Integrating Science and Well-Being



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KEYWORDS

- Art and science of veterinary medicine Veterinarians as family members
- Veterinarians as animal advocates Ethics of specialization Moral stress Suicide

KEY POINTS

- Veterinary medicine is a combination of art and science.
- Through routine referral, the advocacy of the individual animal is being lost.
- Just because one can, does not mean one should.
- Moral stress is a consequence of veterinarians losing their position as advocates.

THE ART AND SCIENCE OF PRACTICING FELINE MEDICINE Introduction

Medicine, human or veterinary, is an admixture of art and science. As Aristotle pointed out, the science part is represented by universal laws that hold in all cases of a given phenomenon. Art, however, represents the understanding of an individual in its individuality.

Historically, human and veterinary medicine were as much art as science. By the second half of the 20th century, however, medicine experienced "scientization," as evidenced by the proliferation of medical specialties. In part for economic reasons, but also for perceived greater status, veterinary graduates ceased to aspire to be general practitioners (GPs), but instead turned to a specialty practice. There have undoubtedly been gains, but there have also been losses not just to the patient and caregiver but also to the profession.

The cost to the patient and client

What was lost was the understanding of animals and clients as individuals. Historically, the GP became part of the family, knowing and treating the animal for its entire life, and relating to the family unit with all of its specific needs and quirks. Like human GPs, veterinarians were friends of the family, often invited to family celebrations and important events. Their advice was sought on all animal matters, and in rural areas, their

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Vet Clin Small Anim 50 (2020) 899–904 https://doi.org/10.1016/j.cvsm.2020.03.009 0195-5616/20/© 2020 Elsevier Inc. All rights reserved. advice was sought in the absence of physicians. As one cowboy said to me, "If my vet can fix my livestock fractures, he can sure as hell fix mine! Bone is bone."

Perhaps most importantly, veterinarians were familiar with all aspects of the animal's life and behavior. Although important with any patient, this is especially important with cats because of their inherently more solitary nature. They often tolerate handling by strangers with less equanimity than dogs do in a clinic setting. Because many people find cats difficult to read, this can result in problems for cats and clinic staff. To do a proper examination on a cat, a long-term, empathic relationship between practitioner and animal is virtually a *sine qua non*. Knowledge of what constitutes "normal" behavior for that individual in the clinic or at home helps with assessing the severity of any underlying concerns.

Sometimes the opposite is true: what seems to be a behavior problem, may indicate ill health (See Stelow's article, "Behavior as an Illness Indicator," in this issue.) Prolonged experience with an animal under a variety of circumstances helps a veterinarian distinguish between the animal having a psychological/emotional problem and a physical one. As Tony Buffington and others have so elegantly shown, the idea that a sickness is based in one or the other is overly simplified, and in many cases the emotional and physical state are intimately related (See Tony Buffington and Bain's article, "Stress and Feline Health," in this issue.)

Sickness behaviors are nonspecific clinical and behavioral signs that may be a reflection of a change in motivation to one that promotes recovery by inhibiting metabolically expensive activities (eg, hunting) and favoring those that contribute to recovery. They include diarrhea; vomiting; anorexia; decreased food or water intake; fever; lethargy; depression; somnolence; enhanced pain-like behaviors; and decreased activity, grooming, and social interactions.^{2,3} Additionally, indoor cats experience a higher prevalence of medical conditions (eg, hyperthyroidism, idiopathic cystitis and other lower urinary tract disorders, diabetes [as a result of boredom and inactivity], and dental resorptive lesions) suggesting a stress component in some cats.⁴

To refer or not to refer

More than 45 years ago I wrote the following on the ethics of referral: "A clear medical example of hearing with one's expectations occurs when a medical professional says, 'cancer.' Patients almost immediately expect a death sentence, preceded by exquisite suffering. While there is no guarantee that the primary practitioner can affect communication, knowing the client certainly provides an advantage the specialist lacks."

Specialists are often prone to perceive with the theoretic biases and predilections of their specialty. For example, the specialty of oncology, especially in human, but possibly also in veterinary medicine, has taken as its goal extending length of life; the oncologist "wins" if the quantity of life is prolonged. Quality of life (QoL) has historically been ignored in human medicine leading many patients to request discontinuation of therapy and an end to their suffering. Patients fear uncontrolled pain and suffering more than death. In the practice of hospice, treatment modalities are initiated by nurses rather than doctors. As one nurse told me: "Physicians worry about cure, we worry about care."

QoL in the present moment is the only thing that matters to an animal, because all indications are the animals do not have the mentational apparatus to understand that current suffering, if treated, can mean extended life later. Insofar as QoL looms large in a client's mind, the GP can and should serve as an animal advocate mediating between specialist and client. Because the primary practitioner knows the client and the animal, and the likely consequences of the treatment modalities for the animal's well-being, he or she can serve as guardian of the animal's QoL, tempering the natural

zeal of many specialists to try everything, and the desire of some clients to keep the animal alive at all costs. Additionally, they serve as a voice for the client because of their familiarity with the client's circumstances.

The GP enjoys certain marked advantages over the specialist. By knowing the animal, he or she should be more adept at picking up subtle signs of pain and distress, or other behavioral signs specific to that animal (eg, an idiosyncratic reaction to certain drugs, fear of men but not women, defensive reactions when being touched over their head). The long-term GP also has the advantage of knowing how perceptive is a given client. They know the family unit, the animal's home circumstances, the lifestyle, the owner's personality and degree of medical sophistication, and tensions in the household that may be relevant to the animal's condition.

This is also true in human medicine. Although suffering virtually nightly asthmatic attacks, the level of stress exerted on my psyche was unparalleled. There is little that is as frightening as the perceived inability to breathe. This fear was easily mitigated by the use of tranquilizers. Yet my highly mechanistic and reductionist allergist simply dismissed my request for the alleviation of stress by affirming that tranquilizers were absolutely counterindicated in asthma, because of their effect of creating respiratory depression. Although technically true, this point was phenomenologically and experientially irrelevant, and adherence to this mechanistic dogma caused me many unnecessary days of suffering. It was only when I moved to Colorado and encountered an extremely common sense–based country doctor that I was able to calm down enough not to be gasping for breath.

The same adherence to common sense must be allowed to play out in veterinary medicine, in particular with regard to cats. In addition to possessing a heightened awareness of the patient's unique needs, the GP has a pretty good idea of how and to what extent complex treatment regimens will be adhered to, whereas a specialist new to the case has no idea. The primary practitioner knows, for example, not to expect an owner to give a treatment every 4 hours because the owner works 14hour days. He or she knows that the household contains six raucous small children, so that there is no hope of the animal resting undisturbed. He or she knows that the doting owner is not going to cut back the quantity of food for an obese cat if their relationship is based on "food is love." He or she knows which owners will never rake through the litter looking for blood in the feces. Perhaps, most important, he or she knows how to translate for the client in question; not only interpreting medical technicalities, but also ensuring that what the specialist says is not only understood, but also heard, not reinterpreted through wishful or pessimistic thinking. What one perceives does not depend on level of medical knowledge alone. We hear not only with our ears, but also with our beliefs, expectations, theories, hopes, biases, and so forth. "Perception is based in theory"5 and belief.

This sort of intimacy with the cat and the family is core to the practice of veterinary medicine and is virtually gone in a version of veterinary medicine that is dominated by specialty practices often with only brief interactions with the cat and client. Despite this era of fear of litigation, referral should not be a way of passing off difficult cases, or of avoiding responsibility.

The cost to the profession

In 1987, I published what I believe is the first paper on moral stress, defined in ethical terms as the unbridgeable tension between what one aspires to do in a profession, such as veterinary medicine, and what one is called on to actually do.^{6,7} In veterinary medicine, the reason for becoming a veterinarian is typically because of the desire to help animals and improve their health and QoL. Too often, veterinarians are asked to

euthanize an animal for owner convenience or for other morally unacceptable reasons, such as, "The animal has gotten too old to run with me, so I need to get rid of this one and adopt a younger one." This creates a great deal of moral stress in the practitioner that is not easily resolved. It may well be the case that the animal you are now being called on to euthanize was one you labored tirelessly to save after it had been struck by a car a few years earlier. Not only is intolerable stress created in the current situation, you are led to question your purpose and doubt the reasons you went into veterinary medicine in the first place.

Over the last three decades, it has become increasingly clear that moral stress is a grave and life-threatening occupational hazard. In Britain and in the United States, there are increasing rates of suicide of veterinarians, at least in part as a direct result of moral stress. There are many prominent stories in the press highlighting this tragic state of affairs. For example, according to the Washington Post, on January 1, 2019, the Centers for Disease Control and Prevention released the first account examining veterinarian mortality rates in America. The results were grim: between 1979 and 2015, male and female veterinarians committed suicide between 2 and 3.5 times more often than the national average, respectively.⁸

Moral stress is different than ordinary stress or burnout. Stress management techniques, such as mindfulness or yoga, are ineffective for moral stress. Even talking about the distress with friends or family may not be available to veterinarians asked to perform convenience euthanasia. Animals are archetypally innocent and cannot be seen as deserving what owners are asking for.

One can argue that the "scientization" or medicalization of veterinary practice contributes to psychological damage. Rather than treating an individual animal, one is treating the diseased body system or organ; a broken machine, the way a mechanic approaches a broken transmission. The desire to heal and care for the whole individual, rather than parts of a biologic machine, has gotten lost along the way and this contributes to moral stress. In an email to me, a veterinarian characterized the source of the problem: "Vets are so caught up in the medicine, tests, treatments, and mechanics of being a really good doctor that they have forgotten why they wanted to be vets in the first place. That was their empathic humanity, their awareness of their patient's experience. In addition, every client comes with a certain amount of emotional attachment/ empathy, time, and money and this budget has to be spent carefully so that no one part of it depletes the others preventing appropriate care for their cat. That contributes to moral stress and this is killing veterinarians... and the profession" (M. Scherk, Personal Correspondence, 2019).

Which brings us to the crux of this article. Losing the relationship with patients and clients can result in self-harm. Excessive referral is detrimental to the patient and client. Part of burnout may come from practicing in a proscribed manner with no room for the imagination. History taking is often given short shrift when it is extremely important in the quest for a diagnosis. A good diagnostician recognizes that there are many different ways to ask the same question. I recall a period when my wife was experiencing periodic fever of unknown origin. Our GP began to query her on whether she had inhaled anything capable of causing toxic effects. She was angry at him for discounting her intelligence. "Don't you think I would have mentioned something if that were the case?" she asked angrily. He nodded and continued asking diagnostic questions. Some 5 minutes later he asked her if she had smelled anything unusual around the house. She said yes, citing a fungicide I had been using on the wood outside the house. That was a wonderful example of where knowing a patient's thought patterns and asking the same question in different ways revealed highly relevant information.

Obviously, veterinarians cannot verbally question a patient; however, conveying empathy engenders trust and alleviates fear. Communication happens through touch, tone of voice, posture, and numerous subtle cues that are grasped unconsciously. This ability contributes to what a client means when they say "Dr. X is an excellent veterinarian." Empathic rapport with an animal is what leads many people to choose veterinary medicine as a career. There are few satisfactions as profound as establishing a connection across species and earning an animal's trust. It is most unfortunate that this is being lost, or at least, downplayed, as veterinary medicine becomes ever-increasingly mechanistic and devoid of a strong emotional component. As Teddy Roosevelt said: "People don't care how much you know until they know how much you care."

During the years that I have been involved with veterinary medicine, I have watched the veterinary profession increasingly emulate the human medical profession, in its embracing of scientism and in its failure to cherish and preserve "the art of medicine." Some of the impetus for this is pecuniary, with greater financial rewards attendant on specialization. However, what is lost is far more than what is gained. Physicians no longer make house calls except under extraordinary circumstances, and thereby lose the full rapport with patients that characterized medicine until recently. Veterinarians are rapidly losing the deep understanding they used to have of their patients. Health and disease are far more than laboratory diagnostics. To understand the subtle dimensions of health and disease requires more than numbers on a machine, test results, or other data. What is also required is an ability to identify with the individual animal's form of life and the pressures and stresses attendant on them. Not only would this help restore the role of healer, it would move the respective professions away from a mechanistic perception of their patients and back toward empathetic identification that was characteristic of traditional medicine.

If this shift is to take place, there must be a root change in veterinary education. In particular, excessive "scientization" needs to be reversed. We must guard against overzealous diagnostic and treatment plans to avoid losing sight of the well-being of the individual patient in question. "Just because one can, does not mean one should" applies in veterinary medicine and human medicine. 9-11 In addition to graduating with an adequate knowledge of the biochemistry, physiology, and pathology of disease, the veterinary graduate must understand the role of the animal in the relevant family unit.

Illness is not merely physical. In human and veterinary medicine, knowledge of the patient's psychological state is of extreme importance. Through empathic connection with patients and reduced fear of missing a diagnosis come rewarding relationships and, it is hoped, less moral stress.

DISCLOSURE

The author has nothing to disclose.

REFERENCES

- Dawson L, Niel L, Cheal J, et al. Humans can identify cats' affective states from subtle facial expressions. Anim Welf 2019;28:519–31.
- 2. Dantzer R. From inflammation to sickness and depression: when the immune system subjugates the brain. Nat Rev Neurosci 2008;9(1):46–56.
- 3. Hart BL, Hart LA. Sickness behavior in animals: implications for health and wellness. In: Choe JC, editor. Encyclopedia of animal behavior. 2nd edition. Cambridge (MA): Academic Press; 2019. p. 171–5.

- 4. Buffington CT. External and internal influences on disease risk in cats. J Am Vet Med Assoc 2002;220(7):994–1002.
- 5. Rollin B. The ethics of referral. Can Vet J 2006;47(7):717-8.
- 6. Rollin B. Euthanasia and moral stress. Loss, Grief, and Care 1987;1(1):115-26.
- 7. Reynolds SJ, Owens BP, Rubenstein AL. Moral stress: considering the nature and effects of managerial moral uncertainty. J Bus Ethics 2012;106:491.
- 8. Leffler D. Suicides among veterinarians become a growing problem. Washington Post 2019. Available at: https://www.washingtonpost.com/national/health-science/suicides-among-veterinarians-has-become-a-growing-problem/2019/01/18/0f58df7a-f35b-11e8-80d0-f7e1948d55f4_story.html?utm_term=14c453dcf285.
- 9. Scherk M, Rollin B. Palliative medicine, quality of life, and euthanasia decisions. In: Little SE, editor. The cat clinical medicine and management. St. Louis (MO): Elsevier; 2012. p. P1155–63.
- Ross S, Robert M, Harvey MA, et al. Ethical issues associated with the introduction of new surgical devices, or just because we can, doesn't mean we should. J Obstet Gynaecol 2008;30(6):508–13.
- Siegal EM. Just because you can, doesn't mean that you should: a call for the rational application of hospitalist comanagement. J Hosp Med 2008;3(5): 398–402.