

VIEWPOINT

The Connection Between Access to Veterinary Care and Access to the Veterinary Profession

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ABSTRACT

Access to veterinary care and careers in veterinary medicine are the foundation of public health. Nevertheless, barriers to the veterinary profession persist. The objectives of this review are to (1) understand the similarities between access to veterinary care and careers in the veterinary profession, (2) identify the intersectional barriers that influence access to care and the profession, and (3) recognize strategies to address intersectional barriers to care and the profession. The literature review scopes relevant publications primarily published between 2003 and 2025. Barriers to accessing veterinary care and the profession are classified as socioeconomic, knowledge-based, and geography-based barriers. The results inform our strategies to address intersectional barriers to veterinary care and careers in the veterinary profession.

1 | Introduction

Veterinary teams uphold human-animal interactions globally, promoting the health and well-being of both. The human-animal bond is one of the most significant human-animal interactions, greatly benefiting the mental, physical, and social well-being of both humans and animals [1–6]. Over 60% of households across the United States (U.S.) have pets, and as many as 95% of these pets are considered part of the family [6–8]. As many as 57% of pet owners, however, report barriers to accessing preventative veterinary care for their pets [6]. Millions of animals throughout the country do not receive preventative, sick, or emergency veterinary care due to systemic barriers [9–12]. The inability to provide care for pets is distressing to both families and veterinary teams, significantly damaging the human-animal bond. Furthermore, the limited availability of veterinary care throughout the U.S. not only impacts the human-animal bond but also public health and food safety.

The systemic barriers that create veterinary care deserts also limit access to careers in the veterinary profession. The nested

One Health model categorizes barriers to veterinary care as environmental, human, and animal barriers [13]. Barriers to veterinary care can also be grouped as societal or systemic barriers, client-based barriers, and veterinary professional barriers [6]. Societal and systemic factors that contribute to these barriers include income inequality, access to transportation, and the spatial distribution of veterinary care providers. These barriers disproportionately impact individuals from historically marginalized communities, especially those from low socioeconomic and rural communities [6, 14–16]. Advancement in the veterinary profession is disproportionately impacted by demographic and sociological categories such as gender, race, ethnicity, geographic location, socioeconomic status (SES), and educational disparities [17].

In this review, we will categorize barriers to veterinary care into socioeconomic, geographic, and knowledge-based barriers. We will further categorize each into client-based and veterinary team-based barriers. Socioeconomic barriers include income, cost, and the perception of class. Geographic barriers include the availability of services and the ability to get to those services.

Knowledge barriers include knowing when and where to seek care. All of these types of barriers also include cultural competency and biases, as well as perceptions and expectations [18]. Overcoming barriers to care means providing equitable care that improves welfare and decreases suffering, while remaining compassionate, respectful, and considerate of animals and their associated humans. Veterinarians report being biased regarding their clients, while individuals from historically marginalized communities express feeling judged and unwelcome—both as clients and as team members. Overcoming biases is therefore crucial to increasing access to both veterinary care and careers in the veterinary profession.

Barriers to veterinary care endanger animal and human health, and exacerbate the challenges the profession currently faces, contributing to burnout and compassion fatigue, attrition of our teams, and retention and recruitment. Addressing barriers to care and barriers to the veterinary profession goes hand in hand, as the individuals most likely to practice in veterinary deserts are those who grew up in similar communities [16, 19]. Addressing these barriers involves changing our perceptions of standard of care, fostering an inclusive growth mindset, and supporting new initiatives. This literature review outlines the similarities between barriers to veterinary care and careers in the veterinary profession.

2 | Materials and Methods

The authors completed this qualitative literature review study on similarities and differences between barriers to veterinary care and careers in the veterinary profession via an electronic academic literature search. Academic databases used to identify relevant studies include PubMed, Google Scholar, and the Journal of the American Veterinary Medical Association. Relevant search terms such as “spectrum of care,” “standard of care,” “barriers to veterinary care,” “veterinarians,” and “telehealth” were used to identify relevant studies published in scientific journals, books, technical reports, and other scholarly resources. In addition, relevant reports, position statements, and definitions from the U.S. Bureau of Labor Statistics, American Association of Veterinary Medical Colleges (AAVMC), and the American Veterinary Medical Association (AVMA) were reviewed. Whenever possible, the authors cited literature from the last 22 years, meaning between the years 2003 and 2025. When reviewing literature reviews, the authors additionally reviewed any original academic studies cited. Once the relevant documents were collected, the most relevant studies were identified and organized according to specific themes related to socioeconomic and non-socioeconomic privilege in and outside of the veterinary profession. A critical analysis of the selected papers was conducted to extract key information and synthesize the findings in a systematic way. The authors take full responsibility for the content included in this publication.

3 | Socioeconomic Barriers

The social standing of a group, measured as a combination of income, financial security, generational wealth, education, occupation, social class, and support networks, is collectively

referred to as SES [20, 21]. SES impacts overall quality of life, and higher SES is associated with access to quality medical care, financial security, as well as resources and opportunities for education and career advancement [22–25]. Low SES is correlated with poverty, poor mental and physical health, lower academic attainment, and housing insecurity [20, 26–28]. Demographic and sociological groups that are disproportionately impacted historically include people with disabilities, racial and ethnic minorities, rural communities, households without a member that is fluent in English, and individuals who identify as lesbian, gay, bisexual, and/or transgender (LGBT) [27, 29, 30]. In addition to being more susceptible to poverty, those from these social groups are considered to be lower on the social ladder, despite their income level. This makes it difficult to separate the impact of social and economic barriers. The American AAVMC identifies these groups as historically underrepresented in veterinary medicine (URVM), stating that their advancement in the profession has been “disproportionately impacted due to legal, cultural, or social climate impediments” [17].

Individuals from these groups report both higher barriers to veterinary care, as well as to careers in the veterinary profession [6, 15–17, 31]. Disposable income and cost of services are the top barriers to preventative, urgent, and emergency veterinary care. The uneven distribution of wealth and resources impacts the diets to which pets are fed, ability to attend training classes, and a client's ability to afford treatment and diagnostics. The ability to confine the pet, availability of equipment such as carriers and leashes, and access to transportation to and from veterinary facilities are also impacted by SES; the latter also holds true for large animal owners, some of whom rely on ambulatory services to receive veterinary care. Those from younger and older age groups report less access to equipment [6]. Individuals in lower SES communities are more likely to work longer hours with fewer benefits, making it less likely that they will be able to take their pets to the veterinarian during regular working hours [32].

Individuals in lower SES communities may not be able to afford forgoing paying jobs in favor of volunteer experiences, which can be detrimental to their long-term experience in veterinary medicine. Black/African American and Asian veterinary school candidates report fewer paid experiential hours compared to their peers [16]. Individuals accepted to veterinary school are more likely to have attended high schools that offered advanced placement (AP) courses, and private colleges, and to be free of educational debt [15, 16]. Candidates from low SES and rural communities, those who identify as first-generation, and non-white candidates—all considered URVM groups—are less likely to be accepted into veterinary school. The cost of the main and supplemental applications, transcripts, travel, and interview attire limits the number of schools those from low SES communities can apply to. In addition, candidates from low SES communities are more likely to accrue high levels of student loan debt compared to the national average [16, 33]. Cost-saving strategies for those from low SES individuals, such as attending community college, negatively impacted acceptance to veterinary school [16]. The disparities continue throughout training, perpetuating long-term inequity. One example is the distribution of debt, with Black and Hispanic/Latin veterinarians graduating with as much as \$100,000 more debt from veterinary school compared to their white classmates [34–37].

4 | Geography-Based Barriers

Veterinary care deserts are geographic areas that lack accessible, affordable, and/or available veterinary care [38, 39]. This includes over 10% of U.S. counties that do not house any veterinary facilities, as well as over half of counties across the country that lack adequate numbers of veterinary professionals [11, 12, 40]. Low SES communities and rural communities are most likely to be veterinary care deserts, creating a complex connection between socioeconomic and geographic barriers to veterinary care. Persistent poverty areas (PPAs) are geographic areas of concentrated poverty that have higher numbers of individuals from demographic and sociological groups that are historically marginalized [25, 27, 29, 30]. PPAs have limited healthcare services and facilities, access to affordable and nutritious food, housing assistance, transit service, and public services such as civic services, transportation, and parks.

Individuals residing in veterinary care deserts travel longer distances to access in-person preventative, urgent, emergency, and specialty veterinary care. Pets in veterinary care deserts may lack a mode of transportation due to limitations such as a valid driver's license and/or access to a vehicle or public transportation [38]. Other limitations can include physical disabilities and access to items for pet restraint such as leashes, carriers, and haul-in trailers. Even in areas with public transportation, if the transportation is accessible, those with disabilities may not be able to access it, or pets may not be allowed to ride. This is especially discouraging since pet ownership is highest in low SES and more rural states [6, 7].

Individuals who reside in veterinary care deserts are less likely to be exposed to veterinary professionals, reporting pet ownership as their motivator for joining the profession [41, 42]. When applying to veterinary school, URVM candidates such as non-white, low SES, and first-generation college students have less animal experience hours compared to their peers [16]. In addition, URVM applicants report more difficulty obtaining research hours, large animal experience, and the ability to work directly with veterinarians. Residing in veterinary care deserts means facing similar transportation limitations as listed above and traveling longer distances to obtain experience, thereby limiting exposure to the breadth of career paths within the profession. Shelters and rescues do not always house a veterinarian, and local veterinary facilities may not permit volunteering due to staffing, bandwidth, or legal issues.

5 | Knowledge-Based Barriers

Academic progress and careers are closely tied to SES, and schools in low SES communities are underfunded [20, 43]. Schools in low SES communities have higher teacher turnover, less experienced teachers, and offer limited access to career offices, guidance counselors, honors and AP classes, and extracurricular activities. Schools in low SES communities often lack quality classrooms, library resources, and equipment [44]. With limited resources, students from low SES communities have limited chances of attending and graduating from college [33]. When given resources and presented with accurate information, students revise and alter their career choices [45].

Direct knowledge-based barriers to veterinary care include awareness of the health needs of the animal as well as knowing where to get veterinary care and the type of care needed. Clients may have limited knowledge regarding the husbandry of their pet, including proper nutrition, preventative care measures, and normal behavior. This makes it more likely for pets to develop preventable conditions. In addition, clients may not be aware of signs of urgent or emergency conditions and may be unaware of specialty and after-hours care. Indirect knowledge-based barriers include the correlation between education level, employment, and SES.

Access to the veterinary profession requires exposure first. Individuals in rural communities, those who are first-generation college students, and those who reside in low SES communities are less likely to be exposed to the veterinary profession at an early age. They are also less likely to see themselves represented in the veterinary profession.

6 | Barriers to Providing Veterinary Care

Veterinary teams also face socioeconomic, geography-based, and knowledge-based barriers to providing care. There are not enough veterinary professionals throughout the country to make care accessible to every animal. In addition, veterinary teams do not represent the demographics of the communities they serve, and perceptions regarding clients and the value of veterinary care can lead to biases that impact who receives veterinary care. Finally, innovative tools such as telehealth remain underutilized, their use limited by outdated and ambiguous regulations.

Socioeconomic barriers to providing veterinary care include the cost of tuition, debt, and operational costs. The cost of operations includes supplies, pharmaceuticals, marketing needs, and access to technologies that were not widely used in general practice 20 years ago, such as smart devices, cloud-based electronic medical records/pet data storage, and telediagnosis tools. Access to some of these technologies is crucial for veterinary facilities to maintain the status quo.

Tying remuneration to production can also exacerbate financial barriers for pet parents, especially taking into consideration that in 2025 the average veterinarian graduated with close to \$200,000 in debt. The funding programs available to encourage veterinary professionals to work within rural communities, food animal practice, nonprofit organizations, and/or government agencies have obscure requirements, as well as strict geographic and financial limitations. The benefits of these programs often do not outweigh the benefits of practicing medicine privately. A debt-to-income ratio (DIR) at or below 0.35–1 is an indicator of good financial health [46]. The DIR for new veterinary graduates is 1.4–1, and for veterinary technicians is 0.7–1 [34, 35, 47]. High DIR leads to turnover, limiting the number of patients teams can care for. Turnover in veterinary medicine may be as high as 40%, and cost as much as 75% of the position's salary [48–52]. While the position is vacant, team members may spend significant amounts of time completing the tasks associated with the position in addition to their own, as well as training new employees, both of which can continue the ongoing cycle of burnout.

Veterinary professionals may maximize their income by holding multiple jobs or by choosing the communities where they practice in based on the demographics of the community, exacerbating geographic barriers to care [53]. The majority of veterinary professionals practice small animal medicine, and due to the few numbers of veterinary teams in geographic deserts, the demand for services from the few existing teams may be very high [9, 10]. Due to the lack of veterinary teams in the area, these teams may be asked for urgent and emergency after-hours care. These teams also have fewer options for specialty care referrals and may be asked to care for exotics, food, and farm animals.

Knowledge-based barriers to providing veterinary care include perceptions of standards of care, devaluing of professional services, as well as a lack of cultural competency. Veterinary professionals are trained at academic and private institutions leveraging state-of-the-art medicine and are taught to mitigate the risk of disciplinary action by offering gold standard care. Many professionals enter the workforce believing that gold standard care is synonymous with standard of care, and by default the best option for case management [54]. More seasoned veterinary teams differentiate gold standard and standard of care, while less seasoned professionals may perceive this as devaluing professional services [55]. Offering every diagnostic and therapeutic modality rather than tailoring the therapeutic modality to the animal and client removes the freedom of the client to customize their next steps with their pet [56, 57].

7 | Discrimination and Access

Socioeconomic, geography-based, and knowledge-based barriers to veterinary care are rooted in systemic discrimination practices and exacerbated by biases and stereotypes that affect both our clients and teams. Whether conscious or unconscious, whether at the societal level or between two individuals, bias has a long-lasting impact on people, workplaces, societies, and professions. The veterinary profession suffers from such biases, which consciously and unconsciously manifest as discriminatory practices that affect access to both the profession as a career and care for animals across the country. Half of the pet-owning population experiencing urgent and/or emergent needs do not seek care [5]. Many pet owners delay seeking veterinary care due to fear of judgment and language barriers [6, 58]. When pet parents delay care, the problems worsen, and by the time they seek veterinary care, the issue may be life-threatening or prohibitively expensive to treat. Unfortunately, this situation frequently leads to pet surrender, premature pet mortality, or, in the worst cases, economic euthanasia [5].

Although the veterinary clientele is diverse, veterinary medicine in the U.S. is described as one of the least diverse professions. Women and people from historically marginalized communities are more likely to experience microaggressions and discrimination in society, and in veterinary medicine as clients and team members [31, 59–63]. Discrimination can severely increase depression and anxiety, burnout, compromise learning, and decrease confidence [60, 64, 65]. Veterinary teams struggle with assumptions regarding what clients can afford, and many believe that not everyone is entitled to own a pet [6, 18]. For instance, we may be presenting the same plan to every patient in

the same situation, but our tone, word choices, and body language can still show our biases, affecting how receptive the client is.

The majority of veterinarians do believe that all pets deserve veterinary care and that not receiving care poses a threat to public health [6]. The inability to provide veterinary care weighs heavily on the minds of veterinary teams and clients and has detrimental effects on the mental health and well-being of both. Families experience emotional distress and trauma when unable to care for their pets, and veterinary teams experience moral distress [6, 8]. Most veterinarians in private practice have implemented strategies to help mitigate barriers to veterinary care. These strategies must evolve beyond fear of devaluing veterinary services and risk of litigation to include access-expanding tools and practices.

8 | Looking Ahead

The barriers to accessing veterinary care and careers in the veterinary profession are complex and tightly intertwined. Addressing these barriers through the lens of animal health and well-being will directly improve the culture of the veterinary profession and expand the services we provide. Teams that are diverse and inclusive are known to be more efficient, agile, innovative, and profitable, expanding access to veterinary care [66–72]. Fostering inclusion requires disrupting biases, changing our mindset, and expanding how we think of and practice medicine.

Fostering a growth mindset helps us acknowledge, identify, and overcome biases. Mindset is a continuum that describes how individuals cope with challenges, mistakes, and others' success [73, 74]. Individuals with a growth mindset believe that qualities are things that you can be cultivated with effort, whereas those with a fixed mindset believe qualities are innate. Those who foster a growth mindset are better able to cope with unexpected challenges and failures [75]. Having a growth mindset means supporting progress and innovation in the veterinary profession to build an inclusive profession and advance veterinary care.

We think of the traditional way of practicing small animal medicine as a brick and mortar—a practice with a physical location in which the pet receives wellness and preventative care, specialized care, and/or urgent or emergency care. However, pet owners without transportation or items for pet restraint, who need veterinary care during inclement weather or rough terrain, and those with financial limitations and physical disabilities will have difficulty in accessing traditional and in-person veterinary care. Innovative ways to increase access to veterinary care and exposure to the veterinary profession include:

1. Mobile clinics that travel to the client's residence may include an associated cost, but can overcome the client or pet's mobility limitations, offer more one-on-one time with the veterinarian, and decrease the pet's fear and anxiety.
2. Community clinics such as pop-up vaccination clinics can bring preventative care to rural and low-income communities, providing limited services that would otherwise

not have access to veterinary care. While they offer limited time slots and access to diagnostics, they tend to be low-cost or even free to the community. Other mobile and pop-up models include high-volume, low-cost spay and neuter clinics.

3. “Virtual” or “remote” care for a wide array of wellness and illness care as well as emergency triage and teleadvice. Telehealth is an overarching term describing the relationship between a medical or health provider and a client and/or patient, utilizing telecommunication technologies while the two parties are located in different geographic areas. There are multiple categories of telehealth based on the goal, including but not limited to triage, teleadvice, teleconsulting, teliagnostics, and telemedicine. The ability of veterinarians to establish a virtual veterinary-client-patient relationship (VCPR) continues to expand across the U.S., expanding access to veterinary care with it [76].

Shifting away from medical monotheism by unpairing the gold standard and standard of care will allow us to contextualize care-based factors specific to the case, client, veterinarian, and patient [55, 56, 77]. Contextualized care is specific care provided in the context of what is best for the client and their human-animal bond. Contextualized care is situation-dependent, helping all parties involved to find the option that works best for their situation without judgment. It protects their dignity and individual wishes and truly achieves informed consent. The spectrum of care refers to an array of treatment options that recognizes the diverse needs, abilities, and beliefs of clients and their pets [55, 78–80]. Care is tailored to the patient along a continuum of acceptable options that may range from basic, affordable, and often non-invasive, low-tech care to advanced and usually more costly and invasive care. Care may also be intentionally incremental, with plans to reassess the patient and revise case management as needed. The spectrum of care is an essential component of practice readiness that requires that there be provision and adaptation of veterinary care that suits clients’ preferences, limitations, and relationship with their pet.

9 | Concluding Thoughts

Those from historically marginalized and low SES communities are disproportionately impacted by veterinary deserts, bias, rigid care structures, and the cultural and financial issues affecting the veterinary profession. Efforts to address the lack of diversity and inclusion in veterinary medicine will directly impact access to care, as individuals tend to practice medicine in communities similar to those in which they grew up [16, 19]. Individuals from low SES communities are most likely to address those barriers but also are less likely to be exposed to veterinary medicine as a profession from an early age and less likely to see and interact with veterinary professionals with whom they can identify. Knowledge that these discrepancies are present and understanding their root cause can help the veterinary profession as a whole.

Just as the barriers to care and the veterinary profession are multimodal, so too are the strategies for addressing them. Virtual platforms and remote care/monitoring improve geographic and

socioeconomic-based barriers, while offering a spectrum of care can improve both client usage of veterinary services and patient outcomes.

Finally, confronting our biases ensures positive, productive interactions with our clients and future veterinary professionals. Though these strategies are informed by a review of common barriers to veterinary care and careers, further investigation is necessary to understand and evaluate the impact on health outcomes.

Ethics Statement

This study is exempt from an institutional review board approval. This work relies on publicly available data from peer-reviewed studies, industry surveys, and organizational reports regarding socioeconomic factors in veterinary medicine. All references and sources are cited in full in the enclosed document.

Conflicts of Interest

The authors declare no conflicts of interest.

Data Availability Statement

The authors have nothing to report.

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