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TEACHER AND DOCTOR? PERCEPTIONS OF TEACHING ROLES IN A MEDICAL COURSE - ACTIVE METHODOLOGIES¹

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ABSTRACT: This study investigated perceptions of the roles played by teachers in a medical course using active methodologies in southern Brazil. The research is warranted by the need to understand how teaching practice shapes the training of reflective, committed physicians, particularly in light of updates to the National Curriculum Guidelines. A quantitative-qualitative approach was adopted, involving 41 teachers, both physicians and non-physicians, working in the basic and clinical cycles. Data were collected through a mixed questionnaire adapted from Harden and Lilley and analyzed using Bardin's content analysis. The results show that the role of learning facilitator or mentor was most frequently attributed to teachers, regardless of professional background or cycle of activity. Physician-teachers placed greater value on the role model function in clinical practice, whereas non-physician teachers emphasized pedagogical skills and the basic cycle. Despite variations in perception shaped by educational trajectories, the findings point to a shared understanding of the centrality of pedagogical mediation. The study underscores the importance of teacher training programs that strengthen guidance and learning-support skills, fostering an integrated practice aligned with the demands of contemporary medical education.

Keywords: Faculty, Medical Education, Academic Training.

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PROFESSOR E MÉDICO? PERCEPÇÕES DOS PAPEIS DOCENTES EM UM CURSO DE MEDICINA - METODOLOGIAS ATIVAS

RESUMO: Esta pesquisa investigou as percepções sobre os papéis desempenhados pelos docentes em um curso de Medicina, no Sul do Brasil, que utiliza metodologias ativas. O estudo justifica-se pela necessidade de compreender como a prática docente influencia a formação de médicos reflexivos e comprometidos, especialmente diante das atualizações das Diretrizes Curriculares Nacionais. Metodologicamente, realizou-se uma pesquisa quanti-qualitativa com 41 professores, médicos e não médicos, que atuam nos ciclos básico e clínico. Os dados foram coletados por meio de questionário misto, adaptado de Harden e Lilley, e submetidos à análise de conteúdo de Bardin. Os resultados indicam que a função de facilitador do aprendizado ou mentor é a mais atribuída aos docentes, independentemente do perfil profissional ou ciclo de atuação. Observou-se que docentes médicos valorizam mais o papel de modelo na prática clínica, enquanto docentes não médicos enfatizam as competências pedagógicas e o ciclo básico. Conclui-se que, apesar das variações de percepção moldadas pelas trajetórias formativas, há um consenso sobre a centralidade da mediação pedagógica. O estudo ressalta a importância de programas de formação docente que fortaleçam competências de orientação e suporte ao aprendizado, promovendo uma prática integrada e condizente com as demandas da educação médica contemporânea.

Palavras-chave: Docentes, Educação Médica, Formação Acadêmica

¿PROFESOR Y MÉDICO? PERCEPCIONES DE LAS FUNCIONES DOCENTES EN UN CURSO DE MEDICINA: METODOLOGÍAS ACTIVAS

RESUMEN: Esta investigación analizó las percepciones sobre los roles que desempeñan los docentes en un curso de medicina en el sur de Brasil que utiliza metodologías de aprendizaje activo. El estudio se justifica por la necesidad de comprender cómo la práctica docente influye en la formación de médicos reflexivos y comprometidos, especialmente a la luz de las actualizaciones de las Directrices Curriculares Nacionales. Metodológicamente, se realizó un estudio cuantitativo-cualitativo con 41 docentes, tanto médicos como no médicos, que trabajan en los ciclos básico y clínico. Los datos se recolectaron mediante un cuestionario mixto, adaptado de Harden y Lilley, y se sometieron al análisis de contenido de Bardin. Los resultados indican que el rol de facilitador del aprendizaje o mentor es el que se atribuye con mayor frecuencia a los docentes, independientemente de su perfil profesional o ciclo de actividad. Se observó que los docentes médicos valoran más el rol de modelo en la práctica clínica, mientras que los docentes no médicos enfatizan las competencias pedagógicas y el ciclo básico. Se concluye que, a pesar de las variaciones en la percepción moldeadas por las trayectorias educativas, existe consenso sobre la centralidad de la mediación pedagógica. El estudio subraya la importancia de los programas de formación docente que fortalecen las competencias de orientación y apoyo al aprendizaje, promoviendo una práctica integral acorde con las exigencias de la educación médica contemporánea.

Palabras-clave: Docentes, Educación médica, Formación académica.

INTRODUCTION

Brazilian medical education has been shaped over time by socially constructed needs, culminating, currently, in the desire for a general medical professional who is ethical, reflective, and humanistic (Machado; Wu; Heinzle, 2018; Brazil 2025a).

In 1988, with the creation of the Unified Health System (SUS), there was an attempt to unify and expand access to health for the Brazilian population, seeking to guarantee health rights for all (Brazil, 1988; OECD, 2021). This process is still gradually being expanded and consolidating itself as one of the largest public health systems in the world (Castro et al., 2019; Lima; Carvalho; Coeli, 2018).

In contemporary Brazil, medicine continues to advance, with telemedicine being a highlight, expanding access to health and reinforcing preventive medicine (Freire *et al.*, 2023). Currently, Brazil has 494 active medical courses, offering approximately 50,000 places (Faculty of Medicine of the University of São Paulo, 2025). However, this exponential increase in new courses is not always accompanied by the necessary infrastructure for the training of future professionals (Federal Council of Medicine, 2024).

In order to guide and standardize the training of doctors in the country, ensuring that education is of high quality and aligned with the health needs of the Brazilian population, the National Curriculum Guidelines (DCN) for medical courses were developed. The first version of the DCN, established in 2001, introduced a more practical and patient-centered approach. It emphasized integrated training, with the inclusion of practical internships in hospitals and health units from the first years of the course; a greater focus on ethical and humanistic teaching and increased hours in internships focused on the SUS (Brazilian Public Health System) and social reality (Brazil, 2001). In 2014, a review of the 2001 National Curriculum Guidelines (DCN) was conducted, with changes to adapt the curriculum to the evolving health needs in Brazil, also reflecting changes in the Health System. This intensified medical training for primary care; detailed the competencies and skills that physicians should develop; and expanded the hours of internships in public health and hospital settings, reinforcing the idea of experiencing practice from the beginning of the course (Brazil, 2014). Furthermore, a supplementary document highlights training focused on palliative care (Brazil, 2022).

The most recent update, published in 2025, deepens and expands elements of the previous guidelines, organizing the curriculum by competencies, reinforcing person-centered, family-centered, and community-centered care, understanding the social determinants of health, and committing to equity. They also bring the critical incorporation of emerging technologies, such as artificial intelligence, telemedicine, and analysis of large databases, and broaden the emphasis on active methodologies, simulation environments, and teaching-service-community integration. Thus, the 2025 National Curriculum Guidelines (DCN) update medical training by integrating technological innovation, social responsibility, and practical preparation aligned with the country's epidemiological profile (Brazil, 2025a).

The DCN have transformed the role of the teacher, who has come to assume more facilitative, guiding, and integrative functions. Batista (2005) highlights the importance of the social place occupied by the teacher as a mediator in the training process of the health professional, responsible for structuring scenarios of meaningful and problem-solving learning.

It is essential that teachers understand the teaching-learning process as a joint construction between teacher and student, recognizing the individuality and protagonist role of the student in this process. Ribeiro and Servo (2019) emphasize that this recognition is fundamental for the development of academic and professional skills. Furthermore, they point out that medical training should encompass not only technical mastery, but also ethical, social, and humanistic aspects.

In line with this reality, it is observed that medical education faces significant challenges regarding teacher training and performance. In many medical schools, teachers are selected primarily for their technical performance and scientific output, and not for their pedagogical skills. Teacher training tends to be informal and empirical, based on experience gained as students, which can lead to repetitive and unreflective practice. In general, teachers continue to adopt traditional teaching methods, without engaging in a critical analysis of their pedagogical practice and act in isolation - individualism in university teaching. This behavior is exacerbated by the traditional structuring of curricula, which favors fragmented teaching by subject, without promoting integration (Barbosa; Franceschi; Delunardo, 2023; Costa, 2007).

This scenario contributes to the fragility of pedagogical competence, harming the quality of teaching and hindering the attraction and retention of prepared teachers. It also contributes to the devaluation of teaching, the absence of specific training for teaching, and low identification with the role of educator, which hinders the adoption of innovative methodologies and the effective transformation of formative practices. Medical education needs to evolve to train professionals who are not only technically competent, but also capable of critically reflecting on their practice and adapting to the demands of society (Barbosa; Franceschi; Delunardo, 2023; Costa, 2007).

Thus, it is essential to promote a deeper understanding of perceptions about the roles of teachers in medical courses, in order to reinforce the importance of a student-centered educational approach that values the teacher as an important agent in the learning process. Since teaching practice directly influences the training of competent, reflective, and committed physicians to health - in a decisive and comprehensive way. Therefore, this study sought to investigate perceptions about the roles played by teachers in a medical course using active learning methodologies in southern Brazil.

METHODOLOGICAL APPROACH

The research was characterized as both quantitative and qualitative, as it sought to verify the relationships between facts and phenomena and understand the characteristics of these phenomena through a detailed analysis of the participants' responses (Minayo, 2012).

It was conducted in a Medicine course at a Higher Education Institution (HEI) in the country side of the Southern Region of Brazil. The municipality has more than 70,000 inhabitants, according to data from the Brazilian Institute of Geography and Statistics (2022); it has a territorial area of 260,817 km², an HDI of 0.802, and a GDP per capita of 50,593.32. The course has existed for just under 10 years, lasts six years (12 semesters), is full-time, admits students through an entrance exam, and follows active methodologies.

The research sample consisted of medical school teachers, both physicians and non-physicians, who had been teaching in the basic and clinical cycles (from the 1st to the 8th semester of the course) for at least one year, were active during the data collection period, and freely agreed to participate in the research. There were approximately 60 teachers in the basic and clinical cycles, and of these, 47 teachers had been active for at least one year, so the sample consisted of 41 teachers, with a 90% confidence level.

Data collection was carried out with the authorization of the research site and the approval of the Research Ethics Committee, Opinion No. 7,452,938, as stipulated by Resolution 466/12 of the National Health Council (CNS). A mixed questionnaire was applied, containing open and closed questions constructed based on the questionnaire by Harden and Lilley (2018, *apud* Costa; Costa; Pereira, 2023). The instrument addressed sociodemographic information, academic background, length of time in the course, teaching cycle, conceptions about being a teacher, motivations for teaching, functions performed, use and evaluation of active methodologies, as well as facilitating and hindering aspects of teaching practice. The questionnaire was applied individually and via Google Forms, after reading, understanding, and accepting the Informed Consent Form (ICF).

The data were analyzed according to Bardin's (2016) content analysis, in its stages: pre-analysis, exploration of the material, and treatment of results and interpretation. In the pre-analysis stage, a floating reading was carried out, highlighting the data that appeared most frequently and were most significant in relation to the research objectives and for the formulation of investigative hypotheses.

The material exploration phase corresponded to the transformation of raw data, such as text and percentages, into units of analysis that were meaningful for the research. In the last stage of this process, meaning was given to the discovered manifestations through the construction of thematic categories and dialogue with the theoretical and scientific framework.

Six categories were constructed: participant profile; perceptions about teaching; roles of teachers; characteristics for being a teacher in the course; facilitating and hindering aspects of teaching practice; and use and perception of active methodologies.

Considering that the study was carried out in a small institution and aims to guarantee the anonymity of the participants, the data were treated in an aggregated way. The interviewees were identified by random codes, such as R1 (Respondent 1), R2 (Respondent 2) and so on, without any association with personal information such as name, age, gender, length of service, curricular units taught or other characteristics that could allow identification.

RESULTS AND DISCUSSION

Participant Profile

Regarding the age of the participants, the majority are adults approaching middle age, with 17.1% between 35 and 39 years old, 29.3% between 45 and 49 years old, and 14.6% between 50 and 54 years old. This data suggests that most of the faculty is in an intermediate age range of their professional lives, which may reflect a significant accumulation of clinical and academic experience.

The majority of participants (65.9%) are female, while 34.1% are male. Among medical teachers, there is gender equivalence, with similar proportions of female and male doctors. In contrast, among non-medical faculty, the female presence predominates.

The feminization of teaching in Brazil is a historical and cultural phenomenon that accompanies the constitution of the school as a social institution. According to Rabelo (2018), teaching, initially practiced mostly by men, underwent a transformation process throughout the 19th and early 20th centuries, with the progressive inclusion of women in teacher training courses, resulting in the consolidation of a predominantly female professional profile. This produced a symbolic association between teaching and attributes traditionally considered feminine, such as care and affection.

Regarding the equivalent proportion between men and women in the medical teaching group, it reflects the historical trajectory of medicine as an initially male profession. Until the mid-20th century, female participation in medicine was minimal: in 1940, it represented only 1%; in the 1990s, it reached 35%; and in 2010, it reached 39.91% (Minella, 2017). Recent data reinforce this trend: for the first time, women have become the majority among doctors in Brazil. In 2025, they represented 50.9% of the total number of professionals, and projections indicate that, by 2035, they will represent 56% of the total number of doctors in the country (Brazil, 2025b). However, challenges related to gender inequality in medicine still persist, such as the lower representation of women in leadership positions and in more valued specialties, in addition to salary disparities (Scheffer; Cassenote, 2013).

This result is consistent with the study by Garcia and Silva (2011), who identified a feminization process among faculty, especially among younger professionals. Thus, while teaching has a consolidated feminization historically linked to culturally feminine attributes, medicine is experiencing a more recent feminization process, still marked by structural inequalities. This comparison highlights the different trajectories and challenges that gender imposes on two professions that are fundamental to society.

Regarding training, 51.2% of the teachers in the sample are doctors, while 48.8% have degrees in other fields. Among non-physicians, 34.1% have degrees in health-related courses, such as Psychology, Nursing, Pharmacy, and Physiotherapy. The presence of these professionals on the faculty broadens the perspectives in the training process, by integrating diverse and complementary knowledge into medical practice. Non-medical educators contribute with specific technical and theoretical bases from their areas, enriching the learning process and making it more dynamic and effective for students and the institution. Furthermore, it responds to educational models and professional practices that

encourage interprofessional teamwork, a fundamental element for training aligned with the contemporary needs of health care (Riesenberg; Pequeno; Wright, 2009; Brazil, 2025a).

When analyzing the training of teachers working in the basic and clinical cycles separately, it is observed that the number of non-medical professionals in the basic cycle is approximately double that found in the clinical cycle. This is partly due to the fact that the basic cycle includes curricular units/subjects focused on basic sciences and general education, such as ethnic, cultural and social analysis, health and environment, and communication skills, which are frequently taught by professionals from related fields.

The work of these professionals in the basic cycle has been identified as an important strategy to broaden the interprofessional vision and promote training that addresses the real demands of health care and education (Ferreira; Souza, 2016). The interprofessional approach presents itself as a strategy that goes beyond the traditional division of knowledge and professional practices, presupposing teamwork, with legitimate recognition of different areas of knowledge, in horizontal relationships, marked by humility, listening, and willingness to engage in dialogue (Ferreira, 2021).

In the field of health, this perspective proves to be challenging and necessary, as it involves practices and knowledge from diverse fields—clinical, environmental, epidemiological, behavioral, social, and cultural—requiring professionals to be open to recognizing limitations and to the collective construction of solutions (Garcia *et al.*, 2007). However, these ideas are still frequently misunderstood in the context of medical education, often being reduced to the simple joining of disciplines and training cycles into "integrated modules," resulting in superficial implementations far removed from a real integration of knowledge (Ferreira, 2021).

Despite the growing proposals for curricular reform that seek to incorporate these perspectives, such changes face significant resistance from certain medical sectors, as well as from educational and health institutions. This difficulty is consistent with what Riesenberg, Pequeno, and Wright (2009) point out, observing that although the number of teachers with varied backgrounds is growing, challenges persist in the academic environment. This is partly due to the traditional training of physicians and other health professionals in isolated structures, the so-called "training silos," which reinforce the fragmentation of knowledge and hinder collaborative practices in teaching and care (Oliveira *et al.*, 2021).

When analyzing the participants' level of education, it is important to highlight that all teachers have postgraduate degrees (residency, *lato* or *stricto sensu*). From this set, 48.8% have a specialization/residency, 31.7% a master's degree, and 22% a doctorate. Furthermore, within the group of medical teachers, the majority are concentrated in the residency specialization modality, with none of them holding a doctorate. This fact aligns with a survey conducted in Porto Velho (State of Rondonia, Brazil), in which 90% of medical teachers reported having completed medical residency and only 15% had completed a doctorate (Ferreira; Souza, 2016). This profile reflects a structural reality of medical training in Brazil. The study "Medical Demographics in Brazil 2025" shows that approximately 63.7% of specialists in the country obtain their specialist title through medical residency, while the remainder (36.3%) obtain it through specialty societies (Maraccini, 2025).

Of the total number of teachers analyzed, 24.4% graduated between 11 and 15 years ago; 14.6%, between 16 and 20 years ago; 14.6%, between 21 and 25 years ago; 14.6%, between 26 and 30 years ago; 12.2%, between 6 and 10 years ago; 9.8%, between 31 and 35 years ago; and 9.8% graduated more than 36 years ago. These data are consistent with those presented by Garcia and Silva (2011), whose sample of teachers has a similar graduation time. Such data reinforce the homogeneity of the time since graduation among the teachers, suggesting a professional profile consolidated over the years.

Regarding the respondents' profiles, analyzing the teachers' time in the course, most have a stable career path. Of these, 9.7% have been teaching for three years, 4.9% for four years, 14.7% for five years, 24.3% for six years, 17.1% for seven years, and 29.1% since the beginning of the course. Considering that the course was created eight years ago, this pattern can be understood as a reflection of the consolidation of the teaching staff since its foundation. This data suggests commitment to the institution, which is positive for the continuity of the pedagogical project, the quality of teaching, and the consolidation of active methodologies.

Experienced teachers tend to have greater mastery of the curriculum and institutional dynamics, which favors innovation and adaptation to the students' profile. According to the study by Steinert *et al.* (2017), factors such as length of service, familiarity with the institutional environment, and prolonged engagement with the course are among the elements that contribute to high-quality teaching, especially in the context of medical education.

In the present study, it was observed that 41.5% of the teachers worked exclusively in the basic cycle, 29.3% in the clinical cycle, and another 29.3% in both cycles. These data are consistent with the study by Garcia and Silva (2011), which found that many teachers worked simultaneously in the morphophysiological, pre-clinical, and internship cycles.

Perceptions about teaching

Regarding perceptions about teaching, many teachers responded that it is an opportunity for continuous learning and personal development, which aligns with the study by Orsini *et al.* (2025), which shows that teaching allows for continuous personal and professional growth, being a source of intrinsic pleasure for teachers. In fact, recent research in higher education reveals that intrinsic motivation and teacher self-efficacy go hand in hand with the adoption of innovative practices (Li; Pei; Zhao, 2025).

Others highlighted the role of mediator of knowledge, as expressed by R1:

"Being a teacher is about empowering students to learn how to learn, emphasizing the need for continuing education and conscious and critical learning."

This point reflects the intrinsic motivation of teachers to promote autonomy and conscious learning in students (Orsini et al., 2025; Bahramnezhad; Keshmiri, 2025). Some teachers also highlighted the importance of constantly reinventing and adapting themselves.

In addition, many consider being a teacher to be about sharing knowledge, influencing student development, and transmitting human values such as ethics and empathy, as cited by R2:

"It is about assuming a social and ethical responsibility, promoting values such as empathy and respect to train critical and conscious professionals capable of transforming society."

Regarding the reasons that led teachers to work in the Medicine course, 73.17% indicated that the main reason was to contribute to the training of new professionals, followed by the interest in sharing knowledge and the opportunity for professional development (both with 48.8%). The analysis by subgroups did not show relevant differences between medical and non-medical teachers, nor between those who teach in different cycles of the course. This motivation is corroborated by Bivanco-Lima, Klautau and Knopfholz (2022) and Gorzynski, Smith and Jones (2023), who highlight that contributing to the training of new professionals is one of the main reasons for choosing teaching.

In addition, many teachers were motivated by the desire to share knowledge and seek continuous professional development. This perspective is supported by Camargo *et al.* (2019), who emphasize that motivated teachers positively influence the teaching-learning process, promoting a more engaging and ethical educational environment.

The Roles of Faculty

The results of this study indicate that the roles of facilitator or mentor were the most frequently attributed to faculty, regardless of the teaching cycle (basic, clinical, or combined) or professional profile. These findings corroborate the literature, which highlights the importance of the faculty member as a guide and tutor in the training process of medical students (Costa; Costa; Pereira, 2023; Weyn; Prati, 2022; Garcia, 2011). Faculty members recognize the centrality of mediating, supporting, and guiding learning, with these competencies being valued in both basic and clinical cycles, as cited by R3:

"As someone who should awaken and encourage the student's desire to learn through their own movement."

In this same sense, and reinforcing the importance attributed by the participants to pedagogical mediation, the teachers who work in both cycles emphasized the mediation between knowledge and practice, helping students to access reliable sources, develop clinical skills, and reflect on ethical and professional values, as R4 said:

"An activity that involves responsibility in guiding and assisting in the studies and ethical and human formation of future doctors."

When analyzing the different training cycles, it was observed that in the clinical cycle, teachers attribute greater relevance to the role of model in clinical practice, while in the basic cycle, the functions of "leader, researcher, and scholar" stand out. This differentiation reflects the nature of the stages of medical training: the clinical cycle emphasizes the practical application of knowledge and work with patients, while the basic cycle focuses on theoretical foundations and the development of basic academic skills, as R5 said:

"Instead of simply transmitting information, I seek to create an environment where students can build their own knowledge, explore ideas, and develop skills and competencies."

This practice is fundamental for the development of professional competencies and for preparing students for medical practice (Harden; Laidlaw, 2013). Costa, Costa, and Pereira (2023) reinforce that faculty in the clinical cycle highlight the importance of bringing students closer to professional practice, serving as a reference in real clinical contexts. Garcia (2011) also observes that faculty with clinical experience tend to assume role models in practice, guiding students in an applied way.

Regarding the professional profile, medical faculty, in addition to the role of facilitator, value the roles of role models in clinical practice and in the continuous pursuit of scientific updating, highlighting the relevance of clinical experience and lifelong learning as a reference for teaching. Among non-medical faculty, the role of evaluator stands out, followed by the role of facilitator, indicating a greater emphasis on teaching methodologies and academic feedback. These results are consistent with studies that discuss the differences in the assignment of teaching roles based on training and professional experience (Zimmermann; Silveira; Gomes, 2019; Garcia, 2011).

Despite the variations observed between cycles and professional profiles, all groups converge on the centrality of the role of learning facilitator/mentor. This consensus highlights the need for teacher development actions that strengthen guidance, mediation, and learning support skills in all teachers, regardless of their initial training; in order to promote a consistent educational practice, integrated into the medical curriculum and capable of meeting the demands of different stages of training (Costa; Costa; Pereira, 2023; Weyn; Prati, 2022; Garcia, 2011). In addition, the findings suggest that institutional policies should recognize and value the diversity of roles that teachers assume, considering the impact of these roles on students' experience and performance. As referred to by R2:

"As a facilitator of active methodologies, my role is to propose an environment that stimulates the autonomy, participation, and reflection of students, guiding them in the construction of knowledge, promoting the development of critical thinking, and valuing their experiences."

The analysis of responses regarding the roles of teachers in the different cycles revealed that, in general, the basic cycle was frequently associated with theory and the introduction of clinical practices, while the clinical cycle was more related to the practical application of knowledge and the supervision of clinical activities. Among the teachers of the basic cycle, 25.8% indicated that the cycle is more focused on theory and 35.48% that it is geared towards the introduction of clinical practices. Teachers of the

clinical cycle, on the other hand, emphasized the clinical cycle itself more, with 39.1% of responses relating to the practical application of knowledge and 26% to the supervision of clinical activities, although some still associated the basic cycle with theory (21.7%) or initial practices (13%). Among the faculty members who work in both cycles, a similar balance was observed: 20.8% stated that the basic cycle is more focused on theory, 25% that it is geared towards clinical practice, while the clinical cycle received 29.1% responses for practical application and 25% for supervision, with some faculty members highlighting that the basic cycle constitutes the foundation for the clinical cycle.

When considering the professional category of the teachers, medical faculty members highlighted the clinical cycle more strongly, with 35.7% of responses indicating a focus on practical application and 21.4% on supervision of clinical activities. Among non-medical faculty members, the basic cycle was more prominent for the introduction of clinical practices (30.5%) and theory (25%).

The results show that the perception of the basic and clinical cycles varies according to the professional profile of the faculty members, reflecting influences from their educational backgrounds and professional experiences. Medical faculty members tend to value practical application more intensely in the clinical cycle, which demonstrates the centrality of clinical practice in their professional identity. This trend is also described by Fischer and Muller-Weeks (2012), who identified that, although physicians recognize the relevance of basic sciences for clinical reasoning, they tend to prioritize applied knowledge and experiences aimed at solving concrete problems in everyday life.

This appreciation of clinical practice is directly associated with how medical faculty perceive their own role in the educational process. According to a study with clinical teachers, many describe their teaching work as an extension of clinical activities, attributing to clinical practice the central role in student training (Delibata; Keles; Akturan, 2022). This understanding reinforces the emphasis on practical application and supervision of clinical activities, aspects also highlighted in the results of this research.

In contrast, non-medical faculty tend to emphasize the role of the basic cycle in introducing practices and consolidating theory, which shows a more gradual and conceptual perception of learning. This difference can be understood in light of the challenges faced by professionals in basic sciences who begin to work in medical education. Wong *et al.* (2024) point out that these faculty members frequently report difficulties in relating their content to clinical practices and in adapting to student-centered methodologies, which may reinforce the focus on theory and conceptual preparation for the clinical cycle.

Furthermore, teachers' perceptions are shaped by the curriculum structure and institutional experiences. Khalid *et al.* (2020) observed that changes in curriculum design, such as the anticipation of clinical activities and the strengthening of the integration between theory and practice, significantly alter how students, and potentially teachers, perceive the role of basic sciences. This suggests that the curricular context directly influences conceptions about teaching and learning in different cycles.

Characteristics for Teaching in the Course

Regarding the essential characteristics for working as teachers in Medicine, participants highlighted competencies that varied according to the teaching cycle in which they work and their professional training.

Teachers in the basic cycle emphasized the importance of solid knowledge in their field of expertise, combined with ethics, empathy, creativity, and flexibility. They also stressed the need to encourage the students' protagonist role and active learning, assuming the role of ethical and human role models, as expressed by R6:

"The teacher needs to be flexible and always open to learning. More than teaching, it is necessary to set an example, encourage respect, empathy, and show that listening and welcoming are also part of healthcare."

These findings reinforce the perspective of Batista and Silva (1998) and Weyn and Prati (2022), who highlight the importance of pedagogical mediation and the continuous development of ethical and humanistic competencies in teacher training.

Faculty members in the clinical cycle primarily valued the transmission of practical experience, good communication, patience, and ethical-professional commitment, as well as involvement in research and constant updating, highlighting the focus on the integration between theory and clinical practice.

Those working in both cycles emphasized the combination of technical-scientific knowledge, empathy, and availability, reinforcing the need to guide students not only in technical content but also in ethical and social issues, warning of the challenges of the job market and the importance of avoiding practices without scientific basis.

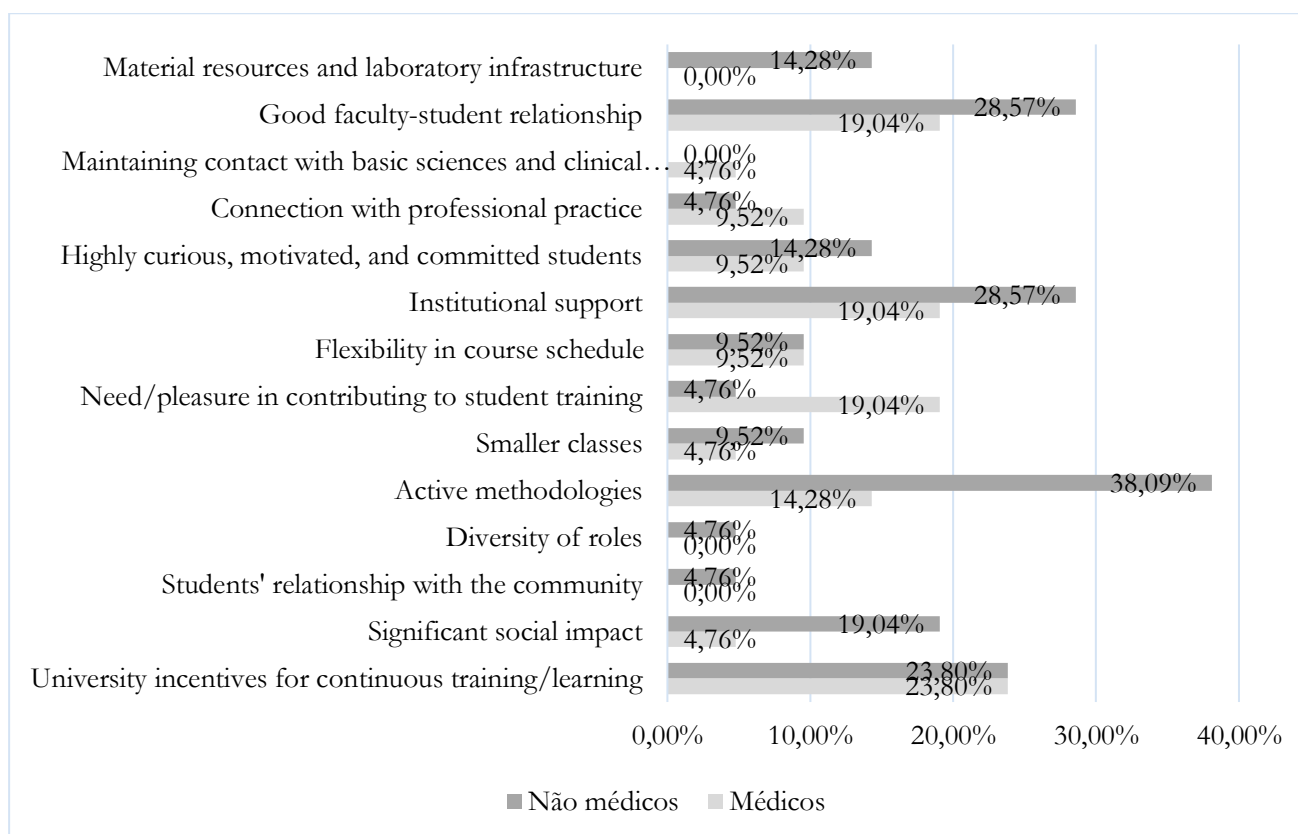
When comparing medical and non-medical faculty, striking differences were observed in the priorities indicated regarding the characteristics of being a teacher. Medical faculty highlighted technical-scientific knowledge and practical experience, in addition to emphasizing ethical training, resilience, and continuous commitment to learning and professional development, considering teaching as an extension of clinical practice. On the other hand, non-medical faculty valued pedagogical, humanistic, and socio-emotional skills, such as empathy, active listening, proactivity, and creativity, highlighting the importance of stimulating the protagonist role of students, integrating theory and practice, and creating a welcoming learning environment. These findings corroborate the need for the integral development of the teacher, as discussed by Batista and Silva (1998), and reflect gaps pointed out by Sousa et al. (2023), who highlight that, despite the inclusion of humanistic disciplines in the curriculum, these are developed superficially and do not always reflect the principles foreseen in the Curricular Guidelines.

In addition, recent studies have reinforced the importance of humanization in teaching practice. Research conducted by Sousa *et al.* (2023) showed that humanization in the doctor-patient relationship among medical faculty directly influences teaching methods, highlighting the interdependence between teaching practice and the quality of patient care. This perspective is corroborated by Andrade, Sitja, and Anjos (2024), who discuss the challenges and possibilities in the training of humanist physicians, emphasizing the need for a university pedagogy that values humanism as a central element in medical training.

Facilitating and Hindering Aspects of Teaching Practice

Teaching practice in Medicine is marked by a set of factors that act as facilitators and hinderers, directly influencing the satisfaction and professional performance of teachers. Graph 1 details, quantitatively, the main facilitating aspects cited by the teachers, providing the basis for the in-depth discussion that follows.

Graph 1 - Facilitating Aspects



Source: Prepared by the authors (2026).

Regarding the aspects that facilitate teaching practice, when analyzing the results related to medical faculty, it was observed that 23.80% indicated university encouragement for training and continuous learning, the same percentage indicated by non-medical faculty. With regard to significant social impact, 4.76% of medical faculty indicated this aspect as a facilitator, a percentage lower than that observed among non-medical faculty (19.04%).

The relationship of students with the community was highlighted by 4.76% of non-medical faculty and was not mentioned by physicians. Similarly, the diversity of functions was not mentioned by medical faculty, while 4.76% of non-medical faculty indicated this aspect.

Regarding active methodologies, 14.28% of medical faculty recognized this factor as a facilitator of teaching practice, while among non-medical faculty this percentage was 38.09%. Smaller class sizes were indicated by 4.76% of medical faculty and 9.52% of non-medical faculty. The need or satisfaction in contributing to student training was indicated by 19.04% of medical faculty and 4.76% of non-medical faculty.

The flexibility of the course schedule was mentioned equally frequently by both groups, with 9.52% of medical and non-medical faculty members citing it. Institutional support was mentioned by 19.04% of medical faculty, while among non-medical faculty this percentage was 28.57%.

Referring to student profile, 9.52% of medical faculty reported that students are quite curious, motivated, and committed, while 14.28% of non-medical faculty highlighted this aspect. The connection with professional practice was mentioned by 9.52% of medical faculty and by 4.76% of non-medical faculty. Maintaining contact with basic sciences and clinical disciplines was not indicated by non-medical faculty, but was mentioned by 4.76% of medical faculty. Good relationships between faculty and students were indicated by 19.04% of medical faculty and by 28.57% of non-medical faculty.

Finally, material resources and laboratory infrastructure were not identified as facilitating factors by medical faculty, while 14.28% of non-medical faculty indicated this aspect.

The findings of this study indicate that the facilitating aspects of teaching practice in a medical course structured in active methodologies are strongly associated with factors intrinsic to teaching, student profile, and institutional environment, rather than strictly structural elements. This trend

was observed among both medical and non-medical faculty, suggesting the existence of points of convergence in teaching experience, regardless of training or cycle of activity.

Among the intrinsic factors, the pleasure and need to contribute to the students' education stood out, especially among medical faculty, as well as the connection with professional practice, elements that reinforce the meaning attributed to the teaching role in medical education. These quantitative findings directly relate to the qualitative perceptions, in which faculty express satisfaction in teaching, learning from students, and actively participating in their educational journey.

Student engagement emerged as one of the main facilitators of teaching practice. The perception of curious, motivated, and committed students, identified more expressively among non-medical faculty, was corroborated by qualitative reports, which highlight the positive impact of this profile on classroom dynamics and faculty motivation. As highlighted by Wu *et al.* (2020) and Stephenson *et al.* (2020), student commitment acts as a mediating factor between motivation and teaching performance, contributing to professional satisfaction and the effectiveness of the teaching-learning process. This perception is exemplified by the testimony of participant R6:

"Medical students, in general, are quite curious, motivated, and committed; they want to be there, they seek out the course, which greatly facilitates the work of a teacher."

In addition to factors related to the students, institutional support proved to be a central pillar in sustaining the teaching work, being more frequently recognized by non-medical faculty. The presence of a welcoming organizational environment, combined with pedagogical autonomy and encouragement of training and continuous learning, an aspect equally valued by both groups, contributes to the consolidation of teaching identity and the strengthening of professional motivation. This perception is summarized in the account of participant R7:

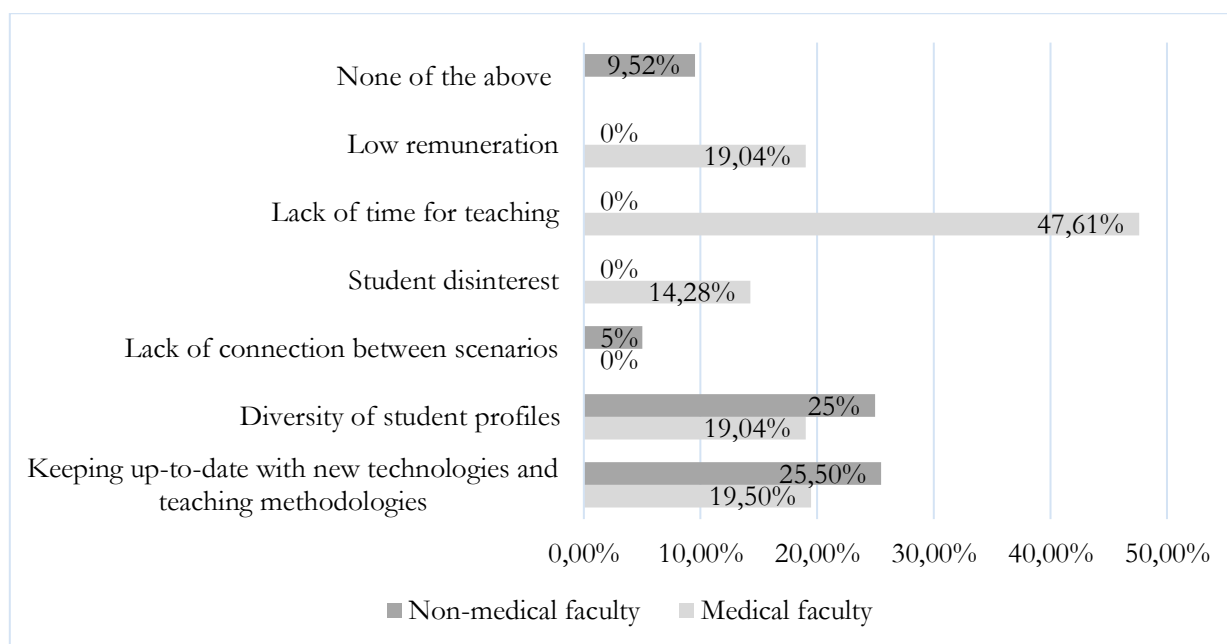
"Work environment; autonomy; institutional support; good teacher-student relationships."

This evidence reinforces the importance of collaborative environments, institutional incentive policies, and conditions favorable to teacher development, in line with the theoretical assumptions of the National Institute of Educational Studies and Research Anísio Teixeira (2006) and Masetto (2012). Furthermore, the appreciation of active methodologies, particularly among non-medical teachers, indicates that the pedagogical structure of the course favors methodological freedom, the diversification of teaching strategies, and the integration between theory and practice.

In this context, the adoption of active methodologies enhances the identified facilitators by promoting more interactive, participatory, and student-centered pedagogical practices. This model contributes to strengthening the bond between teachers and students, stimulates dialogue and co-responsibility for the learning process, and broadens the understanding of the teacher's role, which is recognized not only as a transmitter of content but also as a mediator and facilitator of the formative process. Thus, a positive perception of teaching practice results from the articulation between intrinsic motivation, student engagement, and institutional support, highlighting the relevance of educational policies that value teachers and support innovative pedagogical practices in medical education.

Among medical faculty, the main obstacle to teaching practice was the lack of time for teaching, cited by 47.61% of participants. This was followed by the need to keep up-to-date with new technologies and teaching methodologies (19.50%), the diversity of student profiles (19.04%), and low pay (19.04%). Aspects related to the lack of connection between teaching scenarios and student disinterest were not mentioned by this group as shown in Graph 2.

Graph 2 – Hindering Aspects



Source: Prepared by the authors (2026).

Among non-medical faculty, the most frequently mentioned challenge was the need to keep up-to-date with new technologies and teaching methodologies, indicated by 25.50% of participants, followed by the diversity of student profiles (25%). The lack of connection between teaching scenarios was cited by 5%, while student disinterest was mentioned by 14.28% of non-medical faculty. It is also noteworthy that 9.52% of the participants in this group reported not identifying any hindering aspects in the practice of teaching.

Considering both medical and non-medical teachers together, the results show that the challenges faced in teaching practice are predominantly concentrated in factors of an organizational, structural, and professional nature. In this context, the scarcity of time dedicated to teaching, more pronounced among medical teachers, and the continuous requirement for pedagogical and technological updating, common to both groups, stand out. The diversity of student profiles also emerges as a relevant hindering aspect, reflecting the complexity of the teaching-learning process in heterogeneous formative contexts.

Faculty members reported difficulties that directly impact pedagogical practice, associated with an overload of activities, limited time for lesson planning, continuing education and professional development, as well as the need to reconcile academic and, in the case of medical faculty, clinical demands. These conditions highlight weaknesses in the organization of teaching work, especially given the absence of full-time dedication regimes for a significant portion of the faculty. Associated with this scenario, low remuneration, mentioned more frequently by medical faculty, constitutes an additional factor of burnout and potential discouragement to teaching activity.

The combination of work overload, scarcity of time and insufficient remuneration compromises engagement in pedagogical improvement processes and reflects a reality discussed in the literature. Studies indicate that medical teaching demands continuous effort to balance multiple professional demands, which can result in occupational stress, emotional burnout and reduced professional satisfaction, with direct impacts on the quality of teaching and the faculty member's permanence in the academic environment (Costa, 2007). Beyond structural factors, contemporary pedagogical challenges have emerged related to the constant need for updating in the face of scientific, technological, and methodological innovations, a challenge intensified by the aforementioned time constraints. Added to this scenario is the complexity of the current student profile, marked by aspects such as educational heterogeneity, intensive use of digital technologies, difficulties related to mental health, and episodes of disinterest—elements that demand greater flexibility, sensitivity, and pedagogical adaptability from teachers.

In this context, active methodologies, although recognized as powerful teaching strategies, increase the complexity of teaching work by demanding careful planning, close monitoring, and diversification of approaches to ensure student engagement (Skzypek; Sudbrack, 2023; Azevedo; Pacheco; Santos, 2019). It was also observed that the challenges do not manifest themselves homogeneously among the teaching groups: non-medical teachers reported difficulties related to the integration between different teaching scenarios and the insufficiency of adequate physical spaces, while medical teachers highlighted specific tensions linked to professional identity and the exposure of the medical image in digital environments, pointing to new challenges associated with the contemporaneity of teaching practice.

Thus, the hindering aspects show that teaching practice in contemporary medical education is traversed by demands that go beyond the technical-pedagogical domain, requiring integrated institutional responses. Investment in better working conditions, professional recognition, teacher appreciation policies, and support for ongoing educational transformations becomes fundamental. In order to support qualified pedagogical practices that are consistent with the current demands of medical training.

Use and Perception of Active Methodologies

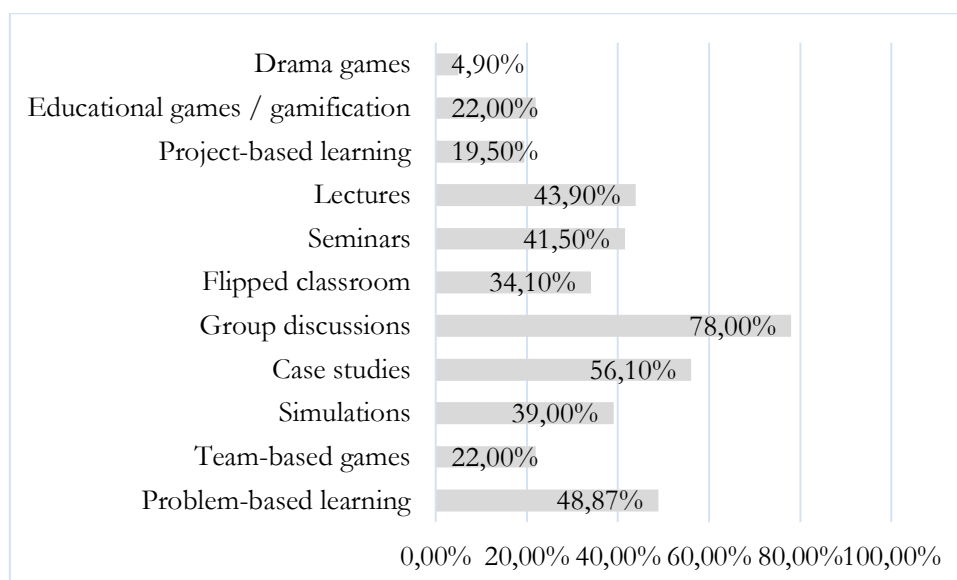
The perception of teachers regarding the use of active methodologies was predominantly positive in the groups analyzed. Among teachers in the basic cycle, 53.4% classified active methodologies as effective, 40% as very effective, and 6.6% reported not knowing how to evaluate them. In the clinical cycle, 66.7% of teachers considered them effective, 25% very effective, and 8.3% somewhat ineffective. Considering teachers from both cycles together, 66.7% evaluated active methodologies as effective and 33.3% as very effective.

When analyzing the data according to professional training, it was observed that, among medical teachers, 71.4% classified active methodologies as effective, 23.8% as very effective, and 4.8% as somewhat ineffective. Among non-medical teachers, 50% considered them effective, 45% very effective, and 5% stated that they did not know how to evaluate them. The implementation of the National Curriculum Guidelines (DCN) has driven the adoption of active methodologies as a structuring axis of medical education. The results of this study corroborate this guideline by showing a predominantly positive perception of the effectiveness of these methodologies among teachers, regardless of the teaching cycle or professional training, reaffirming their consolidation in the daily routine of the course (Prince, 2004; Michael, 2006; Pereira *et al.*, 2025).

However, a subtle difference was observed in the intensity of this perception: non-medical teachers presented a higher frequency of responses in the "very effective" category, while medical teachers concentrated their evaluations in the "effective" category. This distinction may be related to the formative trajectories and predominant contexts of action. While medical faculty tend to integrate active methodologies directly into clinical practices, valuing their clinical applicability, non-medical faculty often emphasize facilitating learning, conceptual construction, and reflective processes in more theoretical settings, which can influence the perception of effectiveness (Cruz *et al.*, 2019; Fischer; Muller-Weeks, 2012).

Regarding the methodologies used in daily teaching practice, it was observed that some strategies showed broad acceptance among all the groups analyzed, as demonstrated in Graph 3.

Graph 3 - Comparative Analysis of Deployed Active Methodologies



Source: Prepared by the authors (2026).

Group discussions emerged as the most frequently employed methodology, with a higher prevalence in the clinical cycle, followed by case studies and Problem-Based Learning (PBL). These three strategies were used recurrently by both basic and clinical cycle faculty, as well as by medical and non-medical faculty. In contrast, methodologies such as Flipped Classroom (FS), Project-Based Learning, Team-Based Learning (TBL), and simulations showed greater variability in use among groups, with lower adoption among clinical cycle faculty and non-medical faculty when compared to basic cycle faculty and medical faculty. It is worth noting that this lower adoption may be associated not only with faculty preference or familiarity, but also with the characteristics of the curricular units/subjects and the faculty's ability to manage such methodologies.

The predominance of group discussions, case studies, and PBL indicates that these strategies are consolidating as pillars of active learning, as they favor interaction, the development of critical thinking, and problem-solving—central aspects of contemporary medical education (Hmelo-Silver, 2004). On the other hand, the heterogeneity observed in the adoption of methodologies such as SAI, TBL, and simulations suggests that the incorporation of active methodologies does not occur in a homogeneous and/or standardized way, but as a dynamic and contextualized process, conditioned by the teaching context, teacher familiarity, and the operational possibilities of each educational scenario (Michaelsen; Sweet, 2008).

In general, basic cycle and non-medical teachers tend to favor methodologies focused on conceptual exploration and interaction in small groups, while clinical cycle teachers and physicians prioritize strategies that articulate practical application, supervision, and decision-making in care settings, reflecting the pedagogical adequacy to the demands of clinical teaching (Cruz *et al.*, 2019; Fischer; Muller-Weeks, 2012).

Despite the incorporation of active methodologies, the data show the persistence of traditional strategies, such as seminars and lectures, frequently used by all groups. This coexistence indicates that, although active methodologies are recognized as effective, traditional practices continue to play a complementary role in the teaching-learning process, possibly due to pedagogical familiarity, time constraints, and the perception of greater efficiency in the transmission of theoretical content (Prince, 2004). In this sense, although strategies such as PBL, group discussions, and case studies are becoming central, the expansion, diversification, and qualification of the use of active methodologies demand continuous investment in faculty development and institutional support, in order to strengthen pedagogical practices aligned with the demands of contemporary medical education (Leon; Onofrio, 2015).

FINAL CONSIDERATIONS

This study showed that teaching in a medical course structured around active methodologies is characterized by a complex, multifaceted practice influenced by the formative and professional trajectories of the teachers. The perceptions revealed by the participants reinforce that the teacher plays diverse roles as facilitator, mentor, evaluator, researcher, and ethical-professional model. These roles manifest themselves differently according to the cycle of action (basic, clinical, or both) and the initial training of the teachers (physicians and non-physicians).

The results demonstrated that, although there are differences in the emphases attributed to the teaching roles, there is a consensus on the centrality of pedagogical mediation, student guidance, and the need to build environments that promote autonomy, critical reflection, and integration between theory and practice. This convergence reinforces that contemporary medical education demands a teacher capable of articulating knowledge, recognizing the uniqueness of students, and favoring dialogical educational practices.

Regarding active methodologies, the perception of effectiveness was positive among teachers, consolidating their role as a formative strategy aligned with the National Curriculum Guidelines for undergraduate medical education. However, the coexistence of traditional practices was observed, which indicates the need for teacher training and development that strengthens the understanding and applicability of different methodologies, enhancing their impact on the teaching-learning process.

The analysis of facilitating and hindering aspects revealed important elements for institutional management. While university support, teacher autonomy, and student engagement strengthen pedagogical practice, challenges such as work overload, time constraints, continuous updating needs, and remuneration-related issues weaken teaching performance, especially among teachers who also carry out clinical activities. These findings suggest that institutional policies of appreciation, pedagogical training, and reorganization of working conditions are fundamental to sustaining the quality of medical training.

As a limitation of this research, it is important to highlight that the findings reflect the reality of a specific institution, which restricts the generalization of the results to other medical courses with different institutional contexts, curricular models, and pedagogical arrangements. In this sense, future research can broaden the understanding of the topic through multicenter studies that compare faculty perceptions in different institutions and regions. As well as longitudinal investigations that analyze how perceptions about faculty roles and the use of active methodologies change over time, especially as a function of pedagogical training processes and curricular changes.

Finally, this study contributes by highlighting that the integration between medical and non-medical faculty, as well as between the different cycles of the course, is essential to consolidate an articulated, interdisciplinary curriculum that is consistent with the principles of active methodologies and the National Curricular Guidelines for undergraduate medical education. Therefore, the importance of permanent spaces for dialogue, collective planning, and faculty development is reinforced, promoting more cohesive and humane educational practices aligned with social needs and contemporary demands of medicine.

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This research follows the ethical guidelines of Resolution 466/12 of the National Health Council (CNS), approved by the Research Ethics Committee, Opinion No. 7,452,938.

DATA AVAILABILITY STATEMENT

The underlying content of the research text is contained in the manuscript.

AUTHORSHIP CONTRIBUTION

Author 1 - Conceptualization, Data Curation, Formal Analysis, Investigation, Methodology, Resources, Visualization, Writing – original draft, Writing – revision and editing.

Author 2 - Conceptualization, Data Curation, Formal Analysis, Investigation, Methodology, Resources, Visualization, Writing – original draft, Writing – revision and editing.

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DECLARATION OF CONFLICT OF INTEREST

The authors declare that there is no conflict of interest related to this article.