




## WHAT IS FELINE ACUPUNCTURE FOR? A FIRST APPROACH TO KNOWLEDGE OF FELINE PRACTITIONERS REGARDING VETERINARY ACUPUNCTURE IN BRAZIL

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### ABSTRACT

Veterinary acupuncture is a complementary and alternative medicine practiced widely in Brazil and it is recognized as a specialty by the Federal Council of Veterinary Medicine. However, despite the growing interest of professionals for training and of clients for care, there are no studies on the knowledge of feline practitioners regarding veterinary acupuncture in Brazil. The present survey received 112 (complete) replies; the social media chosen for the distribution of the survey link were Instagram and WhatsApp. The majority of the respondents were feline veterinarians (80.35%) and from the southeastern region of Brazil (43.75%). Furthermore, 91% recommended acupuncture treatment to their patients while 8.93% didn't nor were they able to identify which patients could benefit from acupuncture. When asked to which of the conditions displayed, they would recommend the technique, neuromusculoskeletal were, by far, the most common diseases for referral to acupuncture. Our results, despite the small sample, point to the fact that acupuncture is still unknown to most veterinarians, and it is therefore rarely indicated. Also, there is a lack of scientific data in Brazil that could elucidate and enrich statistics on acupuncture, furthermore, most Brazilian veterinarians do not respond to surveys because they don't know the importance of it.

**Keywords:** Traditional Chinese Medicine. Cat. Survey. South America. Social Media.

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## INTRODUCTION

In Brazil, feline pets were the one that grew most between the years 2013 and 2018 (Health for Animals, 2022; World Population Review, 2024), compared to other domestic species. Like other countries, Brazil's pet ownership experienced a pandemic boom during the years 2020 – 2022 with an increase of 30% of pets and about 23.9 million cats were identified in the country (Galileu, 2021; Puljiz, 2021). According to Puljiz (2021), in Brasilia (Federal District) 75% of pets were cats, leading to a need for highly specialized professionals for an ever-increasing demand in the feline market. Feline medicine practice requires not only knowledge of the species' ethology and the course of treatment for specific diseases, but also the proper approach of the animal at the clinic to avoid stress and imbalance in physiological responses.

In 2023, Brazil had 166,119 active veterinarians (VETs), an average of 77,4 VETs for 100.000 inhabitants. This average is high when compared to Europe - 38 Vets per 100,000 inhabitants (Wouk, 2023) and the United States (USA) - 39 Vets per 100,000 inhabitants (American Veterinary Medical Association, 2024; United States Census Bureau, 2023). Considering the demand for specialized VETs in Brazil and the large number of professionals, the search for continuous education comprised different modalities and fields of studies, postgraduation courses were highly appealing to these professionals, including acupuncture (AP) courses. AP is a technique of Traditional Chinese Medicine and has evolved over thousands of years and has been used for the treatment of several disorders in humans and animals (Lu, 2024; Santos et al., 2022). Veterinary AP is also an ancient medicine and its earliest and relatively complete veterinary work in China is a collection on the Treatment of Equine diseases, about 838 A.D [Si Mu An Ji Ji, 司安驥集] (XU, 1949 APUD HU & LIU, 2019). The introduction of AP in the West is linked to the Dutch West India Company in 1602. The history of veterinary AP in Europe begins in France, with the publication of articles by Girard (1825) about the use of AP for lameness in horses (Girard, 1825). In Brazil, the practice of AP on animals began in the early 1980s, with Yamagute and Inada (Scognamillo-Szabó, 2010).

Despite the great raise of cat's population in Brazil, few is known about the use of AP for domestic cats. This way, the aim of this work was to do a preliminary survey of the knowledge of Brazilian feline practitioners regarding veterinary AP in Brazil.

## MATERIAL AND METHODS

To conduct the survey, VETs from Brazil were selected and voluntarily agreed to participate by declaring their consent at the beginning of the questionnaire as a mandatory

answer. The survey was conducted by a semi-structured on-line form, including a mix of four multiple choice questions and short answers using Google forms (Appendix 1), available from September 16th, 2024 to November 1st, 2024. The questionnaire was sent by direct messages on Instagram social media to feline VETs who were followed by the Brazilian Academy of Feline Practitioners – ABFEL - and could receive messages. Initially, 259 feline VETs from all regions of Brazil were selected to receive the survey link. Eighty-eight VETs had not seen the message and received the same invitation via WhatsApp social media. A total of 336 messages were sent and 112 responses were received.

## RESULTS/ DISCUSSION

Google forms is an online and free tool, used to create surveys and to collect information. It includes different types of questions such as short answers and multiple selection. The use of electronic tools and social media in this study made it feasible and possible to reach professionals from various regions of Brazil. The criteria used to select professionals was based on a simpler way to reach them, since data from professional associations and regulatory bodies were not available, because of confidentiality of member data. Thus, the online survey was sent via Instagram direct messages.

The search for participants for the study was done in an almost artisanal way leading to subsampling and sample bias, however it was the only possible way of accessing these professionals. The present study was answered mainly by feline VETs who use social media to publicize their work, to obtain new clients and to be in contact with other VETs, courses or other opportunities. Nowadays in Brazil, most customers tend to choose services on Instagram and prefer the ones who have more posts and followers (Forbes, 2023; Adelia et al, 2021). Brazil is in the top three countries that most consume social media in the world and Instagram is the biggest one with 122,9 million users (Forbes, 2023; Statista, 2025). Instagram is an important media for exposing veterinary medical services and its use is regulated by professional regulatory bodies (CRMV – SP 07/11/2024).

It is very likely that the colleagues who took the time to answer the questionnaire are precisely those who refer or even those who know about the clinical effects of acupuncture on cats. In this case, our survey generated a biased sample towards the authors' social networks, with low adhesion of VETs who ignore or don't indicate acupuncture. In our clinical experience, the rate of colleagues who refer cats for acupuncture is much lower than our results. However, there is no statistical data to justify our perception. A survey of the literature on acupuncture services in Veterinary Hospitals in Brazil and USA shows that 5% to 10% of the patients are cats (Angeli, 2005; Ueda et al, 2010; Figueiredo et al, 2018;

Shmalberg et al, 2019; Cavalcanti, 2023; Pereira et al., 2023). In our experience, cat owners do not like to take their animals to a veterinary clinic, preferring home care.

This is because transportation itself could cause stress in the animal and some cats might even need sedation.

Our results showed that 80.35% of the respondents were feline VETs (Figure 1). Around 91% of all respondents recommend AP to their patients (Figure 2). Figure 3 shows that most of the VETs live in the Southeastern region (43.75%), followed by Southern (3.56%); Northeastern (2.67%); middle-west (1.78%) and 0.89% belonging to the Northern region. These results were not surprising, since the Southeastern region is the most populous of the country with 84 million out of 212,6 people (data of ago 2024 GOV.BR - Instituto Brasileiro de Geografia e Estatística – IBGE, 2022), hosting the majority of VETs in the country (77,813 in 2022) (Wouk, 2023).

Despite the great number of VETs in Brazil, the number of specialists is still poor. The Brazilian Federal Council of Veterinary Medicine (CFMV) has issued a total of 140 specialist titles, 0.084% of Brazilians VETs are specialists, although, feline medicine is not one of them, i.e. there is no VET feline specialist in Brazil, despite our results shows that 80,35% of practitioners work exclusively with felines (Figure 1). Those who advertise themselves as specialists are, in fact, specialized or dedicated exclusively to this practice (Wouk, 2023). On the other hand, in the USA the total active board-certified VETs were 15,011 (12%) and 72 were feline specialists.

Most of the VETs (93.75%) knew but did not recommend AP nor were they able to identify which patients could benefit from it. In the group of non-recommenders (8.93%), few did not know the indications for acupuncture technique (2.67%) or had already indicated the technique, but the cats did not accept it well (0.89%). Nonetheless, when asked about which cat illness can be treated with AP, several diseases were mentioned. Since questions were accepting more than one answer, their sum of percentages is over 100% (Figure 4). Neuromusculoskeletal are by far the most common diseases for referral to AP besides urinary and gastrointestinal disorders and feline viruses. This data also appears in other surveys carried out in Brazil (Angeli, 2005, Cavalcanti, 2023; Pereira et al., 2023; Figueiredo et al, 2018, Ueda et al, 2010). On the other hand, in the USA oncological patients are the first complaint (Shmalberg et al, 2019). It is important to highlight that AP is characterized by the treatment of syndromes rather than specific diseases and uses individualized treatment protocols which clashes with the reductionist perspective of evidence-based medicine. Also, the absence of rigorous, evidence-based validation for AP has prompted concerns regarding its safety and efficacy [Lu Lu 2024].

Barriers to further incorporation of AP includes education of conventional VET practitioners about the utility, efficacy, and evidence base of AP (Smith et al, 2024).

The precise current number of active licensed acupuncturists in Brazil is not tabulated by the professional regulatory bodies what is unfavorable since reliable statistics are essential for measuring progress in reaching development goals and provide essential information on the effectiveness of policies and programs. Therefore, it is important to provide an evidence-based view of changes within the profession and the views of VETs on such changes. A previous study showed that acupuncturist VETs considered themselves less valued by colleagues of other specialties, which makes the technique little known and recognized. Another important fact is the lack of similar data in other veterinary specialties in Brazil that could be used for comparison (De Medeiros & Scognamillo-Szabó, 2024).

Few professionals (7.1%) consider using AP as an adjuvant for infectious diseases, even though AP has inflammation-regulatory and antiviral immunity effects and is able to restore and maintain immune homeostasis (Oh & Kim, 2022; Liu et al, 2024; Yang et al, 2024). For instance, the drug for the treatment of FIP, GS-441524 is not available in Brazil and even in the face of a lack of treatment choices for FIP, AP is not considered an option.

Interestingly, aggression disorder and emotional improvement were cited in open questions, which opposes the claim that AP can stress the animal out. The employment of AP in felines is an underexplored topic in technical literature, maybe because of the misunderstanding of the technique or even diseases that can be treated by AP.

## CONCLUSIONS

Our results, despite the small sample, point to the fact that AP is still unknown to the majority of VETs and it is therefore rarely indicated. This may be due to the small number of acupuncturists VETs in the country. Another important aspect is the fact that VETs fear that the feline patient may react negatively to the acupuncture needle insertion.

There is a lack of scientific data in Brazil that could elucidate and enrich statistics on AP, furthermore, most Brazilian veterinarians do not respond surveys because they ignore the importance of it. The employment of acupuncture in felines, especially in domestic cats is a topic that has been neglected by most VETs, maybe due to the lack of published articles or the misunderstanding of the technics or methodology, or even the diseases that can be treated.



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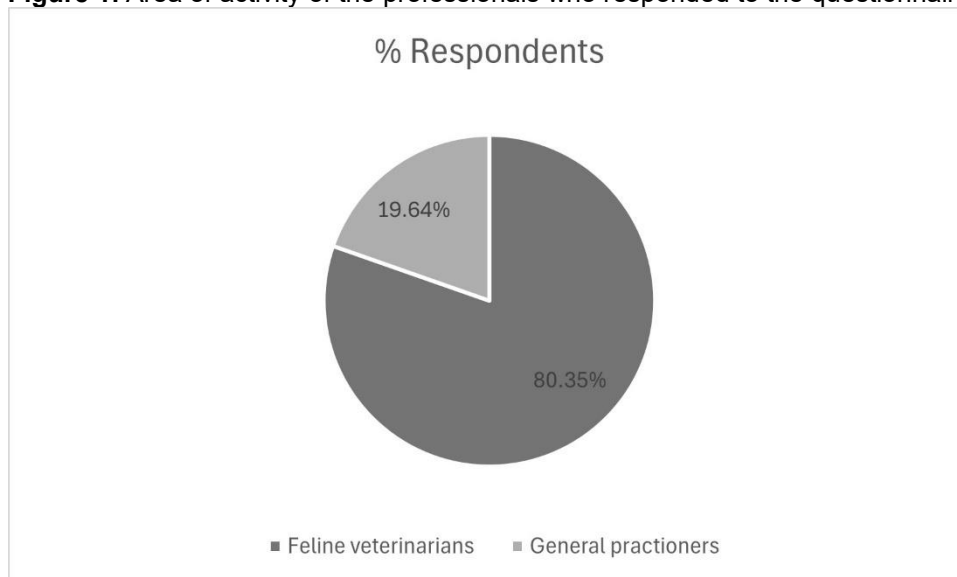
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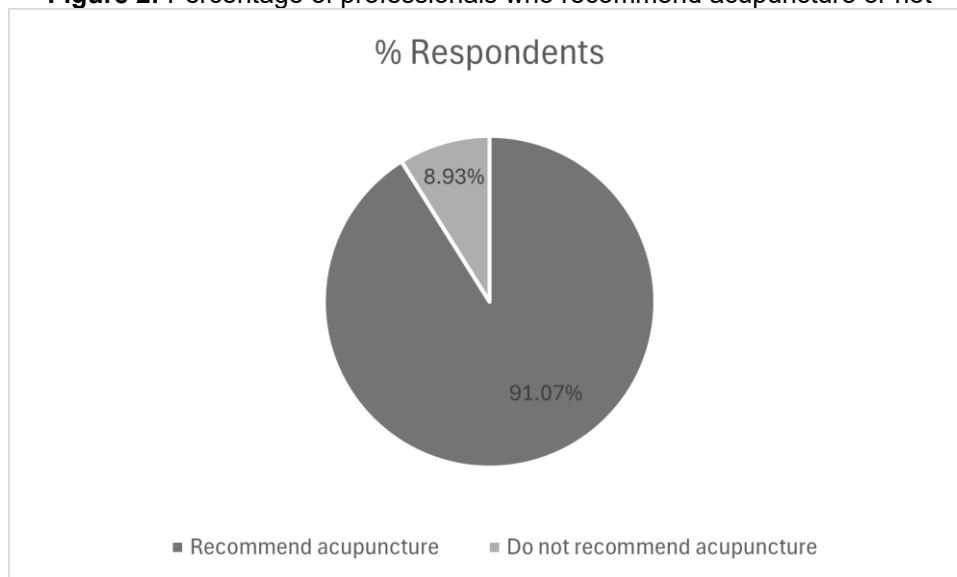
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## APPENDIX

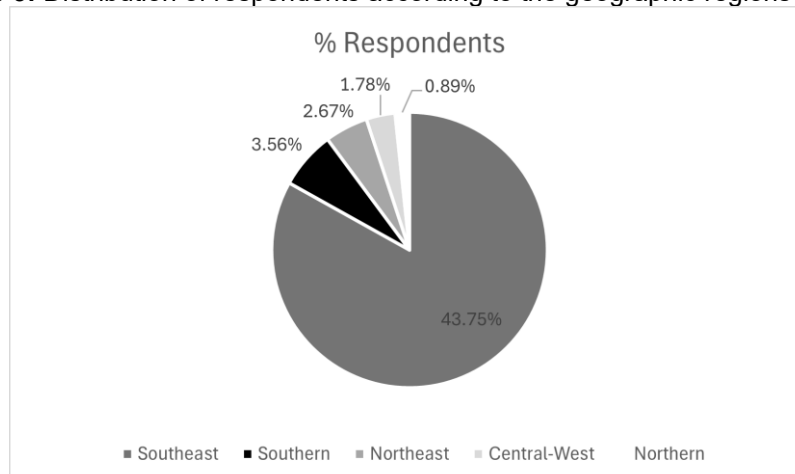
**Figure 1:** Area of activity of the professionals who responded to the questionnaire



**Figure 2:** Percentage of professionals who recommend acupuncture or not



**Figure 3:** Distribution of respondents according to the geographic regions of Brazil



**Figure 4: Diseases for which acupuncture is indicated**

