

English in medical training and clinical practice: perceptions in a border context.

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Abstract.

English is essential both in the academic training of physicians and in their clinical practice in Tijuana, since access to updated scientific literature, interpretation of technical information, and communication with patients who do not speak Spanish depend on this language. However, although English is constantly present in these settings, uncertainty remains about whether formal English instruction in universities truly responds to the practical needs of the professional environment. To examine this issue, an exploratory descriptive mixed-methods study was conducted with 285 participants, including medical students and practicing physicians. Quantitative data were collected through a Likert-scale questionnaire and complemented with semi-structured interviews analyzed using a thematic approach. The results showed consistently high evaluations of English, with no significant differences between students and physicians, as well as a positive relationship between its perceived importance and support for its inclusion as a mandatory subject. The interviews revealed that participants use English to consult recent literature, verify technical information, and, in some cases, communicate with foreign patients, although several noted that institutional courses remain disconnected from clinical practice. Overall, the findings indicate that English functions as a structural resource in the border region and that its instruction requires stronger alignment with authentic academic and clinical tasks.

Keywords: Medical English, clinical practice, medical training, border context, student perceptions.

Summary.

English is essential both in the academic training of physicians and in their clinical practice in Tijuana, as it is necessary to access current scientific literature, interpret technical information, and care for patients who do not speak Spanish. However, although the language is constantly present in these areas, uncertainty remains as to whether formal English instruction at universities truly meets the practical needs of the professional environment. To examine this question, an exploratory-descriptive study with a mixed-methods approach was conducted, including 285 participants, from medical students to practicing physicians. Quantitative data was collected using a Likert-type questionnaire and supplemented with semi-structured interviews analyzed thematically. The results showed consistently high valuations of English, with no significant differences between students and physicians, as well as a positive relationship between its perceived importance and support for its mandatory inclusion in the curriculum. The interviews

revealed that the language is used to consult recent literature, verify technical information, and, in some cases, communicate with foreign patients, although several participants noted that institutional courses remain disconnected from clinical practice. Taken together, the findings indicate that English functions as a structural resource in the border region and that its teaching requires greater alignment with authentic academic and clinical tasks.

Keywords : Medical English, clinical practice, medical training, border context, student perceptions.

1. Introduction

1.1. English in medical training: relevance and current tensions.

In today's higher education landscape, English proficiency remains one of those skills that, despite the passage of time and technological advancements, retains its value. In fields like medicine—where knowledge advances rapidly and continuous professional development is almost mandatory—English not only facilitates access to cutting-edge information but also becomes a necessary tool for participating in a scientific community that transcends borders (1-3). Examples of this include the majority of scientific articles, international conferences, and even global clinical collaborations where English is almost always the language used for communication, particularly in border regions like the one where this study was conducted.

For this reason, learning English has long been considered essential for the training of all university graduates (4-5). This certainty, which once seemed solid, has begun to weaken in the face of recent transformations brought about by globalization. Tools such as machine translation, AI assistants, and medical consultation platforms are transforming not only what we do, but also how we do it. The dilemma is significant. If English ceases to be perceived as a necessary skill, language instruction may lose its purpose and become just another academic formality. This raises an uncomfortable question: do students and medical trainees truly believe that English remains indispensable to their careers? If they see it as secondary or replaceable by technology, medical training could become disconnected from the environments where professional communication takes place in this language.

This article is part of a larger research project entitled "Perceptions, Needs, and Technologies in English Language Learning in Contemporary Medical Training." The complete study examines various aspects of English language learning and use at the Faculty of Health Sciences (FACISALUD) of the Autonomous University of Baja California (UABC), including language skills, the application of the language in professional practice, and the influence of technology. This paper presents only the findings related to the perception of the importance of English and attitudes toward its mandatory inclusion in the curriculum, corresponding to one of the original research questions of the overall project. The purpose of the study is to analyze the value that medical students and practicing physicians place on English in their academic training and professional practice, as well as to examine the relationship between this value and the acceptance of English as a required subject within the curriculum. From these considerations arise the following research questions:

- How do students and practicing physicians value the role of English in their academic and professional development?
- Is there a relationship between that assessment and the acceptance of English as a compulsory subject?

Exploring these perceptions allows us to think more clearly about the role of English in current medical education. Ultimately, understanding how those who study and practice medicine experience it can help determine whether courses should be maintained, updated, or completely transformed.

1.2. Study context: Tijuana–San Diego cross-border region

Based on this general premise, it is necessary to situate the study within its specific context. Tijuana represents an ideal setting for examining this phenomenon. On the border, English is not merely a foreign language, as it is an integral part of daily life in hospitals, clinics, and universities. Doctors and patients move between both languages, making English a working tool rather than simply an academic requirement. However, the everyday presence of the language does not guarantee that students will value or master it. Tijuana and San Diego form a cross-border region of intense economic, social, and cultural exchange. This strategic location has made Tijuana one of the most dynamic border cities in the world, where the constant movement of people and services creates a natural bilingual environment (4, 6-7). In this context, English is no longer seen as a foreign or distant language, but as a practical resource that is part of daily life and is used in various social and professional spheres. In the healthcare sector, this reality is even more pronounced. Providing medical care to migrant patients or those from the United States requires understanding specialized terminology and interpreting manuals or technical reports. Furthermore, it involves communicating with people who, in many cases, do not speak Spanish (4, 6-7). In these scenarios, English becomes a necessary tool to ensure safe, ethical, and effective medical practice.

The rise of medical tourism has reinforced these dynamics. Tijuana has become a frequent destination for patients from the United States seeking affordable, high-quality care, generating a continuous demand for physicians who can communicate clearly in English, interpret clinical reports, and explain procedures in an understandable way. The job market also reflects this reality. Graduates find employment in private practices, specialized clinics, binational hospitals, and public health programs serving migrant populations. Toledo et al. (4) emphasize that the constant flow of people in the region makes bilingualism a necessary condition for performing multiple functions related to professional practice.

The Autonomous University of Baja California has integrated these characteristics into its curriculum, especially in courses focused on the border context. For many students, English ceases to be an abstract academic requirement and becomes a necessary tool for communicating with patients, understanding technical information, or working in institutions where intercultural contact is frequent. As Toledo et al. (4) point out, when this contact is constant, the motivation to learn English tends to strengthen and become oriented toward addressing real communication needs.

1.3. English as an academic and professional competence in medicine

The literature indicates that listening, speaking, reading, and writing skills are essential in professional contexts (4). This need becomes particularly evident in settings where diverse linguistic communities converge. In contexts like Tijuana, language skills are not just theoretical knowledge, but become practical tools for concrete activities, such as accessing technical information.

The role of English as a lingua franca has become so firmly established that a significant amount of the most up-to-date academic and technical resources are published exclusively in this language. This concentration of specialized knowledge compels future physicians to learn English to communicate. At the same time, it drives them to master it as a means of accessing information that supports diagnoses, treatments, and scientific advances. This phenomenon is reflected in

academic training. The language is the medium through which research articles, clinical manuals, procedural guidelines, and presentations at international conferences circulate. Ángel, Alpízar, and García (8) and Wahyuni (3) point out that students often use English to search for specialized information, read medical texts, prepare presentations, write academic papers, and participate in training activities related to the discipline. However, for learning to have a real impact, English must be linked to authentic tasks in the medical field. When instruction is offered in isolation, without connection to clinical problems, case analyses, or reviews of specialized literature, the language risks becoming a mere formality without a clear function within the training.

Likewise, those seeking to specialize or pursue postgraduate studies must demonstrate language proficiency through formal certifications. The Faculty of Medicine at the National Autonomous University of Mexico (UNAM) requires a B2 level in reading comprehension, while the Autonomous University of Yucatán (UADY) requires a B1 level for research-oriented programs (9-10). In the case of the Autonomous University of Baja California, English is included as part of the admission profile for the Bachelor of Medicine program, indicating that students must arrive with basic reading comprehension skills and technical vocabulary (11).

Taken together, these perspectives allow us to interpret the perceptions of students and physicians not as mere opinions, but as reflections of an environment that demands communication, staying up-to-date, and collaboration in English. The study presented below is based on these premises.

2. Methods

This study analyzes two specific aspects. The first relates to how students and physicians value the role of English in their academic and professional development. The second examines their stance regarding its mandatory inclusion in the curriculum. The study adopted a mixed-methods approach with a descriptive and correlational scope. The study report was prepared following the STROBE guidelines for observational studies. The quantitative analysis revealed general trends in the valuation of the language, while the qualitative component broadened the interpretation through experiences and perspectives related to its use in academic and clinical settings. The complementarity of both approaches allowed for an understanding of the phenomenon from perspectives that interact with each other.

The sample consisted of 285 participants from the Faculty of Medicine and Psychology at UABC. They were organized into two groups. The first group comprised medical students, who represented 62% of the total. The second group consisted of practicing physicians, who made up 38%. This latter group included graduates, as they were already engaged in professional or clinical activities. Selection was carried out using non-probability convenience sampling.

The questionnaire used in the quantitative component included 25 Likert-type items with 6 points, where 1 represented “strongly disagree” and 6 corresponded to “strongly agree.” For this article, only the items that explore the importance and value of English in medical training and practice, as well as the item that examines its mandatory inclusion in the curriculum, were considered. This delimitation was based on thematic criteria and does not constitute a comprehensive analysis of the instrument used in the overall project.

The qualitative component was integrated through semi-structured interviews conducted with seven participants, five of whom were students and two practicing physicians. The interviews addressed experiences related to the use of English in medical practice, its usefulness in academic and clinical tasks, and the reasons that support its mandatory inclusion in the curriculum. The qualitative component had an exploratory and complementary character, aimed at expanding the

interpretation of the quantitative results, rather than achieving theoretical saturation or qualitative representativeness.

For the quantitative analysis, SPSS v.28 was used. Descriptive statistics, such as means, frequencies, and standard deviations, were applied, as well as Student's t-test and Spearman's correlations, in order to explore possible relationships between variables. The qualitative analysis was developed using thematic coding, which allowed for the identification of recurring patterns in the testimonies.

The study was conducted under ethical principles that guaranteed voluntary participation, informed consent, anonymity, and confidentiality for all participants. The study was approved by the Ethics and Research Evaluation Committee of the Faculty of Languages.

3. Results

3.1. Sample characteristics

The study included 285 participants from the Faculty of Medicine and Psychology at the Autonomous University of Baja California. Of these, 172 were students (62%) and 113 were practicing physicians (38%), with a female predominance (172 women, 111 men, and 2 participants who preferred not to specify). Among the students, the distribution by semester was heterogeneous, with the highest numbers in the first ($n = 37$), tenth ($n = 33$), third ($n = 32$), and ninth ($n = 23$) semesters.

Participants reported predominantly intermediate levels of perceived English proficiency: elementary ($n = 24$, 8.4%), basic ($n = 61$, 21.4%), lower intermediate ($n = 54$, 18.9%), intermediate ($n = 69$, 24.2%), upper intermediate ($n = 50$, 17.5%), and advanced ($n = 27$, 9.5%). Regarding their prior English language training, 83 participants (29.1%) had not taken any formal courses, while the majority reported limited exposure (94 with few courses, 85 with some courses). Only 23 people (8.1%) reported having taken many courses. Overall, the sample reflects diverse academic and professional trajectories, with heterogeneous linguistic profiles that allow for the exploration of broad perceptions about the role of English in medical training and practice.

3.2. Perception of English as an essential resource in medical training

Quantitative data demonstrate a consistent assessment of English as a key tool in medicine. For this analysis, items 1, 2, and 4, focusing on general perceptions of its relevance, were considered. Means ranged from 5.53 to 5.76 on a 6-point scale, with adequate internal consistency ($\alpha = .85$).

- Item 1: $M = 5.66$, $SD = 0.88$
- Item 2: $M = 5.76$, $SD = 0.80$
- Item 4: $M = 5.53$, $SD = 0.98$

These scores indicate that English is considered essential for accessing scientific literature and updating knowledge. It is also recognized as an important tool for sustaining academic and professional careers in an environment characterized by the constant flow of information in this language.

3.3. Comparison between students and doctors

The comparative analysis showed no significant variations in English proficiency. Students achieved a mean score of 5.66 (SD = 0.55), while physicians recorded a mean score of 5.48 (SD = 1.00). The t-test indicated no significant differences, $t(283) = 0.141$, $p = .159$. These data suggest that English is not only relevant at specific points in training but permeates the entire educational and professional process, from the first semesters to medical practice. Furthermore, both students and physicians recognize that proficiency in the language is essential for accessing reliable and up-to-date scientific information.

3.4. Relationship between academic progress and assessment of English

The correlation between semester completed and perception of English was positive, although weak and not significant ($r = 0.11$, $p = .1398$). Although students in later semesters tend to assign a slightly higher value to the language, this variation does not constitute a statistically robust pattern. Interviews help to qualify this trend. Students highlight that, as they progress in their studies, academic demands increase: “it is no longer based so much on the bibliography... we are asked for more articles” (FM3). This transition coincides with the need to consult recent evidence, mostly in English.

3.5 Qualitative evidence on the usefulness and meaning of English in medical training

The testimonies obtained in the interviews provide a more detailed understanding of how students and physicians experience English in their training and practice. In general, the narratives confirm the quantitative trend: the language is perceived as an indispensable resource for accessing reliable information, making evidence-based decisions, and responding to academic and clinical demands in an informed manner.

3.5.1 English as a gateway to scientific literature

One of the most frequently mentioned themes was the association between English and the ability to consult up-to-date sources. One student explained that “there are articles that are in English... having even a little command of it... helps a lot” (FM1). Another emphasized that “most of the more sophisticated articles... have been in English” (FM2). These experiences are not limited to theoretical subjects. In visual subjects like anatomy, the language is also predominant: “everything was in English... so it wasn’t like I could sometimes find it in Spanish” (FM1). Consequently, English is not seen as something accessory or secondary in their education, but rather as the primary and everyday means of accessing learning resources.

3.5.2. English as a tool for validating information

The students described using English to confirm the quality of their sources. One commented that, when faced with doubts about a topic, they decided to consult the language directly: “to be more certain about what information I was going to use... I went to websites in English” (MS1). Another participant explained that English texts allow them to work more quickly: “the first thing I found... worked perfectly” (MS3). These experiences show that English is perceived as a guarantee of accuracy in a context where speed and precision are essential.

3.5.3. Academic demands that increase with progress in the career

The interviews reveal that the English language requirement increases as students progress. One participant noted that in later semesters, “it’s no longer based so much on the bibliography... we’re asked for more articles” (FM3). The transition to clinical courses requires consulting recent evidence, almost entirely in English. This shift explains why the perceived usefulness of the

language remains stable, even among those who do not consider it a priority at the beginning of their studies.

3.5.4. Clinical relevance of English in real-world scenarios

Although the intensity of English use varies across clinical contexts, some students reported situations where English directly impacted their ability to care for patients. One student stated, “I wouldn’t have been able to help the patient... because I wouldn’t have understood” (MS1). Among physicians, the presence of English was described as constant in some departments: “We use it daily” (MM2). Others explained that its use is concentrated in academic tasks rather than in daily practice: “In my case, it’s more for academic purposes” (FM1 – physician). In both cases, the accounts agree that English is a necessary resource for interpreting information, communicating findings, and supporting sound clinical judgment.

3.5.5. Limitations on the exclusive use of translators

Participants pointed out risks associated with using technological tools as a substitute for learning English. One student commented, “We’re no longer forced to learn English... we have translators” (FM3). However, another warned about the risks of machine translation: “Not everything is translated correctly... any one word can change everything” (FM2). A physician echoed this concern: “Google... does its part, but it doesn’t do it well” (FM1). These observations suggest that, while technologies are useful, their accuracy is insufficient for clinical tasks where terminological precision is critical.

3.5.6. Gaps in institutional training and inequality in linguistic preparation

A recurring theme was the lack of formal English instruction in medical training. One student stated directly: “Honestly, I haven’t had any English instruction at the university” (FM3). In the case of physicians, the absence of institutional preparation has led them to rely on self-directed learning: “As a doctor, I don’t have any academic tools that the university has given me... my English is personal; I worked on it myself” (FM1). Another doctor expressed it even more clearly: “My training has been self-taught” (MM2). These experiences highlight inequalities in language training that affect both access to literature and professional development.

3.5.7. Professional projection and integration into the global medical community

Beyond the academic aspect, some participants highlighted the importance of English for training as professionals capable of working in diverse environments. One doctor summarized it this way: “that students graduate prepared for the world, not just for Mexico” (FM1). This perspective, typical of the border context, reinforces the idea that English not only enables access to information but also participation in international professional networks.

3.7. Attitude towards the mandatory nature of English in the curriculum

Item 21 explored whether English should be optional. The mean ($M = 2.44$, $SD = 1.76$) shows widespread disagreement with this idea. The mode was 1, indicating that the dominant view favors maintaining it as a required subject. This trend is linked to the perceived value of the language: the correlation between the two variables was positive and moderate ($\rho = 0.52$, $p < .001$). Those who consider English essential also tend to support making it a formal requirement of the curriculum. The testimonials help to understand this support. One doctor pointed out that the lack of institutional training can generate inequalities: “As a doctor, I don’t have the academic tools that the university has given me... my English is personal; I worked on it myself” (FM1). This statement reveals that making it mandatory is understood as a way to guarantee more equitable conditions for language training.

Table 1. Emerging themes on the importance of English in medical training and practice.

Issue	Description	Representative quotes
Access to scientific literature	English is the primary way to access specialized texts, articles, and resources.	"Most of the more sophisticated articles... were in English" (FM2). "Everything was in English... I couldn't find it in Spanish" (FM1).
Information validation	Language is used to verify the quality and accuracy of sources.	"To be sure... I went to English websites" (MS1). "The first thing I found... worked perfectly" (MS3).
Increasing academic demands	The use of English increases in advanced semesters and clinical subjects.	"It is no longer based so much on the bibliography... we are asked for more articles" (FM3).
Clinical relevance	In some contexts, English directly influences patient care and decision-making.	"I wasn't going to be able to help the patient... because I wasn't going to understand him" (MS1). "We use it daily" (MM2).
Limitations of translators	Participants are skeptical of the accuracy of machine translations.	"Not everything is translated correctly... it can change everything" (FM2). "Google... does its part, but it doesn't do it well" (FM1).
Gaps in institutional training	The lack of formal English instruction creates inequalities.	"At university I didn't have any formal English instruction" (FM3). "My English is personal... I worked on it myself" (FM1).
International projection	English allows one to integrate into the global medical community.	"That students graduate prepared for the world, not just for Mexico" (FM1).

3.8. General summary of findings

The results confirm a consistent pattern: English occupies a structural place in medical training and practice. The stability of the means, the absence of differences between groups, and the relationship between the perceived value of the language and its curricular requirement reflect the centrality of English in a context where access to information, clinical evidence, and technical resources depends largely on its proficiency.

The interviews complement this picture and show that, although the intensity of use varies according to the clinical or academic context, students and doctors agree that English supports professional updating and the quality of training.

4. Discussion

The results of this study show that English occupies a structural place in medical training and clinical practice in Tijuana. The consistently high average scores among students and physicians indicate that the language is not perceived as an external requirement. On the contrary, it is recognized as a necessary skill to meet the demands of a discipline that depends on up-to-date technical information. This result suggests that the centrality of English is not solely an institutional requirement. Rather, this centrality is configured as a pragmatic response to the real conditions in which medical knowledge is produced and validated. The participants' assessment aligns with the findings of INEGI (6) and Toledo et al. (4), who highlight the role of English in cross-border regions. In these contexts, daily contact between diverse communities generates a bilingual environment that transcends the classroom and manifests itself in social, institutional, and clinical settings.

Qualitative findings reinforce this interpretation. Participants described English as the primary means of accessing scientific literature and specialized sources, a function widely recognized in previous studies. According to Ángel, Alpízar, and García (8) and Wahyuni (3), students use the language to prepare presentations, read medical texts, and complete assignments requiring up-to-date information. The testimonies gathered in this study confirm this pattern. One participant stated that “most of the more sophisticated articles... have been in English” (FM2), while another noted that “there are articles that are in English... having even a little fluency... helps a lot” (FM1). Even in subjects where reading is not the central focus, such as anatomy, the language appears as an essential reference point: “everything was in English... so it wasn’t like I sometimes found it in Spanish” (FM1). This convergence between literature and empirical evidence shows that the relevance of English in medicine is not abstract. It is built upon concrete practices and tasks that are part of daily academic work. However, this convergence does not imply that proficiency in English automatically translates into a systematic and competent use of the language in all educational and clinical settings.

The quantitative results also align with research explaining that medical knowledge circulates primarily in English. Chan et al. (1) and Nguyen (2) point out that professional development depends on access to sources in this language, which requires students and physicians to maintain a functional level of linguistic competence. The qualitative data support this perspective. One student mentioned that he used English “to be more certain... I went to websites in English” (MS1), while another explained that “whatever I found first... worked perfectly for me” (MS3). These experiences illustrate how English plays a role in the evaluation of sources, critical reading, and evidence-based decision-making.

The border context amplifies these dynamics. According to Toledo et al. (4), medical care in Tijuana requires interaction with migrant patients or those from the United States, making English a resource for ensuring safe care. Testimonies reinforce this scenario. One student commented that “I wasn’t going to be able to help the patient... because I wasn’t going to understand him” (MS1), and a physician noted that “we use it daily” (MM2). These experiences align with Toledo et al. (4), who describe how regional mobility and medical tourism flows integrate English into daily clinical practice. The evidence gathered in this study confirms that communication in English does not arise from an isolated institutional requirement. It is the result of a binational dynamic that shapes clinical care in the region. However, this same context can exacerbate inequalities among students. This occurs because not all students have equal access to training opportunities that allow them to develop language skills aligned with these demands.

The analysis also reveals tensions between the perceived importance of English and the actual opportunities to learn it within institutional training. Although the literature indicates that medical schools should prepare students to respond to the professional context (9-11), several testimonies suggest that this preparation is not always reflected in practice. One student stated that “at the medical school, I haven’t had any English instruction” (FM3). Two physicians mentioned that their proficiency came from self-study: “my English is personal... I worked on it myself” (FM1) and “my training has been self-taught” (MM2). These experiences align with the findings of Ángel et al. (8) and Torres-Cabrera et al. (12), who warn that the impact of English diminishes when it is not integrated with authentic tasks in the medical field. The findings reveal that, although there is a clear recognition of the importance of English, the training offered does not always meet these expectations.

The ambivalent perception of machine translation and digital tools adds another relevant nuance. Participants acknowledge that these tools can facilitate certain tasks, but warn that their use involves risks. The concern about accuracy is evident. One student stated that “any word can

change everything” (FM2), while another noted that “Google... does its part, but it doesn’t do it well” (FM1). This assessment aligns with studies that warn of the limitations of machine translation in areas where terminological accuracy is essential. The quantitative results show a high regard for English, and the testimonials explain why technological tools do not replace fluency in tasks that demand conceptual precision.

The relationship between valuing English and supporting its mandatory inclusion in the curriculum also makes sense in this evidence. For the participants, the mandatory nature of English is not seen as an institutional imposition, but rather as a way to promote more equitable educational pathways. One physician expressed this clearly when she said that mandatory English instruction allows “students to graduate prepared for the world, not just for Mexico” (FM1). This statement aligns with the literature that describes medicine as a globalized discipline, where academic mobility, access to current knowledge, and professional interaction depend on functional language proficiency.

Taken together, the quantitative and qualitative results, and their relationship to the reviewed literature, indicate that English not only provides access to scientific evidence but also supports the practice of medicine in an environment characterized by constant interaction between diverse communities, different healthcare systems, and continuous flows of information. The challenge lies not in convincing future professionals that English is important, but in redefining how it is taught, for what purposes, and under what curricular models it is relevant in contexts where technology, globalization, and clinical practice converge. It is not simply a matter of teaching content in the abstract; rather, instruction must be practical, contextualized, and connected to the real demands of the profession, preparing students to act in complex international settings.

Limitations of the study

This study used non-probability sampling and relied on self-perceptions of English proficiency, which limits the generalizability of the results. Furthermore, the quantitative analysis focused on three items related to general language perception, as the remaining items on the scale are part of dimensions that will be presented in other publications. While these characteristics reduce the statistical scope of the analysis, they do not affect the consistency of the qualitative findings or their interpretation in the border context.

5. Conclusions

- English is integrated into medical training and clinical practice in Tijuana, and is essential for reading scientific literature, understanding technical information, and communicating with non-Spanish-speaking patients. In a cross-border context, English proficiency not only expands professional opportunities but is also necessary for practicing confidently and staying current in a field based on scientific evidence.
- There is a mismatch between institutional English teaching and the real needs of students and doctors, which has led many to learn the language on their own.
- To improve learning, English teaching should focus on authentic tasks and real-life situations in the medical field, facilitating immediate practical application.
- Translation technologies and artificial intelligence offer useful support, but they present limitations and risks when terminological precision is required. These tools do not replace fluency in English, so their responsible use requires linguistic training, clinical judgment, and technological updates.
- Requiring English in medical training is perceived as a positive measure that promotes quality and professional equity. The main challenge is not including English in the curriculum, but transforming its teaching so that it is relevant and functional in real-world professional contexts.

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