



Veterinary Surgery and Ethics

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Webster's International Dictionary defines **ethics** as a group of moral principles or a set of values. It's the discipline of dealing with what is right and wrong or associated with moral duty and obligation. It's also the principles of conduct governing an individual or a profession. To further understand the meaning of ethics in veterinary medicine, we must consider animal ethics versus veterinary ethics. **Animal ethics** is the moral obligations that people have for animals, while **Veterinary ethics** relate to Veterinarians and others directly involved in the provision of veterinary care. Dr. Albert Schweitzer, a noted theologian, philosopher, musician, physician and Nobel Peace Prize recipient, wrote the following: "**Ethics is the name that we give to our concern for good behavior.** The public recognizes the need for animal experiments but would like other approaches to be utilized. The scientific community expresses privately the same concerns but do not wish to speak of them publicly. Fact is that animal experimentation will continue to play a key role in essential research towards tackling major biomedical and veterinary problems.

The alternatives to animal experimentation have been widely accepted as humane educational aids and teaching approaches that can replace harmful animal use or complement existing humane education. These include computer software, student self experimentation, models, manikins and simulators, ethically source animal cadavers and clinical work with animal patients. Advances in technology and the ethical and financial advantages of alternatives have led to curricular changes and establishment of alternatives as norm in many institutes in developed parts of the world. In our country, we are yet to make determined beginning. Whatsoever little has been done is due to the faculty's interest in a few institutes. There is need to develop non-animal alternatives, which need to be validated before recommending them for larger use. Government and other non-government organizations working for the welfare of animals should provide financial support for such endeavors. The purpose of the topic chosen for this congress of *Iranian Veterinary Surgery Association* is, therefore, to debate these issues and to

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sensitize the scientists and academicians about the alternatives to animal experiments in teaching and research in veterinary sciences in general and veterinary surgery in particular. Humane science, the minimization and if possible the elimination of pain and distress in animal experiments,

John B. McCarthy(2007) cites from J. Tannenbaum defines veterinary ethics as having four branches and describes them as follows:

1. Descriptive: values or standards of the profession outlining what is acceptable behavior determined by peers. The Veterinarian's Oath is an example.
2. Official: values formally adopted by organizations composed of members of that profession. The AVMA Principles of Veterinary Medical Ethics is an example.
3. Administrative: rules set by governmental bodies that regulate veterinary medicine. Licensure requirements or Drug Enforcement Agency registration protocols define this category.
4. Normative: the individual's attempt to discover what he or she believes to be the correct moral standard and norms for professional behavior and attitude. A practitioner's stance on convenience euthanasia is an example.

The use of animals in research, teaching and testing is an important ethical and political issue. From the dawn of time, when the first human killed an animal for food, or drove it from a berry patch so that he could eat instead, there has been competition with animals for basic resources. Likewise, over the ages, humans have contemplated their relationship with animals. Ancestral societies worshipped the animals they used, recognizing that the lives they took fueled their own lives. An important ethical principle of animal use in biomedical research is that alternatives to live animals should be used whenever possible. There is a legal requirement for documentation of a search for alternatives and an explanation for why these alternatives were not found to be suitable or how alternatives were incorporated into the experimental design.

The word alternative literally means offering or expressing a choice. For that reason, Bill Russell and Rex Burch in their classic book *The Principles of Humane Experimental Techniques* gave the term **3 Rs**, which is more commonly used nowadays. 3 Rs stand for **reduction, replacement** and **refinement**, thereby avoiding the misleading term alternatives.

Replacement means replacing 'higher' animals with 'lower' animals. Microorganisms, plants,

eggs, reptiles, amphibians, and invertebrates may be used in some studies to replace warm-blooded animals. Alternately, live animals may be replaced with non-animal models, such as dummies for an introduction to dissection for teaching the structure of the animal or the human body, mechanical or computer models

Reduction means minimizing the number of animals needed to perform an experiment or teach a concept determine if thoughtful experimental design was employed to minimize overall animal use.

- 1- Performing pilot studies to determine some of the potential problems in an experiment before numerous animals are used.
- 2- Designing a study to utilize animals as their own controls.
- 3- Gathering a maximum amount of information from each animal, perhaps gathering data for more than one experiment concurrently.

4- Consulting with a statistician to use only the numbers of animals required to achieve significance.

5- Minimizing variables such as disease, stress, diet, genetics, etc., that may affect experimental results.

6- Performing appropriate literature searches to ensure that experiments are not duplicated.

7- Using the appropriate species of animal so that useful data is collected .

Refinement means refining experimental protocols to minimize pain or distress whenever possible. Examples of refinement include:

1- Identifying pain and distress and making plans for preventing or relieving it.

2- Receiving adequate training prior to performing a procedure.

3- Using proper handling techniques for animals.

4- Using appropriate analgesics and anesthetics for potentially painful procedures.

5- Performing surgeries and procedures aseptically to prevent infection.

6- Performing only a single major survival surgery on any one animal, whenever possible.

7- Performing appropriate post-surgical care, including thermoregulation and fluid balance.

Veterinarians are professionals who must make decisions that influence the fate of animals and affect the lives of the people who own or look after them. They also have to address issues of public interest, such as public health. The central role they play in decision-making implies considerable collective and individual responsibility. However, not every decision requires a unique ethical or moral consideration or judgment, although, no matter in what field a veterinarian works, be it clinical practice, research, education, or public health, he or she will always be faced with dilemmas that have no obvious solution.

In these situations they have to make a decision, but in the knowledge that afterwards it may be questioned or have an outcome that was never intended

The animals' interests

The immediate interest of an animal is to live in an environment that it can adapt to in the absence of lasting pain or impairment of health.

The role of the veterinary profession

The veterinary profession is essential for the proper care of animals kept in captivity and, to a lesser extent, for the health and welfare of wild fauna.

Policy and legislation on animals

Fortunately, it is now generally accepted that the well being of animals in captivity must be given reasonable consideration; this is certainly the case in most industrialized countries. The last two decades have seen the implementation of a substantial body of new, or renewed, legislation to address issues such as the welfare and use of farm and laboratory animals, the methods used for slaughtering animals and the performance of routine surgical interventions. Zoos, and similar institutions, have also made a concerted effort to improve their husbandry practices and to broaden their aims.

The veterinarian as the animals' advocate

The veterinary profession is a follower rather than an initiator in the development of policies that aim to safeguard and improve the welfare and moral status of animals.

Codes of ethics for veterinarians focus mainly on professional conduct in relation to colleagues and clients, such as advertising and the adoption of one another's clients.

Curative veterinary medicine

This first example of a typical dilemma faced by a veterinarian in practice is relevant to small animal practice, but could be equally well applied to other situations.

Concluding remarks

By now, it should be clear that the average practicing veterinarian meets ethical dilemmas on a day-to-day basis. The term 'dilemma' implies that generally accepted moral standards, or formal rules and regulations, do not provide clear guidance towards a morally just solution. There is an ever-increasing awareness of animal welfare amongst the general public and an increasing notion that animals represent a moral subject 'in their own right', quite independent from their usefulness to man.

Finally, the development of decision-making schemes clearly enhances the quality of communication because there is a protocol to follow, which may be described to anyone who questions the conclusion. The overall result is greater justification of any moral decisions made.

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