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Ethics of Critical Care

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In critical care medicine, as in veterinary medicine in general, the most problematic moral/conceptual dimension one confronts is the issue of whether veterinarians owe primary moral obligation to the animal and its interests, or to the client. It is that question which underlies virtually all pressing moral issues one encounters in the field. Consider, for example, the problem of how long a clinician should keep a suffering animal alive, given our ever-increasing capacity to do so, and the client's lack of cognizance of, or lack of concern with, the degree to which the animal is suffering. Some clients want the animal kept alive at all costs for selfish reasons, and simply refuse to acknowledge the terrible price paid by the animal. In the same vein, critical care units (CCUs) serving research institutions may be asked to care for research animals owned by a zealous researcher interested primarily in milking every drop of data from that animal, again at considerable costs in pain and suffering to the animal. Another issue is the unowned animal brought to a CCU by a Good Samaritan who cares about the animal, but is not willing to assume financial responsibility. Additionally, there is the issue of a reasonable owner who wishes to have the animal treated not excessively, but enough to return the animal to relatively pain-free normalcy, but cannot afford the ever-burgeoning expenses of critical care. The issue of 'cure' versus 'care,' with the latter often taking a back seat to the former in veterinary as well as human medicine is also central. In this view, fixing the patient is given significant precedence over patient comfort. The measure of winning the battle against disease or injury is keeping the animal alive.

How one responds to these questions will almost certainly depend upon how one answers what I have called 'the fundamental question of veterinary ethics': to whom does a veterinarian owe primary obligation, owner or animal? If one adopts the Pediatrician Model, one serves the animal, with the client's interests shunted to the side if they are inimical to the animal's, as when the client would not spend money on a fixable animal, or, conversely, when a client spares no expense in keeping an animal in misery alive. On the other hand, if one adopts the Garage Mechanic Model, the veterinarian basically pursues the satisfaction of client interests or desires, with animal interests shunted to the side.

In order to understand the full significance of this pivotal question relative to the issues catalogued briefly early in our discussion, we must quickly address the nature of ethics. Three categories are relevant:

(1) Social Consensus Ethics: Despite the unfortunate tendency on the part of what I have elsewhere called Scientific Ideology or the Common Sense of Science (for it is to scientific day-to-day practice what ordinary common sense is to ordinary life) to perpetuate the view that ethics is simply a person's subjective opinions or predilections that view is patently false. Were ethics simply left to each person's subjective opinion, society would be chaotic, anarchy would prevail and life would be, as Thomas Hobbes put it 'nasty, miserable, brutish, and short.'

Thus, all viable societies must possess what I have called a Social Consensus Ethic, which informs and is reinforced by all social laws and regulations. All of our laws, from municipal rules for zoning strip clubs and pornographic book stores away from elementary schools, to laws against discrimination, insider trading, and murder, are based on consensus insights about right and wrong, which enjoy social objectivity in the same way as do the rules of grammar or traffic.

It is no surprise that scientific ideology has put the scientific and medical commentaries at loggerheads with society in general.¹ This ideology is historically based in Newton's professed disdain for what could not be verified empirically. In the early 20th century, it was invoked to rid science of some mystical notions that had gradually entered various fields of science. Physics talked of absolute space and time that allegedly were independent of how they were measured. Biology invoked 'life force' and 'entelechy' to explain to the essence of living matter. While successfully banishing these untestable concepts from science, it also threw out the baby with the bathwater. As ethical judgments could not be verified empirically – Wittgenstein once remarked that if one took inventory of all the facts in the universe, one would not find it a fact that killing is wrong – ethics too was banished from science and this banishment was trumpeted in the slogan that science was 'value-free' and 'ethics-free.' Typical science text books throughout the 20th century proclaimed this notion in prefatory chapters and no less a figure in American science than the director of NIH once remarked that although new technologies like genetic engineering were always controversial 'science should not be burdened by ethical considerations.'

This ideology ramified in scientific and medical practice, leading to, among other things, cavalier treatment of human subjects in research, which treatment in turn led society to demand legislative and regulatory assurance that the research community was taking its ethical obligations seriously. Another component of scientific ideology further complicated the issue – the failure of veterinary and human medicine to focus on control of felt pain as a major component of practice.² Virtually no literature on animal analgesia, for example, could be found in veterinary medicine until after the federal laboratory animal laws of 1985 mandated that animals felt pain and that it needed to be controlled. Until recently, the working definition of pain in human medicine made the possession of language a precondition for feeling pain, and medical practice with neonates and infants mirrored this highly questionable approach.³ Although 90% of cancer pain in humans is controllable with today's analgesia modalities, until as recently as the early 1990s, 80% of such pain was not controlled.⁴ Until the late 1980s, open heart surgery on prematurely born human neonates was performed using paralytics, not anesthetics.

(2) Personal Ethics: In addition to the Social Consensus Ethic explained above, society leaves certain decisions of ethical import to an individual's personal ethic; such choices as what one eats, to whom one gives charity, and what one reads are left to one's (hopefully consistent and coherent) individual choice.

As society changes, decisions once the purview of the social ethic become relinquished to individuals' Personal Ethics, and vice versa. Sexual behavior among consenting adults provides an example of the former sort of change, whereas to whom one rents or sells one's property is an example of the latter. During the past 50 years, society has come to realize that private, uncoerced sexual activity is not its business, while also realizing that leaving renting and selling or hiring to individual choice led to unfair discrimination against minorities and women. In general, the social ethic appropriates behavior from Personal Ethics when leaving such behavior to individuals generates widespread injustice or unfairness.

(3) Professional Ethics: Finally, it is necessary to define Professional Ethics, which historically has erroneously been equated with intra-professional etiquette in veterinary medicine and other professions. Professionals are people in society who perform highly significant tasks that require special skills and special privileges. Examples of such people are physicians and veterinarians, who are allowed to write prescriptions and perform surgery. Society by and large does not understand the details of such professions, and thus is loath to regulate them. Instead it essentially says to them: 'You regulate yourselves the way we would regulate you given the Social Consensus Ethic if we understood what you do, which we don't, but if you screw up we will know and will regulate you.' Examples of what happens when professionals fail to follow this dictum are manifest. About 20 years ago, veterinary medicine almost lost extra-label drug use privileges to Congressional action when society became aware that some practitioners were endangering human health by indiscriminate use of antibiotics in animal feeds for

growth promotion. Similarly, the biomedical research community was hammered with two pieces of federal legislation in 1985 when it became apparent that it was failing to provide proper care for laboratory animals.

In our ensuing discussion, we shall examine the five major ethical questions enumerated earlier relevant to critical care medicine in terms of how we can illuminate the Fundamental Question of Veterinary Ethics by examining Social Ethics, Personal Ethics, and Professional Ethics.

If we look to the Social Consensus Ethic historically for guidance on the question of the moral status of animals and thus on the Fundamental Question of Veterinary Ethics, we find a fairly unequivocal answer: animals are property in the eyes of the law. This in turn, seems to militate in favor of the Garage Mechanic View, pure and simple. Yet the situation is far more complex than that. In virtually all legal systems, going back to the Bible, the social ethic has constrained certain actions toward animals despite their property status. These actions traditionally are deliberate, willful, deviant, intentional, sadistic acts of cruelty towards animals or outrageous neglect.⁵ These stipulations existed as much to protect society from sadists and psychopaths as to protect the animals, for it has long been known that such individuals may begin with abusing animals but graduate inexorably to abusing humans.

During the past 30 years, it has become clear to society that the vast majority of animal suffering at human hands is not the result of what the anti-cruelty ethic constrains, but rather grows out of common, socially accepted practices with animals invisible to that ethic in areas such as agriculture, research on animals, toxicology, rodeo, hunting, trapping, circuses; indeed all 'normal' uses of animals. A moment's reflection reveals that the amount of suffering in animals produced by such normal use vastly outnumbers what results from overt cruelty. For reasons that I have detailed elsewhere, society began, for the first time in its history, to worry about the animal suffering that does not result from cruelty, wished to see it controlled, and needed other ethical notions beyond cruelty to articulate these concerns.⁶

But new ethics are not spun out of nothing. Ethical change comes out of recollection of implications of our prior ethical commitments. So it was inevitable that when society sought new ethical concepts to express its ethical concern for all varieties of pain and suffering occasioned by human use of animal, it would look to its ethical machinery for judging treatment of humans for a basis. And the relevant concepts to appropriate were obvious.

In essence, society is saying that if fair use of animals no longer occurs naturally and automatically as it did in husbandry, it needs to be artificially imposed by the legal and regulatory systems. It is for this reason that, in the last 20 years, the legal systems of all civilized countries have witnessed a vast proliferation of legislative proposals and laws designed to protect animals in all areas, with research and agriculture seeing the most dramatic laws (cf. the US laboratory animal laws of 1985 and the Swedish law of 1988 abolishing confinement agriculture). In addition, we are seeing the concept of cruelty being modified to cover established and accepted practices where we now know that equal alternatives that do not cause as much suffering exist – cf. the USDA being found guilty of cruelty for mandatory face branding of cattle during the dairy buyout of the 1980s.

This new state of affairs has major implications for social consensus morality regarding animal treatment. While it is still true that animals are legally property, there are ever-increasing moral constraints entering the law on how they can be treated, even for human benefit. And, indeed, there are a variety of philosophies and legal scholars working towards a promissory change in the status of animals away from property.

What is quite real is the serious concern that society – and these new bills and laws – show for animal pain and suffering. (In fact, people are so concerned with animal suffering that it affects their economic choices. Disavowal of animal testing catapulted a cosmetic company called the Body Shop into a multi-million dollar business, and zoos as prisons are a thing of the past.) Consider the laboratory animal laws that have proliferated in the US, Britain, and Europe during the past two decades, or the European food animal laws. Their concern is with assuring that animals do not suffer or experience significant pain, distress, or suffering. In some countries, if an animal is experiencing unalleviable pain, the experiment must be terminated immediately. In all countries, early end points for experiments are designated to prevent suffering, and pain and distress must be controlled by proper use of anesthesia, analgesia, and sedation.

In all of these emerging laws, little attention is paid to preserving animal life per se – the emphasis is on limiting pain and suffering. In fact, to my knowledge, nowhere do laws address the most senseless waste of animal life, the euthanasia of pet animals for convenience! The taking of animal lives for research, testing, or food is not addressed; the quality of that life is very seriously addressed.

The most momentous of these new laws in the US are the 1985 laws regulating the use of animals in research. At a conference on the legal mandate to control pain held in 1987, Hiram Kitchen pointed out that, being embodied in federal law, the mandate for control of pain in research animals sets the standard of practice, which veterinarians must live up to or be (theoretically at least) legally actionable. This is directly relevant to a number of the issues we raised in critical care medicine. The first problem we raised is keeping a suffering animal alive – How long should one do this for an owner? For a researcher? How much suffering is justified by a cure? Are owner demands sacrosanct?

The issue is clear from the dictates of the social ethic with regard to a research animal in critical care: if euthanasia is the only way to control suffering, the animal should be euthanized. Intractable and prolonged suffering is not permitted under these laws. If the purpose of the experiment is realized, the animal must be terminated immediately, and no Animal Care Committee would ever permit a protocol requiring prolonged, uncontrolled pain.

The same logic, in my view, applies *mutatis mutandis* to an animal owned by a private individual. If society will not accept prolonged suffering in an animal for biomedical reasons (i.e., reasons that benefit humanity in general), it will surely condemn the owner who keeps a suffering animal alive for egoistic (or egotistic) reasons because he or she cannot bear to let go. Similarly, it would clearly be wrong to the consensus ethic to keep an animal alive heroically, and at considerable suffering cost, if the animal will never be capable of a decent (not perfect!) quality of life, e.g., if the animal will be unable to move or dramatically be wracked by pain.

Part of the emerging consensus social ethic is a respect for – and increasing demand for legal protection of – animal natures, what I call, after Aristotle, *telos* – the ‘pigness’ of the pig, the ‘dogness’ of the dog.⁷ The fact is that the US laboratory animal laws mandate ‘exercise for dogs’ and ‘environments for primates that enhance their psychological well-being’; that the Swedish agricultural law of 1988 demands environments for animals that suit their psychological and biological needs and natures, and that US zoos now try to create functionally naturalistic environments for their charges, rather than aesthetically naturalistic environments that look good to us, all attest to the extent to which society worries about animal nature. In that light, a dog (or any other animal) suffering constant significant pain is no longer a dog – its normal life is subordinated to the pain, even as humans tell us that extreme pain leaves little else to focus on in life. And animals in pain may well suffer more than humans in pain; at least we are capable of hope and anticipation of pain’s end!⁸

Thus, I am arguing that whether the CCU client is a researcher or a pet owner, the emerging social ethic militates in the direction of the veterinarian acting as a pediatrician, not as a garage mechanic, at least as far as pain and suffering are concerned. In the case of a research animal, the clinician has explicit law on his or her side; in the case of a private owner, although the law is not explicit, it certainly sets the standard of practice on the side of stopping pain. Thus, a CCU clinician could say to a client, 'We've gone far enough; keeping the animal alive at any cost involves too much suffering,' and 'going any further would not be allowed in research' and, 'in addition, in my view violates my understanding of the Veterinary Oath,' and they would have the moral force of federal law and society behind them.

Technically, although, the animal is still property, and a client could be intransigent. In this case, there are three options for the clinician:

(1) Capitulate. You have done what you can.

(2) Persuade. Utilize your Aesculapian authority (which is considerable and which we shall shortly discuss) to move the client to a different place, for example by explaining the suffering, making the client watch, visit, etc.

(3) Extract a commitment allowing you to keep the animal comfortable. Even if you truly believe that the animal should be euthanized, it is almost as reasonable to gain client support for keeping the animal unaware. In the first place, you forestall suffering. Second, there is a fine line between keeping an animal comfortable with increased analgesia and moving towards euthanasia. The former can well entail the latter.

Obviously some combination of (2) and (3) is probably optimal. Resorting to (1) on a regular basis would probably generate what I have elsewhere called 'moral stress' – the tension between what one is doing and what one believes one ought to be doing – which ultimately erodes both personal health and job satisfaction.⁹

Thus, although the social ethic clearly determines the path a critical care veterinarian is obliged to take regarding a suffering research animal, it merely suggests, without compelling, the decision regarding a suffering companion animal. For even though federal law sets the standard of practice in theory, de facto there is no one to impose it upon a private owner. At best it provides a powerful argument for the critical care clinician who must, in the end, appeal to his or her personal ethic in adjudicating such a situation. If the veterinarian holds strongly to the Pediatrician Model, he or she will strongly object to prolonging life at all costs. I believe as mentioned earlier, that veterinarians, like physicians, enjoy a great deal of what Talcott Parsons called Aesculapian authority, the powerful, almost mystical authority that healers enjoy in all cultures. Deploying this authority by first of all convincing the client that you have the animal's best interest at heart, and second by demonstrating your considerable experience with situations like the one in question, both go a long way towards securing client trust.

A special case, midway between research and private ownership, is the case of a client animal being used in an experimental research protocol for therapeutic purposes. In some ways, the use of animals with naturally occurring disease for research obviously represents a moral advance over creating the disease in experimental animals. But this sort of activity, for example in oncology, creates its own moral problems. In particular, the clinician-researcher usually has a vested interest in keeping the animal alive as long as possible for the understandable purpose of garnering data. The animal owner may be subtly (or not so subtly) swayed by the Aesculapian authority of the research-clinician to keep the animal alive for longer than he or she would be inclined to do. (Such researchers often build close emotional bonds with clients after many months or even years of therapy.) Thus the client may decide to take the animal

home after a very dramatic invasive experimental therapy, say radical intestinal resection, amputation of the tongue, or removal of the mandible. The animal may have been stabilized in the research institution's CCU, but is by no means normal. While at home, the animal crashes, sometimes far away from the research institution, and the animal is brought to a local CCU. As the local veterinarians may not be familiar with the intricacies of the protocol, they are faced with a suffering, failing animal about whose situation they may know very little. With the client–researcher complex strongly leaning toward keeping the animal alive, the CCU veterinarian is faced with controlling pain and suffering in an area in which he or she lacks familiarity. Although endpoints for ordinary research animals are generally set by researchers in consultations with Institutional Animal Care and Use Committees, the euthanasia decision for client-owned research animals in the sort of situation we described is left to the client!

In my view, the CCU clinician should address his or her moral problem very directly and honestly. If he or she believes that saving the animal or even keeping it comfortable requires specialized knowledge or facilities lacking in the practice, or believes that the animal cannot in fact be made comfortable, he or she should say so directly. He or she should explain to the client that, while perhaps CCU clinicians at the research institution may have the specialized knowledge necessary to manage the suffering adequately, he or she is uncomfortable with the responsibility. In my view, by no means should this private clinician trade extra data for animal suffering, particularly if he or she embraces the Pediatrician Model. Once again, the spirit of current social ethics supports this decision.

While typically a critical care clinician does not enjoy the long-term relationship with a client that allows you to put your arm around the client and say, 'It's time to let go,' the lack of such a relationship can also be a boon. Some oncologists who treat animals over a long period of time warn that directing the client toward euthanasia may well lead them to later blame the veterinarian for 'killing my dog.' The very fact that the critical care clinician steps into the picture only in extremis, for a relatively brief and dramatic moment, militates against long-term resentment and increases the power of your advice. If the client later resents you, it will not have the same effect on you professionally or emotionally as it does on a primary care clinician or oncologist. To put it crudely, you are able to focus more on the animal.

Our analysis is buttressed by looking at Professional Ethics. It is manifest that society expects veterinarians to champion animal welfare and lead in welfare reform.¹⁰ This is clearly evidenced by the laboratory animal welfare laws in the US and Britain designating veterinarians as responsible for assuring research animal well-being. It is also something any veterinarian can confirm through ordinary experience. Although US organized veterinarian medicine has been slow to shoulder this burden, society expects veterinarians to perform the same role with regard to all animals, including agricultural animals, race horses, zoo animals, wild animals, and companion animals. And once again, except for endangered species, the area of concern is animal suffering rather than animal life. We all know from personal experience that society unequivocally condemns humans who will not euthanize a suffering animal (though we are split on suffering humans). It would therefore behoove organized veterinary medicine as a whole – and certainly the specialty of emergency/critical-care veterinarians – to adopt as a principle of Professional Ethics that they are committed to not prolonging the life of an animal when suffering is uncontrollable, or when the prognosis is permanent suffering, pain, distress, or disability. The details of such a Professional Ethical position should of course be worked out by the professionals involved. This leaves room for professional judgment and flexibility, but some such principle would be of great social value both in setting out the ground rules regarding uncontrolled suffering, and preempting eventual loss of professional autonomy to legislation.

On the basis of the analysis we have hitherto developed, we can generate a response to the problem of pain control, the third ethical question we raised in our introductory paragraph; what we may call 'care' versus 'cure.'

It is manifest that 20th century scientific medicine, human or animal, was captured by the ideology outlined above and, desirous of eschewing talk of unverifiable subjective states, has schematized the battle against disease, injury, or death as won or lost. If a disease is cured or life is prolonged, medicine wins; if not it loses. Little emphasis is placed on patient comfort – that is one reason the voluntary euthanasia issue in humans has become so pronounced. Physicians routinely argue against morphine and marijuana for terminally ill patients. As one nursing dean said to me, 'Physicians worry about cure, we worry about care.' Patients whose situations are perceived as hopeless end up cared for by nurses, and it is all too revealing that the hospice movement, aimed at keeping patients comfortable and as pain free as possible, is almost totally a creation of and staffed by nurses, not doctors.

Veterinary medicine too, has been guilty of ignoring patient comfort.¹¹ For much of the 20th century, anesthesia was confused with chemical restraint both in nomenclature and in practice. Surgical procedures such as spays, castrations, dehorning, wound repair, and others were performed with 'bruticaine' on small and large animals, or with paralytic, curariform drugs, or visceral procedures were performed with drugs like ketamine which provide virtually no visceral analgesia but do immobilize. Killing of animals was often done with these paralyzing drugs via asphyxiation – a far cry from the 'good death' entailed by the term 'euthanasia.' Early textbooks of veterinary anesthesia do not even mention pain control as a justification for anesthesia, and routine rationalization for not using anesthesia or analgesia were rife – 'The anesthetic bothers the animal more than the pain;' 'The analgesia will allow the animal to reinjure itself,' etc.

In today's society, enduring pain is not seen as a virtue or as building strength or character. And indeed, pain is a major biological stressor, which, if unalleviated, can retard healing and even promote morbidity and mortality. One can argue that one of the major causes of the movement in society toward scientifically unproven alternative medicine is that alternative practitioners openly address and sympathize with human and animal pain, suffering and distress.

Our earlier discussions of the question of keeping animals alive are directly relevant to the issue of controlling pain and suffering. As detailed in our earlier reasoning, social ethics values control of animal suffering more than it values animal life, as do owners not blinded by selfish concerns. Thus the moral imperative for CCU veterinarians to keep animals as pain free as possible seems to rule, and in some cases can be used to trump the selfish owner's willingness to keep the animal alive at all costs, because death can be a serendipitous sequela to controlling pain.

Obviously, not all pain can be controlled all the time. In some cases, like physical therapy, some pain must be accepted in order to return the animal to normalcy. There are no hard and fast rules for such situations; common sense and common decency should suffice. As a general moral principle, it is only reasonable not to control pain and suffering when controlling pain interferes with a clear and pressing health demand that leads directly to rapid return to normalcy (as in physical therapy).

When, however, one is tempted to withhold pain control one should bear in mind that, contrary to old Shibboleths, animals may actually suffer pain more intensely than humans. It used to be said that, lacking language and future concepts, animal pain is limited to the now, as opposed to human pain, which can be potentiated by fear and anxiety. (Thus part of the suffering of going to the dentist may be fear that he is Josef Mengele.) In response to that claim, I would argue that, lacking such concepts, animals have no hope of pain cessation, or anticipation of a future without pain, and thus they are their pain. In the same vein, Ralph Kitchell and others have pointed out that the experience of pain has two elements, a sensory-discriminative dimension and a motivational dimension.¹² As animals lack the intellectual power humans have to reason out the source of pain and how to stop it, the motivational aspect may be stronger and thus animals may well suffer more than we do.

Thus keeping the animals comfortable should be a top moral priority for the CCU clinician. The Social Consensus Ethic points in that direction, and the Professional Ethics of such clinicians should be developed to be in accord with that ethic. Control of animal pain, suffering and distress should be a primary and articulated ethical imperative across all of veterinary medicine and should be made an unequivocal top priority in the Veterinarian's Oath.

The issue of clients who cannot afford to pay for CCU fees is one that leads to pervasive problems across veterinary medicine. Unlike human medicine, there is no social guarantee in veterinary medicine that a patient will get the requisite care. There is little animal health insurance in society, and what there is favors upper middle class animal owners. Unlike the situation for children, society does not yet see fit to guarantee medical care for animals, especially the costly sort of care entailed by CCU modalities. So euthanasia for animals belonging to poor people often presents itself as the only option.

In some cases, veterinary schools may run a clinic for indigent clients, both as a public service and as a way of educating veterinary students, but this sort of operation is relatively rare, and is not found in all (or even most) veterinary schools. Given that society is increasingly reluctant to allow veterinary students to practice surgery and other skills on unwanted companion animals slated for euthanasia, such clinics may well proliferate. But given that there are only some 30 veterinary colleges in the US, even creating such clinics at every veterinary college would only deal with a very tiny percentage of such cases.

In large measure then, solutions to this problem will emerge from the Personal Ethics of veterinarians engaged in critical care. If a veterinarian strongly adheres to the Pediatrician Model, or strongly values the strength of the human-animal bond in at least some cases, for example where the animal in question is all that gives meaning to the life of an elderly, lonely person, he or she may choose to do the requisite work at cost. But in many such instances, the owner in question can still not afford to pay. The veterinarian is then left with a dilemma – either euthanize the animal, or do the work gratis. While idealistic students are often inclined to working for free, they soon realize that they simply cannot afford to do this very often, particularly in critical care cases that are extremely consumptive of time and resources.

One solution which was quite prevalent in veterinary medicine in general during hard times earlier this century was barter. Oftentimes cash-poor clients may have a good deal to trade for veterinary services. I have heard of veterinarians trading their services for farm products such as eggs, milk, vegetables, or meat. I have also heard of barter for client labor, skilled or unskilled. Clients can trade house painting, fence building, lawn maintenance, snow removal, mechanical work, trash hauling, or general clean-up for care given to their animals. Alternatively, some veterinarians allow clients to pay a small amount each month, in effect extending long-term, low interest credit to poor people.

In the end, however, there is only a limited amount that a critical care veterinarian can do, as he or she will always encounter more hardship cases than can be managed by the approaches mentioned. State-of-the-art critical care is expensive, and is likely to become even more expensive as new cutting-edge technology is incorporated.

A final related issue concerns the unowned animal requiring critical care, say a trauma victim brought in by a Good Samaritan or public servant such as a policeman, fireman, or animal control officer. The owner is unknown, and the animal rescuer is unwilling to assume financial responsibility. Obviously, as we saw earlier, even the most morally concerned veterinarian cannot do many such treatments without pay. What does one do?

Many of the considerations relevant to the indigent owner clearly apply here. But there are some new aspects worthy of note. Once again, the key to resolving the problem lies in the veterinarian's personal

ethic. If one holds a Garage Mechanic view, the choice is simple – euthanize the animal. But if one leans towards Pediatrician, the old difficulties arise.

One of my veterinarian colleagues has found a very solomonic solution to such cases. Unlike most veterinarians, he welcomes these situations. He first of all sees them as ‘continuing education from God’; helpful in sharpening his clinical skills. Secondly, he has a unique agreement with the local newspaper. When such an animal is brought in, he photographically documents the animal’s condition. He then proceeds to treat the animal to the full extent of his ability. When the animal returns to normalcy, he takes a new set of photographs. He then presents both sets of photos to the newspaper. The paper devotes a page to the ‘before’ and ‘after’ and offers the public the chance to adopt the animal if the owner does not claim the animal. In some cases, grateful new owners will pay my colleague. Even if this does not happen, my veterinarian friend argues that he has acquired, relatively cheaply, priceless publicity and advertising that he could not have bought for any amount of money!

Another option is for the local humane society to develop a fund covering unowned injured animals. Such funding drives are often quite successful, and in some areas come close to covering all the requisite expenses. Finally, some fortunate veterinarians have their own funding from rich clients precisely earmarked to cover such situations. In my view, it is not only not unethical, but rather laudable for a veterinarian to solicit such funding and thereby perform a public service that furthers the social plausibility of the Pediatrician Model.

In sum, then, as long as society is in flux regarding the social ethic for animals, the ethical issues in critical care medicine will be solved by reference to reasonable implications from extant social ethics, collective Professional Ethical decisions, and the veterinarian’s personal ethic. In the latter case, I would suggest that what we have called the Pediatrician Model can well serve as a practical moral beacon.

References

1. Rollin BE. *The Unheeded Cry: Animal Consciousness, Animal Pain and Science* (Expanded Version). Ames, IA: Iowa State University Press; 1998.
2. Rollin BE. Pain and ideology in human and veterinary medicine. *Semin Vet Med Surg (Small Anim)* 1997; 12(2):55–60.
3. Rollin BE. Some conceptual and ethical concerns about current views of pain. *Pain Forum* 1999; 8(2):78–83.
4. Ferrell BR, Rhiner M. High-tech comfort: ethical issues in cancer pain management for the 1990’s. *J Clin Ethics* 1991; 2:108–115.
5. Rollin BE. *Animal Rights and Human Morality* (2nd edn.). Buffalo, NY: Prometheus Books; 1992.
6. Rollin BE. *Farm Animal Welfare*. Ames, IA: Iowa State University Press; 1995.
7. Rollin BE. *Animal Rights and Human Morality*. Buffalo, NY: Prometheus Books; 1983.
8. Rollin BE. The ethics of pain control in companion animals, In: Hellebrekers LS. ed. *Animal Pain*. Utrecht: Van Der Wees; 2000, (Chapter 2).
9. Rollin BE. Euthanasia and moral stress, In: DeBellis R. ed. *Loss, Grief and Care*. Binghamton, NY: Haworth Press; 1986, pp. 115–126.
10. Rollin BE. *Veterinary Ethics: Theory and Cases*. Ames, IA: Iowa State University Press; 2000.
11. McMillen F. Comfort as the primary goal in veterinary medicine. *J Am Vet Med Assoc* 1998; 212:1370–1374.
12. Kitchell R, Guinan M. The nature of pain in animals, In: Rollin B, Kesel M.. eds. *The Experimental Animal in Biomedical Research*, Vol. I. Boca Raton, FL: CRC Press. (Chapter 12).