

Lapses of professionalism: a case study in anesthesiology residency in the northeast

Lapsos de profissionalismo: estudo de caso em um programa de residência médica em anestesiologia

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ABSTRACT

Introduction: Medical professionalism (MP) is the basis of the social contract between physicians and society, but it lacks a precise definition and a uniform standard of teaching and assessment in educational institutions in Brazil. MP teaching is addressed in a limited manner without an integrated approach in technical-scientific curricula. It is crucial to understand how professionalism is taught in medical specialties as well as its assessment during resident training, especially during specialization in anesthesiology.

Objective: To analyze the perception of residents and preceptors of an Anesthesiology Residency about unprofessional behaviors and practices.

Methodology: Case study using a questionnaire adapted from the Dundee Polyprofessionalism Inventory I, applied to physicians of an anesthesiology service. The variables were presented as mean, standard deviation, median, percentiles, minimum and maximum, frequency and prevalence rate, with a significance level of 5%. The analyses were performed using R and Microsoft Excel 2016.

Results: Preceptors were more severe in their sanctions for lapses in professionalism, highlighting their supervisory role. Residents were more severe in matters related to academic experience. More severe punishments were given to sexual practices, aggression and use of illicit drugs.

Conclusion: Minimizing lapses and valuing the theme of Medical Professionalism is of utmost importance to develop a medical residency program that allows the training of fully competent anesthesiologists.

Keywords: Professionalism, Medical Residency, Anesthesiology, Medical Education.

RESUMO

Introdução: O profissionalismo médico (PM) é a base do contrato social entre médicos e sociedade, mas carece de definição precisa e de um padrão uniforme de ensino e avaliação nas instituições de ensino do Brasil. O ensino do PM é tratado de maneira limitada sem uma abordagem integrada nos currículos técnico-científicos. É crucial entender como o profissionalismo é ensinado nas especialidades médicas, bem como a sua avaliação durante a formação do residente, especialmente durante a especialização em anestesiologia.

Objetivo: Este estudo teve como objetivo analisar a percepção de residentes e preceptores de uma residência em anestesiologia sobre comportamentos e práticas antiprofissionais.

Método: Trata-se de um estudo de caso em que se utilizou um questionário adaptado do Inventário de Poli Profissionalismo de Dundee I, aplicado a médicos de um serviço de anestesiologia. As variáveis foram apresentadas em média, desvio padrão, mediana, percentis, mínimo e máximo, frequência e taxa de prevalência, com nível de significância de 5%. As análises foram realizadas com os programas R e Microsoft Excel 2016.

Resultado: Os preceptores mostraram maior rigidez nas sanções a lapsos de profissionalismo, destacando seu papel fiscalizador. Os residentes foram mais rígidos em questões relacionadas à vivência acadêmica. Punições mais graves foram atribuídas a práticas de cunho sexual, agressão e uso de drogas ilícitas.

Conclusão: Minimizar lapsos e valorizar o tema PM é de suma importância para desenvolver um programa de residência médica que permita a formação de anestesiológicos totalmente competentes.

Palavras-chave: Profissionalismo; Residência Médica; Anestesiologia; Educação Médica.

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INTRODUCTION

Since 1999, the Accreditation Council on Graduate Medical Education (ACGME) and the American Board of Medical Specialties have adopted professionalism as one of the six core competencies to be developed by physicians during their training¹. Despite its relevance to medical and specialist training, however, the concept of professionalism is not homogeneous, which makes it difficult to standardize strategies in both the formal and hidden curricula².

Medical professionalism constitutes a multidimensional construct that is increasingly recognized as an important component of medical education³. The domains most frequently cited in the literature include altruism, responsibility, care, teamwork, self-control, ethical principles, and clinical excellence³. This construct is fundamental to the physician's role in society, representing the basis of the social contract between physicians and patients⁴.

Furthermore, the teaching of professionalism is still in the implementation phase in the competency matrices of medical residency programs (MRPs) in Brazil, and for many of them, the proposed national curricular guidelines do not include requirements for professionalism assessment processes for certification at the end of the specialist's training². In the specific case of anesthesiology, this specialty still has its practice very restricted to the operating room, with distancing in the doctor-patient relationship, one of the main benchmarks in the construction of medical professionalism. This distancing between the professional and the patient, however, can lead to the dehumanization of care and the naturalization of attitudinal lapses⁵.

In addition, scientific production on professionalism in the context of anesthesiology is limited⁶. Chen et al (2024) sought to identify unprofessional behaviors commonly observed among anesthesiologists⁶. Other studies have evaluated the role of feedback in behavior change⁷. However, feedback from various sources on professional behavior, in Riveros's research (2016), had no effect on the evaluations that anesthesiology residents received from family, faculty, or patients' work colleagues^{7,8}. For Dexter, the response to feedback is directly related to the quality of supervision, which should be guided by reflective practice, recognition and mitigation of biases, and emphasis on professional responsibilities⁹.

Based on these assumptions and given the need to build a work plan on professionalism in the largest anesthesiology residency program in a state in Northeast Brazil, the question emerged: "what are the lapses in professionalism that are naturalized in the daily lives of anesthesiologists in training?"

Although professionalism is multifactorial, the specific literature considers academic integrity to be an element

intrinsically related to this construct¹⁰. Thus, this article reports a case study conducted with the objective of analyzing the perception of anesthesiology residents and preceptors regarding unprofessional behaviors and practices based on an instrument on academic integrity.

METHOD

Study type

This is a quantitative, cross-sectional, descriptive-analytical study using a questionnaire with two parts. The first part consists of a sociodemographic questionnaire, and the second part contains 31 questions adapted from the Dundee Polyprofessionalism Inventory I.

Data collection instrument

The Dundee Polyprofessionalism Inventory used in this study was adapted to the Brazilian context by Sá (2021)¹¹ and proposed to assess students' perceptions of appropriate sanctions for unprofessional behaviors related to Brazilian academic integrity. This inventory was first applied at Dundee Medical School in Scotland, and the explored questions were based on the most frequent lapses identified in students by the General Medical Council of the United Kingdom, such as: criminal conviction, drug or alcohol abuse, aggressive, violent or threatening behavior, persistent inappropriate attitude or behavior, cheating or plagiarism, dishonesty or fraud, pedophilia, disrespect for the academic community, points that remain a major concern worldwide¹².

This questionnaire depicts 34 unprofessional behaviors, and students indicate which sanctions are recommended for each behavior. The sanctions range from 1 = None, 2 = Reprimand (verbal warning), 3 = Reprimand (written warning), 4 = Reprimand and mandatory counseling; 5 = Reprimand, counseling, and extra work; 6 = Failure in the subject or specific strategy/completion of work to obtain credit; 7 = Failure of the specific year (repetition allowed); 8 = Expulsion from the institution (readmission after one year possible); 9 = Expulsion from the institution (no chance of readmission); 10 = Notification to the regulatory board.

Instrument adaptation for the context of anesthesiology residency

For this study, three questions from the instrument adapted by Sá (2021)¹¹ were excluded because they were not suitable for the specific scenario of anesthesiology residency or showed limitations in applicability in the studied context. The exclusion decision was based on criteria of contextual relevance and practical applicability, as detailed below:

Excluded Question 1. "Obtaining help or assisting with

coursework or assessments, contrary to the teacher's rules."

- a. This question was excluded because in anesthesiology residency, collaboration among residents is often encouraged as part of the learning process, unlike the undergraduate environment where individual work is more common. The collaborative nature of anesthetic practice makes this question less applicable to the context of specialization.

Excluded Question 2. "Removing an indicated reference from a shelf in the library to prevent other colleagues from accessing the information contained therein."

This question was considered obsolete in the current context of residency, since access to scientific information occurs predominantly through digital platforms and electronic databases. The practice of removing physical books to harm colleagues has become virtually nonexistent with the digitization of medical knowledge.

Excluded Question 3. "Posting inappropriate material about colleagues, teachers, or patients on social media."

- a. This question is extremely relevant in the current context, especially considering the growing concern about the inappropriate use of social media by health professionals^{13,14}. This topic merged with item 29 "Inappropriate participation in social media through publications, posts, photos, videos or texts about class or clinical activities". The item in question is broader, since it incorporates not only posts themselves, but also video conferences, live streams and other participations in social media. The exclusion, therefore, did not disregard the topic, since the inappropriate use of social media represents one of the main contemporary challenges for medical professionalism^{15,16,17}. Studies indicate that between 60% and 90% of medical students and residents use social media, and a significant proportion have already posted potentially problematic content¹⁸.

Therefore, in the instrument used in this study, 31 questions were used out of the 34 original questions, as shown in Table 1.

Research scenario

The research was conducted at the largest anesthesiology service in a capital city located in the Northeast region of Brazil. This is the largest general hospital in the state, responsible for providing tertiary-level care to patients from across the state of Ceará in various medical specialties, thus becoming an excellent environment for medical learning. It is characterized as a teaching hospital, hosting academic internships for students from various universities in the state, as well as Medical Residency Programs in several specialties.

Table 1. Dundee I Inventory of Polyprofessionalism: Academic Integrity.

Quest.1- Signing attendance sheets for absent friends or asking colleagues to sign attendance sheets for theoretical or practical classes on one's behalf.
Quest.2- Forging a healthcare professional's signature on a work document, patient record, grade sheet, or attendance sheet.
Quest.3- Claiming work done in a group or collaborative setting as individual work.
Quest.4- Altering or manipulating research data or conclusions (for example, to obtain a significant result or to cover up errors).
Quest.5 - Failing to follow proper infection control procedures.
Quest.6 - Threatening or verbally assaulting a colleague or staff member at the university or college.
Quest.7 - Attempting to take advantage of personal relationships, bribes, or threats to gain academic advantages.
Quest.8- Abusing inappropriate substances (e.g., drugs).
Quest.9- Intentionally falsifying test results or treatment records to cover up errors in care.
Quest.10- Making false entries and signing the logbooks.
Quest.11- Physically assaulting a student or staff member of the institution.
Quest.12- Buying work from colleagues, online, etc.
Quest.13- Lack of punctuality in classes or practical activities.
Quest.14- Providing illicit drugs to colleagues or employees of the institution.
Quest.15- Failing to do one's part in group work.
Quest.16- Examining patients without the preceptor's knowledge and/or consent.
Quest.17- Sabotaging another student's work.
Quest.18- Inventing external circumstances to delay the taking of an exam.
Quest.19- Sexually harassing a colleague or employee of the institution.
Quest.20- Resubmitting previously submitted work to another course or previous coursework.
Quest.21- Plagiarizing the work of a colleague or from publications/the internet.
Quest.22- Cheating on tests, for example copying from a neighbor, using cheat sheets or a cell phone, or asking someone to take the test for you.
Quest.23- Copying and pasting or paraphrasing material without citing the source.
Quest.24- Damaging public or private property (e.g., scribbling on tables or chairs).
Quest.25- Falsifying references or notes on a resume or altering notes in an official record.
Quest.26- Involvement in pedophilic activities through possession, viewing of child pornography images, or molesting children.
Quest.27- Photographing patients
Quest.28- Making jokes or disrespecting bodies or parts of the human body.

Continue...

Table 1. Continuation

Quest.29- Inappropriate participation in social media through publications, posts, photos, videos, or texts about class or clinical activities, colleagues, teachers, or patients.
Quest.30- Deliberately damaging another student's work.
Quest.31- Drinking alcohol during lunch and interviewing a patient in the afternoon.

Source: The authors (2025), adapted from Sá (2021)¹¹

Participants

The anesthesiology residency program consisted of 26 residents divided into 8 first-year residents, 8 second-year residents, and 10 third-year residents.

The preceptors comprised a group of 33 anesthesiologist physicians, employees of the institution who entered through a public competition and had a professional and often affective bond with the institution due to many years of dedication. Many of them were graduates of the institution's own residency program with varying lengths of service, the most recent being employees admitted in the last public competition held in 2021. It is important to emphasize that the preceptors who work at the Anesthesiology Teaching and Training Center (CET) of the aforementioned hospital, for the most part, do not have formal training for the role of preceptor, even though they are key actors in the residents' professional development¹⁹.

There was no sample selection; the inclusion criterion used was being a resident or preceptor of the anesthesiology MRP at the service. As an exclusion criterion, anesthesiologists working under outsourced services without an employment relationship with the institution were not included due to the high turnover of these professionals. All signed the Informed Consent Form (ICF) to participate in the research.

Data Collection and Analysis

Data collection was carried out from July to October of 2023. Data were collected online using an instrument built in Google Forms based on the Dundee Polyprofessionalism Inventory.

The variables were presented as mean and standard deviation, and as median, percentiles, minimum and maximum values, frequency, and prevalence rate. The Mann-Whitney U test was used to analyze the participants' characteristics, verifying the non-adherence of the data to the Gaussian distribution.

Pearson's chi-square test and Fisher's exact test were used to investigate the association between categorical variables.

A significance level of 5% was adopted. Statistical analyses were performed using the R statistical program and Microsoft Excel 2016. Medians and standard deviations of the sanctions

suggested by participants (residents and preceptors) for each unprofessional practice in the Dundee Polyprofessionalism Inventory were calculated and compared.

Ethical Aspects

The study was approved by the institution's Research Ethics Committee under protocol number 3.954.616. All participants signed the Informed Consent Form, guaranteeing anonymity and confidentiality of the collected information.

RESULTS

Twenty-seven individuals participated in the study, comprising 16 residents and 11 preceptors. The participants' age varied significantly between the groups, with the preceptors with a median age of 42 years (interquartile range of 40 to 50 years) and the residents with a median age of 27 years (interquartile range of 25 to 29 years), resulting in a p-value < 0.001, indicating a statistically significant difference between the ages of the two groups.

The remaining sociodemographic variables did not show statistical differences between the groups of residents and preceptors. The residents were distributed as follows: 8 first-year residents (R1): 50%; 6 second-year residents (R2): 37.5%; 2 third-year residents (R3): 12.5%. The length of preceptorship was reported only for the preceptors, with a median of 12 years (interquartile range of 11 to 14 years).

The descriptive analysis of the Dundee Polyprofessionalism Inventory I revealed varying perceptions among preceptors and residents regarding appropriate sanctions for unprofessional behaviors related to academic integrity. Among the 31 questions analyzed, six showed statistically significant differences between the groups, as shown in Table 2.

The results show that, in most questions with significant differences, the preceptors assigned more severe sanctions than the residents. The only exception was question 3, related to the claiming of group work as individual work, in which the residents were more rigorous.

For better statistical analysis, considering the limited number of participants, the sanctions were categorized into three levels of severity:

- Mild Punishments (Reprimand): Sanctions 1 to 5, related to warnings and counseling
- Moderate Punishments (Failure): Sanctions 6 to 7, related to failing subjects or the academic year
- Severe Punishments (Expulsion): Sanctions 8 to 10, related to expulsion and notification to the class council

Table 2. Median of sanctions assigned by residents and preceptors and their differences.

	Preceptor n= 11	Resident n = 16	p-value*
Quest.3- Claiming work done in a group or collaborative setting as individual work.	4.00 (3.00-5.00)	5.00 (4.00-6.00)	0.022
Quest.10- Making false entries and signing the logbooks.	5.00 (4.50-6.00)	3.00 (2.00-4.00)	0.001
Quest.13- Lack of punctuality in classes or practical activities.	3.00 (2.00-5.00)	2.00 (2.00-2.25)	0.022
Quest.16- Examining patients without the preceptor's knowledge and/or consent.	2.00 (2.00-4.00)	1.00 (1.00-3.00)	0.027
Quest.22- Cheating on tests, for example copying from a neighbor, using cheat sheets or a cell phone, or asking someone to take the test for you.	6.00 (6.00-6.50)	5.00 (4.00-6.00)	0.013
Quest.29- Inappropriate participation in social media through publications, posts, photos, videos, or texts about class or clinical activities, colleagues, teachers, or patients.	4.00 (3.50-10.00)	3.00 (2.75-4.00)	0.032

*Median (25%-75%); * Mann-Whitney Test; Source: The authors (2025).

An important aspect observed was the low tendency to neutralize lapses in professionalism, evidenced by the small percentage of participants who did not assign any sanction (sanction=1 – none) to the presented questions.

Only four questions had participants who suggested no sanctions: question 10 (making false entries in logbooks), question 13 (lack of punctuality), question 16 (examining patients without the preceptor's consent), and question 20 (resubmitting previous work). Question 16 had the highest percentage of neutralization, with 56% of residents and 9.1% of preceptors not suggesting sanctions, a statistically significant difference ($p=0.018$).

The practices that received severe sanctions ($\geq 50\%$ of the total participants) were: physical assault (Question 11), supplying illicit drugs (Question 14), sexual harassment (Question 19), and involvement with pedophilia (Question 26). All of these questions are related to behaviors of high ethical and legal severity.

The following were associated with lighter sanctions (reprimand $\neq >85\%$): signing attendance sheets in place of absent friends (Question 1), failing to follow proper infection control procedures (Question 5), lack of punctuality (Question 13), and examining patients without the preceptor's knowledge and/or consent (Question 16).

The comparison between first-year residents (R1) and second- and third-year residents (R2+R3) revealed significant differences in two questions. First-year residents demonstrated greater rigor regarding the purchase of colleagues' work (Question 12) with a median of 7.0 versus 5.5 in the R2+R3 group ($p=0.013$), and regarding cheating on exams (Question 22) with a median of 6.0 versus 4.0 ($p=0.035$).

The analysis of standard deviations revealed questions with high variability in responses, indicating a lack of

consensus on appropriate sanctions. Among the preceptors, the questions with the highest standard deviations (>3.0) were: photographing patients (Quest.27) with a SD of 3.43 and inappropriate participation in social media (Quest.29) with a SD of 3.32.

Among residents, the highest standard deviations (>2.90) were observed in questions about forging a healthcare professional's signature (Question 2) with a SD of 2.97, falsifying test results (Question 9) with a SD of 2.92, and consuming alcohol during lunch before attending to patients (Question 31) with a SD of 2.90.

On the other hand, questions with less variability ($SD < 1.1$) among preceptors included: inventing circumstances to delay exams (Question 18), resubmitting work (Question 20), and involvement with pedophilia (Question 26), indicating greater consensus on these practices. Among residents, there was similar consensus on questions about lack of punctuality (Question 13), pedophilia (Question 26), and photographing patients (Question 27).

These issues are listed in Table 1, along with the participants who did not assign sanctions (whether residents or preceptors), the number of these participants, and their proportion according to the group (residents or preceptors).

DISCUSSION

The lack of conceptual unity surrounding medical professionalism is associated, among other factors, with cultural, contextual, conceptual, and generational variations². This study, by comparing the perception of lapses in professionalism and their consequences between preceptors and residents of the anesthesiology CET, contributes to the understanding of these variations in the specific context of specialist training.

Medical professionalism, recognized as a multidimensional construct³, manifests itself in a complex way in the relationship between educators and trainees. The results of this study show that academic and professional integrity, as one of the constituent attributes of the medical professionalism construct, is perceived differently by preceptors and residents, suggesting variations in perceptions of ethical behavior and professional responsibility that deserve in-depth analysis.

The findings of this study reveal a consistent pattern in which preceptors demonstrate greater rigor in the sanctions attributed to lapses in professionalism compared to residents. This trend, observed in five of the six questions with statistically significant differences, reflects a complex interaction between generational, hierarchical, and experiential factors that deserves detailed analysis.

The significant age difference between preceptors (median of 42 years) and residents (median of 27 years) represents more than a simple chronological difference; it reflects distinct professional generations with different formative experiences and sociocultural contexts²⁰. Preceptors, trained in an era with more rigid codes of conduct and more defined hierarchical structures, may have internalized more conservative standards of professionalism²¹. On the other hand, residents, representing a younger generation, may have a more flexible perception of certain practices, especially those related to technological aspects and interpersonal relationships²².

In addition to generational differences, the preceptors' hierarchical position as supervisors and evaluators significantly influences their perception of the need for stricter sanctions. This stance can be understood through the lens of the professional and legal responsibility that falls on preceptors²³. As those responsible for the residents' training and supervision, preceptors may feel compelled to adopt a more rigorous posture as a way to ensure the quality of training and protect both patients and the institution from possible consequences of professional lapses.

The analysis of the differences observed between preceptors and residents cannot be dissociated from the context of the institutional culture and the preceptors' pedagogical training. As identified in this study, most preceptors do not have formal training for the preceptor role, which may influence their perceptions of professionalism and disciplinary strategies.

The absence of formal pedagogical training may lead preceptors to base their disciplinary decisions on personal experiences and models that were internalized during their own training, perpetuating patterns that may not be the most appropriate for the current context²⁴. Recent studies demonstrate that preceptors with pedagogical training tend to

adopt more reflective and educational approaches to lapses in professionalism, in contrast to purely punitive approaches²⁵.

The institutional culture of the CET, characterized by a traditional hierarchical structure and the predominance of preceptors trained within the institution itself, can contribute to the perpetuation of certain patterns of perception about professionalism. This formative endogeneity, while it may guarantee the continuity of institutional values, can also limit exposure to different perspectives on professionalism and innovative educational practices²⁶.

The issue of illicit substance abuse (Question 8) deserves particular analysis, both for its specific relevance in anesthesiology and for the high variability of responses observed in both groups. The high standard deviations (2.53 for preceptors and 2.63 for residents) indicate a lack of consensus on appropriate sanctions, revealing an important gap in institutional policy for addressing this problem.

Anesthesiology has unique characteristics that increase the risk of substance use disorders (SUDs) among its professionals²⁷. Easy access to controlled medications, the stress inherent to the specialty, and the self-medication culture can contribute to anesthesiologists' greater vulnerability to substance use-related problems²⁸. American data demonstrate that, although anesthesiologists represent a small percentage of the total number of specialists, they constitute a significant proportion of professionals in recovery programs²⁹.

The variability in responses regarding sanctions for substance use reflects an ethical and practical dilemma faced by medical educators: how to balance the need to protect patients with the appropriate therapeutic approach for professionals with SUDs. Some participants may favor a more punitive approach, aiming at the immediate protection of patients and the deterrent effect. Others may prefer a more therapeutic approach, recognizing SUD as a medical condition that requires specialized treatment³⁰.

The international literature suggests that prevention, education, and support programs are more effective than purely punitive approaches³¹. American institutions that have implemented randomized drug testing, combined with education and support programs, have reported positive results in reducing the problem^{32,33}. In the Brazilian context, studies indicate that most professionals recognize the risks of SUD for patient safety and professional life, but there is a need for clear institutional policies and adequate support programs^{11,23}.

The results of this study, when compared with the international literature, reveal interesting patterns of convergence and divergence. In a study conducted in Saudi Arabia, 17 lapses showed percentages of 2% to 38% of teachers who did not characterize certain issues as lapses subject to

sanction³⁴. In contrast, the present study showed more rigorous preceptors, with only one lapse showing 18% of preceptors not suggesting sanctions (excluding question 16 due to its contextual particularities).

This difference may reflect cultural and contextual variations between the health and medical education systems of Brazil and Saudi Arabia. Factors such as legal structure, educational traditions, and social expectations regarding medical behavior can significantly influence perceptions on professionalism³⁵.

In comparison with a Scottish study, where 46% of medical students did not score sanctions for lapses in professionalism³⁶, the residents in the present study demonstrated greater rigor, with only three questions (9.67%) showing neutralization percentages ranging from 6.3% to 19%. This difference can be attributed to the context of medical residency, where participants are already fully qualified physicians with greater awareness of professional responsibilities, in contrast to undergraduate students who are still in the process of forming their professional identity.

The study by Sá (2021)³⁷, conducted in the Brazilian context with medical students, offers a particularly relevant comparison. When compared with that study, the preceptors of this CET were statistically more rigorous in five questions, while the residents were more rigorous in only one question related to research and education. This difference may reflect the residents' closer involvement with academic and research activities, areas where integrity is particularly valued in the medical residency environment.

Analysis of the differences between first-year residents (R1) and more experienced residents (R2+R3) reveals a pattern of concern related to decreasing rigor in sanctions over the course of training. First-year residents demonstrated greater severity in matters related to buying assignments and cheating on exams, suggesting that prolonged exposure to the residency environment may lead to the normalization of certain lapses.

This phenomenon, known in the literature as "moral erosion" or "ethical drift," represents one of the main challenges in medical education³⁶. Continuous exposure to questionable practices, combined with workplace pressures and fatigue, can lead to the gradual acceptance of behaviors that would initially be considered unacceptable³⁷.

The difference observed between R1 and more experienced residents suggests the need for continuous educational interventions throughout the residency program, not just at the beginning of training. Professionalism programs should be longitudinal and include moments of reflection and reinforcement of professional values at different stages of training³⁸.

Question 16, regarding examining patients without the preceptor's knowledge or consent, deserves specific analysis considering the particularities of anesthetic practice. The high rate of neutralization of this question among residents (56%) may reflect confusion about the question interpretation in the specific context of the studied CET.

In anesthesiology, pre-anesthetic assessment is traditionally performed by the resident in a relatively independent manner, with indirect supervision from the preceptor. This practice, while educationally valuable, can generate ambiguity about the limits of the resident's autonomy and the need for direct supervision³⁹.

The significant difference between preceptors and residents on this issue ($p=0.018$) suggests a need for clarification of institutional policies on resident supervision and autonomy. Clear guidelines on when direct supervision is necessary can reduce this ambiguity and improve the quality of training⁴⁰.

The high variability observed in some questions, evidenced by the high standard deviations, indicates a lack of consensus on appropriate sanctions for certain lapses. This variability is particularly problematic from an educational point of view, as it can lead to inconsistencies in the application of disciplinary measures and confusion among residents about behavioral expectations.

The questions with the greatest variability among preceptors (photographing patients and inappropriate participation in social media) reflect contemporary challenges of medical professionalism that may not have been adequately addressed in preceptor training⁴¹. The digital age has brought new ethical dilemmas that require discussion and institutional consensus on appropriate policies⁴².

Among residents, variability in questions about document forgery and alcohol use during work may reflect different levels of exposure to real-life situations or different interpretations of the severity of these behaviors. This variability suggests a need for more in-depth discussions on professional ethics during training⁴³.

The results of this study have important implications for the development of teaching strategies for professionalism in anesthesiology residency. The identification of systematic differences between preceptors and residents suggests a need for approaches that promote dialogue and alignment of expectations.

Teaching methods that favor the identification of professional lapses and allow residents' reflection tend to generate more effective behavioral changes. The implementation of validated tools for teaching and evaluating medical professionalism in anesthesiology residency is imperative to ensure adequate training of future specialists.

Preceptor modeling emerges as a fundamental strategy but requires the preceptors' own clarity about professional expectations and standards^{19,23}. Teacher development programs focused on professionalism may be necessary to ensure that preceptors are adequately prepared for this educational role²³.

Immediate feedback when situations arise, combined with other educational methods, represents one of the most effective strategies for teaching professionalism². However, it is important to recognize that negative models can have a more lasting impact than positive ones, reinforcing the importance of a learning environment that consistently promotes appropriate professional behaviors³⁷.

STUDY LIMITATIONS

This study has some limitations that should be considered in the interpretation of the results and in future investigations on the subject. The relatively small sample size (27 participants) constitutes an important limitation. Future studies with larger and multicenter samples could strengthen the external validity of the findings.

The study was conducted at a single institution, which may limit the generalization of the results to other anesthesiology residency programs with different institutional cultures, organizational structures, or socioeconomic contexts. The specific institutional culture of the studied CET, characterized by the predominance of preceptors trained at the institution itself, may have influenced the results in a particular way.

The cross-sectional nature of the study prevents the establishment of causal relationships between the variables studied. A longitudinal design would allow the better understanding of the evolution of perceptions about professionalism throughout training and the identification of factors that influence changes in these perceptions.

Data collection was carried out over a specific period (July to October 2023), not capturing possible seasonal variations or those related to specific events that could influence perceptions about professionalism. Furthermore, the post-COVID-19 pandemic context may have influenced perceptions about some aspects of medical professionalism.

CONCLUSION

This study revealed a significant dissonance between the perceptions of anesthesiology preceptors and residents regarding the severity and sanctions for lapses in professionalism. Preceptors, in general, demonstrated greater rigor, a reflection of complex interactions between generational, hierarchical, and professional experience factors. A relevant finding was the suggestion of a "moral erosion" during training, with more experienced residents showing themselves to be less rigorous

than first-year residents on issues of academic integrity. The high variability in sanctions for issues such as substance use and conduct on social media points to the absence of consensus and the urgent need for clear institutional policies.

By diagnosing perceptions in a residency program, this work reinforces that professionalism is a dynamic construct and highlights the importance of continuous educational interventions and faculty development to align expectations and strengthen the training of competent and ethically responsible anesthesiology specialists. The study contributes to the body of knowledge on medical professionalism in the Brazilian context and offers support for the development of more effective educational strategies.

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AUTHORS' CONTRIBUTION

Rachel Ribeiro contributed by conducting the research and investigation process, specifically performing experiments, or collecting data/evidence and preparing, creating and/or presenting the published work by members of the original research group, specifically critical review, commentary or revision – including pre- or post-publication stages. Aline Veras Moraes Brilhante contributed with supervisory and leadership responsibility regarding the planning and performance of the research activity, including external guidance to the main team. Ana Maria Catrib, responsible as co-supervisor and leader of the research project. Henrique Luis do Carmo e Sá and Silvia de Melo Cunha, fundamental in evaluating the research from an academic perspective. Germana Leal Coutinho performed the data collection and conducted the interviews.

CONFLICTS OF INTEREST

The authors declare no conflicts of interest.

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Research data are only available upon request.

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