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Technical and emotional safety in veterinary medicine during surgical procedures on dogs and cats.

Technical and emotional safety in the field of veterinary medicine in surgical procedures for dogs and cats

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SUMMARY

Veterinary Medicine in Brazil has been experiencing significant growth; however, issues such as the technical skill and emotional health of professionals performing surgical procedures on dogs and cats are rarely addressed in the curriculum. This study aimed to survey these professionals' perceptions of their technical and emotional safety, identifying factors that interfere with their performance in the workplace. Based on a literature review and field research conducted using a questionnaire administered via Google Forms to students and recent graduates, the data revealed that most professionals did not receive adequate support during their undergraduate studies for the technical and emotional development necessary to handle adverse situations that may occur during surgical procedures on dogs and cats. This highlights the need for increased hours dedicated to practical classes and subjects focused on emotional well-being, complementing the curriculum and technically and emotionally qualifying professionals to perform their role with greater confidence.

Keywords: surgery, emotional, safety, technique.

ABSTRACT

Veterinary Medicine in Brazil has been experiencing significant growth, yet issues such as the technical quality and emotional health of professionals performing surgical procedures on dogs and cats are rarely addressed in the curriculum. This study aimed to survey these professionals' perceptions of their technical and emotional safety, identifying factors that interfere with their performance in the workplace. Based on a literature review and field research conducted through a questionnaire administered via Google Forms to students and recent graduates, the data revealed that most professionals did not receive adequate support during their undergraduate studies for the technical and emotional development needed to deal with adverse situations that may arise during a surgical procedure or treatment on dogs and cats. This highlights the need for more class hours dedicated to practical classes and courses focused on emotional balance, complementing the course curriculum and providing technical and emotional training for professionals to perform their roles with greater safety.

Keywords: surgery, emotional, safety, technique.

1. INTRODUCTION

Veterinary medicine is becoming an increasingly competitive profession and This is a growing trend, as evidenced by the increase in the number of colleges offering the course in recent years. (Alfano, 2023; CRMV-MA, 2025). The large number of newly graduated veterinarians in Brazil raises questions regarding capacity and knowledge, given the preparation. The role of these students has been questioned, as some colleges do not guarantee a quality education. quality for graduating students, who in turn are unable to enter the job market. (Alfano, 2023; CRMV-MA, 2025).

Newly graduated professionals face a major challenge when entering the profession.



Year V, v.2 2025 | Submission: 02/11/2025 | Accepted: 04/11/2025 | Publication: 06/11/2025

whether through veterinary medical residency programs, this as a differentiated modality in postgraduate studies, where intensive and supervised training in the services of assistance, offered by institutions that offer this program. (Wolf et al., 2020). In this During the professional development period, the professional should conduct a survey on caregiving duties and of healing, dealing with feelings of helplessness and emotional stress that can be harmful, affecting the quality of care provided to patients. (Wolf et al., 2020).

Qualification in surgery requires a high level of theoretical and practical knowledge. especially in surgical techniques and their particularities, it is essential to develop Practical skills are considered one of the primary requirements. (Camargo et al., 2018).

Performing surgical procedures on dogs and cats is a fundamental step in practical training for veterinary medicine students, as well as in the practice of veterinarians. newly graduated veterinarians (Gomes Junior et al, 2011; Pereira & Oliveira, 2023). However, the Technical and emotional safety during these procedures can directly influence quality. of the care, the recovery of patients and the professional development of these individuals (Gomes Junior et al, 2011; Pereira & Oliveira, 2023).

Resident physicians are affected by various factors that compromise their health and Quality of life during the student/doctor transition, including sleep deprivation and social isolation. responsibility, work overload, and fear of making mistakes are linked to their training, generating psychological and behavioral reactions, including depressive states that trigger suicidal thoughts, being classified as a risk group due to emotional disorders such as Depression, stress, compassion fatigue, and even Burnout Syndrome. (Wolf et al., 2020).

National studies also indicate that work overload and patient care contribute to the problem. In serious cases, emotional exhaustion and sleep deprivation are among the main factors of suffering. psychological issues in residents. Symptoms such as excessive fatigue, anxiety, and personal insecurity are frequently reported in this context (Guido et al., 2012).

Given this, an analysis of the perception of both technical and emotional security is fundamental. of professionals in the field of veterinary medicine in surgical procedures on dogs and cats, the which, for the most part, have daily contact in the professional environment, through the survey and investigation of the main factors that generate technical uncertainty, the impact of anxiety and of Stress during surgical procedures and perceptions of practical training in undergraduate studies. of these professionals.

2. METHODOLOGY

This study is characterized as field research with a quantitative approach. of a descriptive and exploratory nature, structured as a series of responses. For the work described

Year V, v.2 2025 | Submission: 02/11/2025 | Accepted: 04/11/2025 | Publication: 06/11/2025

A literature review was conducted using databases such as: Scielo, Pubvet, Google Scholar, Collections from USP (University of São Paulo) and renowned digital journals such as: Brazilian Archives of Veterinary Medicine, The information obtained from the Brazilian Journal of Veterinary Medicine, Pubvet, and Clínica Veterinária served as a basis. For the purpose of understanding and formulating questions directed at the target audience. For data collection. Regarding the research approach, a questionnaire was created on the Google Forms platform. with fifteen questions that were submitted through social media. With the return of the answers, the Data were compiled and analyzed to determine the results and discussions of this work. with graph generation and simple statistical analysis (percentages).

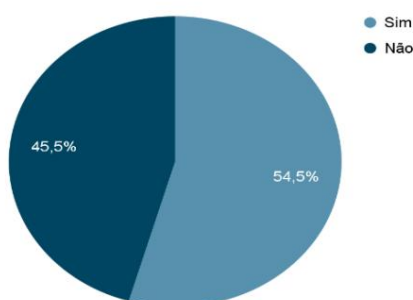
3. RESULTS AND DISCUSSION

Pie charts were created from the data collected from 22 questionnaires regarding technical and emotional security, anxiety, preparation, and university support, where These will be discussed along with the scientific literature. The data collected and analyzed, originating from The field research provides an illustrative quantitative overview for the discussion regarding insecurity among veterinary medicine students and newly graduated veterinarians in Surgical procedures in dogs and cats.

Among the participants, 72.7% are veterinary medicine students, while 27.3% are... recent graduates, thus encompassing both the perception of professionals in training and the already in the job market. The age ranges of the participants were also verified, being It was found that 18.2% are under 25 years old, 31.8% are between 25 and 30 years old, and 50% are over 30. years indicating a young audience, whose process of technical and emotional maturation is in progress. Regarding the participants' gender, 81.8% of the responses were from women.

When asked about completing a practical surgical internship during their undergraduate studies (Figure 1) it was possible to verify a significant deficit regarding the training of some of the future professionals, by highlighting the importance that practical internships bring, both in terms of technical foundation. as well as in gaining professional self-confidence in surgical procedures.

Figure 1 - Graph showing the number of participants who completed a practical surgical internship during their undergraduate studies.

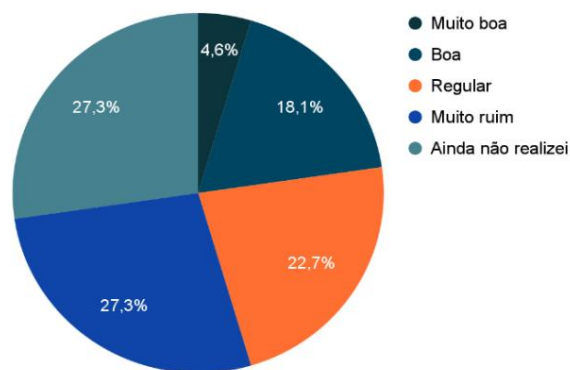


Year V, v.2 2025 | Submission: 02/11/2025 | Accepted: 04/11/2025 | Publication: 06/11/2025

The learning process begins with an interest in resolving doubts and expanding knowledge. knowledge, involving the active participation and interpretation of the student in the face of various experiences gained throughout their education. Due to the limited time allotted to classes. In addition to practical training in the curriculum, veterinary medicine students need to complete internships to supplement their skills. and improve their technical and professional skills. (Costa Neto et al, 2010).

When questioned regarding the assessment of technical safety in performing surgeries in dogs and cats, most participants rated as very bad or fair, a portion The significant lack of practice still indicates that the practice has not yet been carried out (Figure 2). This highlights the lack of practice. The use of techniques directly impacts the professional's confidence and experience gain. for performing surgical procedures, especially at the beginning of one's career.

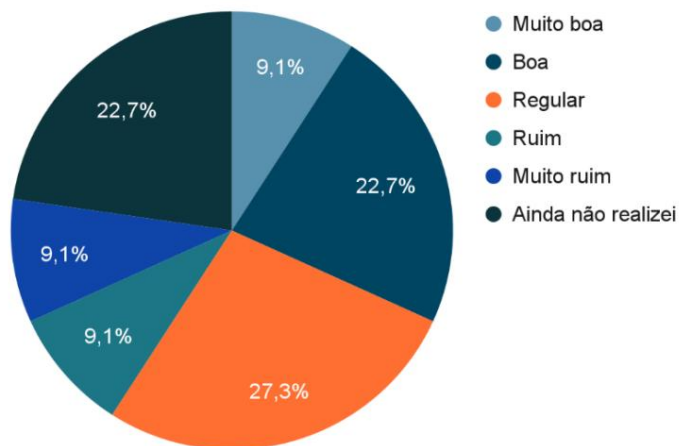
Figure 2 - Graph showing participants' ratings regarding technical safety in performing surgeries. in dogs and cats.



Given the ongoing discussions about the negative impacts of using animals in education, due to the difficulties in obtaining and maintaining cadavers, in addition to the fact that many students do not receive adequate training to perform basic surgical procedures during the During our undergraduate studies, the proposal arose to develop a new methodology focused on teaching medicine. veterinary medicine. Thus, an alternative model for surgical training of the cavity was developed. abdominal muscles in dogs, realistically reproducing the organs in that region, with the aim of to provide students with the opportunity to practice techniques and procedures fundamental to their professional training (Greif, 2003; Guimarães et al, 2016).

In addition to technical safety, the emotional safety of the professional during procedures is also important. Surgical skills are also affected by the lack of practical experience; it has been found that some of them... participants feel emotionally insecure during surgical procedures (considered markers regular, bad and very bad), while a significant portion indicates that it did not perform the practice (Figure 3)

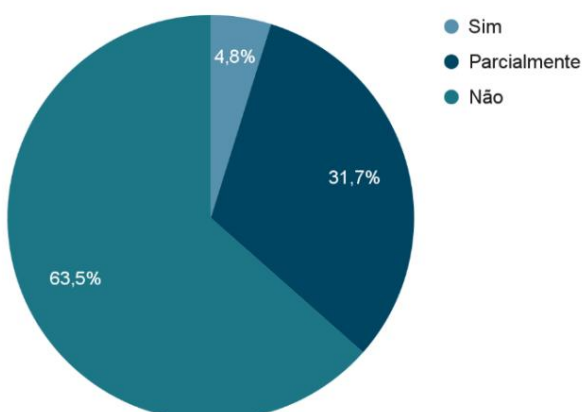
Figure 3 - Graph showing participants' assessment of emotional safety when performing surgeries on dogs and cats.



The role of a veterinarian is complex and involves not only technical expertise-scientific, but also empathy, sensitivity, and communication skills. However, these Professionals face significant emotional challenges, such as burnout syndrome. characterized by intense physical and mental exhaustion, and compassion fatigue, which occurs when there is Emotional distress due to constant contact with animal suffering. Despite the increase in Despite the number of graduates in recent years, many report feeling overwhelmed, stressed, and... Difficulty in maintaining a balance between personal and professional life. Lack of support. Psychological and professional recognition issues intensify these situations, potentially leading to serious problems. repercussions for the physical and emotional health of veterinarians. (Paulista & Oliveira, 2023).

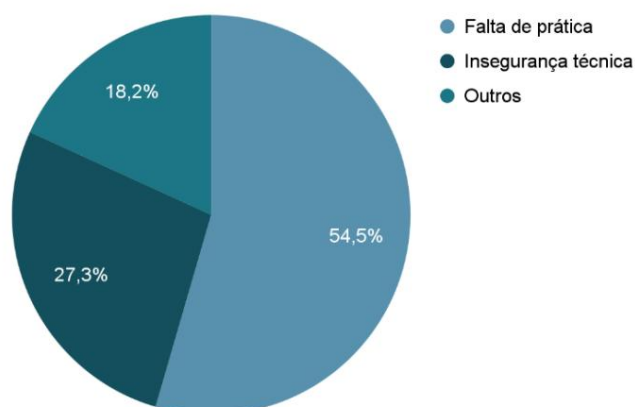
Lack of preparation during undergraduate studies exacerbates professional insecurity for the job market. Regarding the procedures, when questioned, most participants claim not to have received them. sufficient preparation as students, in performing surgeries on dogs and cats, reaffirming the reaffirming the importance of the practical internship included in the curriculum. (Figure 4)

Figure 4 - Graph showing the participants' responses when asked if they had received sufficient training during their undergraduate studies to perform surgeries on dogs and cats.



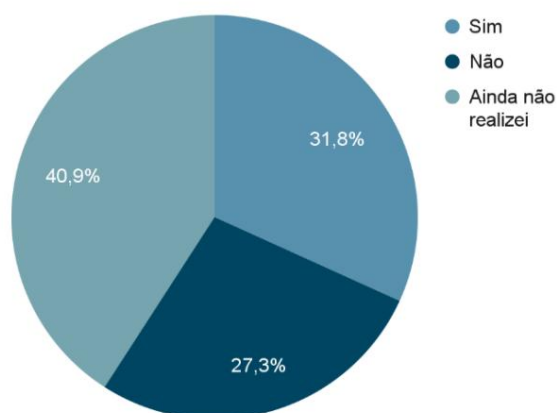
Lack of practice and technical uncertainty are the biggest challenges identified by participants in performing surgeries (Figure 5). In addition to insecurity in the relationship with tutors, lack of experience and/or acquired technique, and insecurity in the procedure and/or complications. It is evident that the greater the professional's practical experience, the greater their technical background and emotional maturity to deal with situations, such as incidents in surgical procedures, gradually reducing the burden of anxiety and/or stress arising from them. of the insecurity felt before or during the procedures

Figure 5 - Graph showing participants' ratings regarding their biggest challenges in performing surgeries on dogs and cats.



When asked if they had ever experienced anxiety or stress attacks before or during the performance of surgical procedures, it was found that most reported having experienced these episodes (Figure 6), demonstrating the emotional impact that technical insecurity can generate in professional.

Figure 6: Graph showing participants' responses when asked if they had ever experienced anxiety or stress before or during surgery on dogs and cats.



The process of humanizing animals has significantly increased the demand for them. Veterinarians, which increases their responsibilities and the role they play in health public. Despite this, these professionals still face several challenges, such as the lack of social recognition, long working hours, and emotional strain, especially in certain situations.

Year V, v.2 2025 | Submission: 02/11/2025 | Accepted: 04/11/2025 | Publication: 06/11/2025

involving euthanasia and the emotional bond with caregivers. An observational experience in a clinic.

Veterinarians highlighted recurring problems, such as compassion fatigue and excessive self-criticism.

and the difficulty in balancing personal and professional life. Direct contact with these professionals

It demonstrated the effects of occupational stress and the importance of providing ongoing psychological support.

Recent research points to worrying suicide rates among veterinarians, which reinforces the

The need for preventive measures and mental health programs, including mindfulness practices.

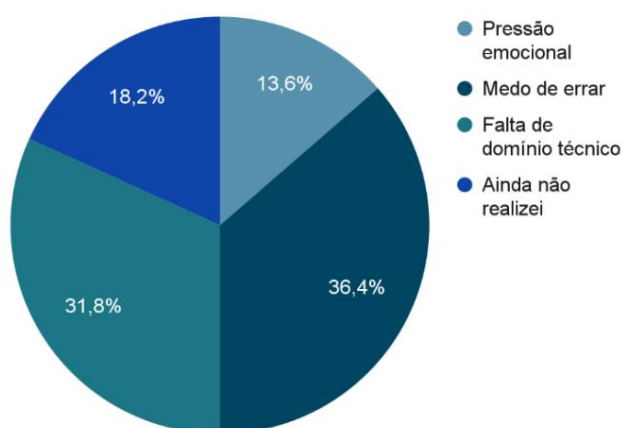
and stress management techniques to promote greater emotional well-being. (Riva & Berni, 2025)

Among the factors that most affect professionals during the performance of a procedure

In surgical procedures, participants cited fear of making mistakes, lack of technical skill, and pressure.

emotional (Figure 7).

Figure 7: Graph showing participants' responses when asked about the factors that most affect them during surgery.



The quality of veterinary medical care is directly related to the safety of...

patient, requiring the prevention of failures and errors that could cause harm during care.

clinical or surgical. Although studies on safety in veterinary medicine are still ongoing.

While limited, it is already recognized that adverse events and errors in procedures and medications can occur.

resulting in serious consequences, including animal deaths (Souza, 2022).

The emotional factor is of great importance in both personal and professional life, a

given the workload, self-imposed pressure, insecurities, great responsibilities, and deprivation of

Sleep problems compromise quality of life. All participants admit that emotional insecurity...

This can compromise surgical performance. These data bring to the discussion...

The importance of emotional training during graduation, when questioned, all of them

Participants agreed on the need to include this subject in the course curriculum.

Veterinary Medicine courses in Brazil train professionals for different areas.

However, technical knowledge alone does not guarantee professional success. In this context, the

Developing emotional intelligence is fundamental for balance and performance.

Veterinarian. This skill involves understanding and controlling emotions, promoting...

Motivation and resilience in the face of daily difficulties, such as patient loss and work overload.

Work and complex decisions, such as euthanasia. To improve it, self-knowledge is essential.

This can be stimulated through reflection on emotions, meditation, and therapy. Professionals

Emotionally intelligent people become better prepared to face the challenges of daily life.

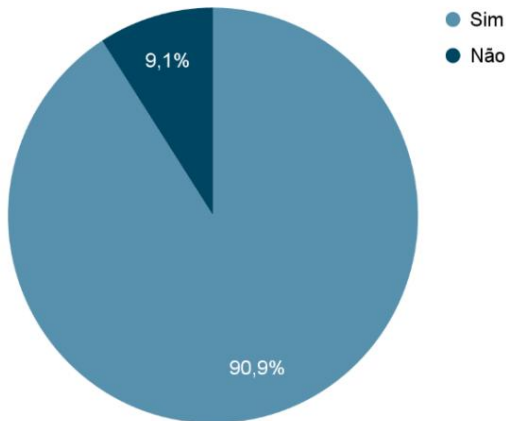
veterinary. (Pellenz, 2021)

It was found that all participants agreed that the presence of an experienced professional

It conveys a sense of security during surgery, while most feel comfortable in

Ask for help during the procedure (Figure 8).

Figure 8: Graph showing participants' levels of comfort in asking for help during surgery.



The insecurity experienced by students or recent graduates in veterinary medicine.

It stems from a feeling of technical unpreparedness, resulting from a lack of or insufficient experience.

Internship practices during undergraduate studies directly affect the emotional well-being of professionals and

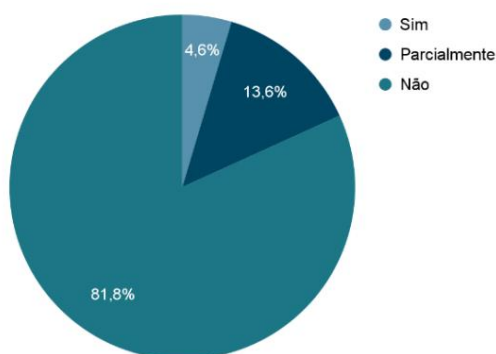
consequently their performance in carrying out surgical procedures. The lack of support

suitable for the development of technical and emotional security by universities during the

The professional qualifications of the staff are evident when questioning students and recent graduates of the course (Figure

9).

Figure 9: Graph showing participants' responses when asked if the university offers adequate support for the development of technical and emotional security.



The data presented demonstrate that during and after graduation, veterinarians do not feel prepared technically and emotionally, highlighting the importance and need for... Inclusion of adequate support for the development of the technical and emotional security of future generations. professionals complementing the course curriculum.

4. FINAL CONSIDERATIONS

It is understood, therefore, that technical and emotional security are interdependent factors and essential for the effective and ethical surgical performance of veterinary students and newly graduated veterinarians. Strengthening these skills requires joint action between institutions of teaching, faculty, and professionals in the field, with the goal of ensuring a more comprehensive education. safe and emotionally healthy, contributing to the responsible practice of medicine. Veterinary.

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