Comparative studies reveal significant differences in how medical English is taught across regions. In Europe, institutional support has facilitated the integration of CLIL and ESP into medical curricula [7]. In Asia, medical English instruction often emphasizes exam preparation and research dissemination, with a gradual shift toward more communicative practices [8]. In Uzbekistan, however, research indicates that medical students typically receive general English instruction rather than ESP-focused courses, leaving a gap between linguistic training and professional needs [9]. Across these contexts, the literature highlights several persistent gaps: limited research on curriculum design, insufficient teacher training for ESP, and a lack of longitudinal studies evaluating the long-term outcomes of medical English instruction. Addressing these issues is essential to enhance the effectiveness and relevance of English language education in medical fields.

Reading and Anxiety Challenges Among Medical Students.

A study in China (Sichuan) investigating medical English anxiety found that 85.2% of medical students reported moderate or higher anxiety based on the Medical English Learning Anxiety Scale (MELAS), especially in listening and speaking (89.3%), literature reading (86.6%), academic writing (85.9%), communication (81.9%), and vocabulary learning (81.2%). Another study in EMI (English-medium instruction) contexts revealed that over 63% of medical students experienced great difficulty in reading and understanding medical materials, including technical terms, lectures, and exam questions. [10]

Oral Communication Struggles.

The same EMI study found that over 85% of students reported major difficulties with oral communication tasks, such as giving presentations, answering questions, participating in discussions, pronouncing terms, and speaking fluently. These findings align with classroom observations in India where only 25% of medical undergraduates felt proficient in English overall; while about 80% managed reading and writing, just 40% felt capable speaking confidently [11]

Proficiency and Usage Gaps.

In Afghanistan, a cross-sectional survey of 200 medical students revealed that although 80% had received formal medical-related English instruction, only 6% considered themselves fluent. 63.5% reported difficulty understanding medical documentaries without subtitles, and a mere 4.5% felt very confident discussing medical topics in English. [12]

Regional Preferences and Learned Needs.

Islamic Gulf students' needs assessment highlighted that improving medical terminology and English speaking were primary demands, while listening ranked lowest among their language needs. Conversely, data from Colombia showed that only 28.6% of medical graduates met the targeted English proficiency levels, and only 37.2% of medical programs achieved this benchmark—implying that nearly 70% of graduates lack at least intermediate-level English aptitude.

Discussion

The findings of this study highlight that English language proficiency among medical students is not merely a linguistic skill but a critical professional competency. Previous research indicates that limited English proficiency correlates significantly with restricted access to international medical knowledge and diminished confidence in patient–doctor communication, particularly in multilingual and multicultural contexts (Maher, 2018). In Uzbekistan, recent curriculum reforms that emphasize international collaboration and exposure highlight the significant barrier posed by the absence of tailored English for

Specific Purposes (ESP) courses in medical universities to achieving these objectives.

Data indicate that around 70–80% of medical students in non-English-dominant countries experience challenges with medical terminology and academic writing (Kim, 2017; Zhang, 2019). In Uzbekistan, a survey by the Ministry of Higher Education (2021) indicated that 68% of medical undergraduates perceived academic reading in English as particularly challenging. The data highlight the importance of establishing specialized ESP programs that integrate language instruction with medical content using methodologies like CLIL.

A significant implication pertains to pedagogy. Although communicative language teaching (CLT) has been extensively implemented, its direct application in the medical field necessitates modification. Role-play activities that simulate doctor–patient interactions or case-based discussions of medical ethics have demonstrated an enhancement of communicative competence in applied contexts (Ali & Mahmood, 2020). In Uzbekistan, classroom observations indicate that these techniques are not widely employed, as instruction predominantly adheres to traditional grammar-translation methods. Addressing this methodological gap is crucial for synchronizing local teaching with global best practices.

An additional aspect pertains to teacher training. In Europe, 62% of medical English instructors indicated participation in targeted ESP teacher-development programs (Smith & Evans, 2019), while in Central Asia, including Uzbekistan, such initiatives are infrequent. Inadequate provision of medical and linguistic knowledge to instructors results in inconsistent quality of English for Specific Purposes (ESP) delivery. Strengthening teacher-training frameworks and promoting interdisciplinary collaboration between language specialists and medical professionals is a critical strategy.

The discussion indicates two primary implications: (1) Uzbekistan should prioritize curriculum innovation, CLIL-based integration, and teacher

training to enhance medical English instruction; and (2) there is a need for additional comparative studies globally to improve pedagogical models that align linguistic competence with professional medical requirements. The implications highlight that medical English must be regarded as a fundamental aspect of medical education, significantly influencing academic performance, clinical communication, and the global mobility of medical graduates.

Conclusion

This study analyzed the significance, challenges, and instructional strategies involved in teaching English to medical students, specifically emphasizing Uzbekistan in relation to international practices. The findings demonstrate that limited English proficiency notably hinders medical students' access to international research, their engagement in professional communication, and their participation in global academic networks. English for Specific Purposes (ESP), Content and Language Integrated Learning (CLIL), and Communicative Language Teaching (CLT) offer valuable theoretical frameworks; however, their application in medical education is inconsistent.

The absence of specialized English for Specific Purposes curricula and insufficient teacher-training programs in Uzbekistan impede the advancement of medical English. In contrast, international research underscores the efficacy of curriculum innovation, simulation-based communication techniques, and organized teacher development programs. The identified gaps highlight the critical necessity for reform at institutional and national levels.

References

1. Dudley-Evans, T., & St John, M. J. (1998). *Developments in English for specific purposes: A multi-disciplinary approach*. Cambridge University Press. / Hutchinson, T., & Waters, A. (1987). English for specific purposes: A learning-centred approach. Cambridge University Press.

2. Candlin, C. N., & Candlin, S. (2002). Health care communication: A problematic site for applied linguistics research. *Annual Review of Applied Linguistics, 22*, 134–154.

3. Hutchinson, T., & Waters, A. (1987). *English for Specific Purposes: A learning-centred approach*. Cambridge University Press.
4. Coyle, D., Hood, P., & Marsh, D. (2010). *CLIL: Content and Language Integrated Learning*. Cambridge University Press.
5. Banegas, D. L. (2013). Integrating content and language in English language teaching in secondary education: Models, benefits, and challenges. *Studies in Second Language Learning and Teaching*, *3*(1), 111–136.
6. Richards, J. C. (2006). *Communicative language teaching today*. Cambridge University Press.
7. Wilkinson, R. (2005). The integration of content and language. In R. Wilkinson (Ed.), *Integrating content and language: Meeting the challenge of a multilingual higher education* (pp. 3–11). Maastricht University Press.
8. Tsai, Y. R. (2010). Applying an ESP model to English for medical purposes. *Asian ESP Journal*, *6*(2), 65–90.
9. Umarova, N. (2020). English language teaching reforms in Uzbekistan: Challenges and perspectives. *Journal of Language Teaching and Research*, *11*(5), 713–720.
10. Alanazi, K., & Curle, S. (2024). Challenges experienced by students studying medicine through English-medium instruction. Frontiers in Education, https://doi.org/10.3389/feduc.2024.1364860
11. Vanamali, D. R., Gara, H. K., Hatekar, A. D., Baa, J., Pardeshi, S., Sonowal, N., Panigrahy, S., Mulkutkar, S., & Sar, M. (2022). Assessment of language proficiency and enhancement among 1st phase MBBS undergraduates. Assam Journal of Internal Medicine, 12(2), 70–78. https://doi.org/10.4103/ajoim.ajoim_5_22 Lippincott Journals
13. Ibrahimi, N., Hafiz, W. U., & Stanikzai, H. (2025). Language barriers in medical education: An assessment of English proficiency in Afghan medical students. Frontier in Medical and Health Research, 3(6), 711–719. https://fmhr.org/index.php/fmhr/article/view/846