One Health: Many Patients? A Short Theory on What Makes an Animal a Patient

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Abstract

The holistic understanding of health is a crucial idea of *One Health* and *Comparative Medicine*. Both concepts aim at bridging human and veterinary medicine and the transfer of medical knowledge. The aim of this paper is to analyze the possibility to transfer knowledge from human biomedical ethics to veterinary ethics. Based on the concept of *patient* in human medicine and its normative implications, the concept of *animal patients* in veterinary medicine will be analyzed. As we will argue, the crucial similarity is to aim at health-related interests in both fields. Focusing on such interests seems to be the unquestionable goal in human medical contexts. However, since these interests are not always the end of veterinary action, criteria will be explicated that allow to judge whether an animal can rightly be referred to as patient. In a last section moral implications and the limits of transferring the concept of patient to animals will be investigated. Therefore, the famous four principles of biomedical ethics by Beauchamp and Childress will be used. The transfer of the *non-maleficence* and

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the *beneficence* principle is widely uncontroversial, whereas the principles of *justice* and *autonomy* open a number of moral questions regarding the concept of *animal patients* that will be addressed.

15.1 Introduction: One Health, Comparative Medicine, and the Question of Animal Patients

In the recent past, the concept of "One Health" (OH) has gained prominence (cf. Sandøe et al. 2014, 610; cf. Stärk et al. 2015, 127). Defined as "any added value in terms of health of humans and animals, financial savings or environmental services achievable by the cooperation of human and veterinary medicine when compared to the two medicines working separately" (Zinsstag et al. 2015, 18), the term OH refers to the idea of bridging various fields of health care and gaining added value by linking human and veterinary medicine (Bresalier et al. 2015; Zinsstag et al. 2015). The main premises of OH are that knowledge can be meaningfully transferred from animals to humans and vice versa and that this has significant consequences for human and animal health (cf. Bresalier et al. 2015; Nieuwland et al. 2015, 132f). To give an example, animal research is one of the most prominent fields demonstrating the possibility of transferring knowledge from one field to the other (within limits). The majority of experiments are justified with reference to the idea that knowledge gained with animal *models* can be meaningfully transferred to humans and can benefit them. However, the knowledge gained and its use to establish clinical treatments in human medicine allow also for the transfer back into clinical veterinary medicine, if the demand for advanced medical treatment of animals is generated (Gardiner 2006a, b; Sandøe et al. 2016, 26f). In the view of Nieuwland et al. (2015, 132), such instances reflect a holistic understanding of health. This holistic concept leads to an approximation in methods, concepts, paradigms, and treatments of humans as well as animals and promises to benefit both. However, according to Sandøe et al. (2014), the initial aim of developing the OH concept was to fight against zoonosis, meaning infectious diseases of animals that can be transmitted to humans, and was therefore focused on human health. Similar to OH the use of the term "Comparative Medicine" (CM) is rather new in the debate, although its subject is probably as old as medicine itself (cf. Jensen-Jarolim 2014, 3; Bresalier et al. 2015). CM shares the idea with OH that human medicine can benefit from veterinary medicine and vice versa. Hence, both fields make use of the approximation of methods, concepts, and paradigms for the treatment of humans and animals.

In this article we will follow this idea. In particular, we will draw from debates and knowledge established in the field of human medical ethics and transfer it to veterinary medical ethics. The central question is: Can a holistic concept of "patient" that comprises both human and animal patients be developed and defended? In recent times, "patient" has increasingly become a central term in veterinary medicine (Jones 2003; Gardiner 2009). Hence, the question arises whether "patient" in

"human patient" and "animal patient" reflects similar or different ideas. Approaching this subject is the main aim of this article. We are going to argue that the concept of "patient" illustrates what it means to deal with both humans and animals in ways that are directed toward their health and well-being in clinical contexts. As it will turn out, this idea can be paralleled with the principle of respecting the moral status of humans and animals in medical practice.

Since we will argue that the idea of animal patients can only plausibly be defended if the moral status of animals is acknowledged, we start with some thoughts about the moral consideration of animals in general. Building upon these clarifications, we are going to identify criteria for what makes an animal a patient with moral status and then specify the corresponding obligations for veterinarians. We will draw from the concept of human patients in order to transfer criteria from the human field to animals. In this section we are going to follow the idea of a holistic concept of health that can provide a reasonable background to approximate the concept of "human patient" and "animal patient." In the subsequent part of the article, we will elaborate on the practical consequences of acknowledging animals as patients. In this regard, we will apply the principles of biomedical ethics by Beauchamp and Childress in order to sketch normative implications of treating animals as patients.

15.2 Extending the Moral Community

The arguments to extend moral concern and apply moral principles to animals have a long, complex, and not very uniform tradition. From ancient philosophers like the Pythagoreans to thinkers like Michelle de Montaigne, Arthur Schopenhauer, and Jeremy Bentham in modernity to present animal ethicists, a great variety of arguments have been put forward for acknowledging the moral significance of animals (cf. Grimm et al. 2016b). Nowadays, the dominant approach to this question is *moral individualism* (cf. Grimm et al. 2016a, c; Rachels 1990). Thinkers who follow this idea justify the moral status of animals on the basis of individual capacities, such as the ability to experience positive and negative states (i.e., being sentient). McReynolds (2004), for instance, presents a well-reasoned argument that similarities between humans and animals guide and support the idea of extending the moral community in animal ethics. The argument proceeds from a core group of individuals of moral significance (humans) and is then extended to others (at least some animals) with similar morally relevant capacities: "[…] structural feature: whenever moral standing is *extended* to a new group, it is granted to the new group *to the extent of and on the basis of their similarity to* members of the old group" (McReynolds 2004, 64). Such extensions have an obvious impact on veterinary medicine, since also medical treatments in humans and animals are parallel if animals are to be considered morally relevant. Although the dominating theory of moral individualism can be put in doubt (cf. Grimm et al.2016b, d), we will address and analyze the outlined question of the status of animals as patients in this

philosophical framework. We are certain that other academic approaches that have a different understanding of ethics can also lead to success in the formulation of a theory of animal patients. However, in this context, we think that a moral individualistic approach can highlight important aspects and open the doors for further debates by linking questions regarding the concept of "animal patient" to well-established theories and traditions in medical ethics.

To illustrate what moral individualism is all about, we refer to Peter Singer. He formulated a prominent and influential individualistic theory in animal ethics. Singer takes sentience as the individuals' characteristic that gives us sufficient reason to integrate animals into the moral community (Singer 2011, 50). If a being is sentient and has a sufficiently high degree of (self-) consciousness, it will have *an interest* in experiencing pleasure and avoiding pain and suffering, his argument goes. As long as we have reason to think that these interests are similar and comparable with human interests that we consider morally relevant, these comparable interests of nonhuman beings have to be taken into account in our moral life. In other words, we have reason to extend the moral community and consequently treat these animals with moral respect. They are receiving ends of our moral duties, which prohibit, for example, harm without justifying reasons. Taking the well-being (e.g., satisfaction of interests) of beings into account for their own sake is a clear sign of moral status or, in other words, of being a member of the moral community (DeGrazia 2002; Gruen 2014; Grimm et al. 2016b).

The acknowledgment of animals as members of the moral community is not only obvious in the academic field, but it is also increasingly part of our commonsense morality (cf. Rollin 2006, 7–41). In the following section, we are going to argue that the concept of the "animal patient" is directly linked to the idea of moral status in the context of veterinary medicine. If an animal's health is cared for in medical contexts *for the animal's sake*, its moral status is respected. In contrast, if an animal's health is cared for merely because of ends other than the animal's good, such as the owner's interests, gaining knowledge in experiments, or public health like in the case of zoonosis, the animal should not be referred to as a patient. As we will demonstrate, only when the animal's health-related interests are the end of a treatment carried out by a veterinarian can we rightly speak of the animal as a patient.

Let us now focus on this idea by utilizing arguments from a debate on what have been coined "marginal cases" in ethics. As the term indicates, "marginal cases" refers to beings that are at the margin of the moral community and not undoubtedly members. In order to clarify whether they are members from a moral individualistic point of view, the following question needs to be answered: are their capacities sufficient to include them in the moral community? In human medical ethics, children, severely impaired humans, fetuses, and others are considered "marginal cases." Some 20 years ago, a debate was started on which human marginal cases could be considered patients in the full sense in clinical practice. We will use some insights from this debate in human medicine for our question of animal patients.

15.3 What Makes a Being a Patient?

For centuries, the starting point for what morally ought to be in clinical practice has been the obligation to protect and promote the interests of the patient (Chervenak et al. 1996, 115). This general obligation plays a major role in the context of medicine, understood as a particular practice that is centered on the patient. As a starting point, we follow Chervenak et al. (1996) and use the term "medicine" in the following way: "On the basis of scientific knowledge, shared clinical experience, and a careful, unbiased evaluation of the patient, the physician identifies clinical strategies that will likely protect and promote the health-related interests of the patient and those that will not. The health-related interests of the patient include preventing premature death and preventing, curing, or at least managing disease, injury, handicap or unnecessary pain and suffering" (ibid., 115). In this context, the *principles of beneficence and of non-maleficence* direct the clinical perspective to the interests of the patient, and it obligates the physician to seek the greater balance of goods over harms for the patient (ibid., 116). Therefore, the clinical perspective on the patient's goods and harms has to be complemented with the *perspective of the patient herself*, represented, e.g., in the concept of informed consent or role taking if the patient cannot consent herself. If the health-related interests are not the end of medical treatment, it is not very plausible to talk about a patient. Against this background, Chervenak et al. give an answer to the question whether human fetuses are patients (cf. ibid., McCullough et al. 1994). Their argument is illustrative and helpful in order to formulate a crucial component of an ethical theory of the patient. They argue in favor of a dependent moral status of the fetus:

> Instead [of having an independent moral status; H.G./M.H], being a patient means that one can benefit from the application of the clinical skills of the physician. Put more precisely, a human being without independent moral status should be regarded as a patient when two conditions are met: 1) when that human being is presented to the physician and 2) when there exist clinical interventions that are reliably expected to be efficacious, in that they are reliably expected to result in a greater balance of goods over harms for the human being in question. (ibid., 117)

From this perspective, human beings are "turned" into patients if they *can* be treated in a particular way in the context of medicine: If the being is brought to a physician and *can* be medically treated so that health-related interests are promoted and protected, it is considered a patient and *should* be treated accordingly. This is independent of capacities that are eventually considered as necessary or sufficient for personhood.

These criteria can easily be brought to veterinary medicine. However, are they sufficient to turn animals into patients? Although the criteria are in principle plausible, we have one major concern: Whereas it is clear that in human medicine, patients that can benefit from medical treatment should be treated accordingly for their own sake, this is not the case in animals. As Chervenak et al. rightly state, clinical practice in human medicine is evidently under the obligation to protect and promote the interests of the patient (ibid., 115). What else should be the

end and the legitimization of the intervention other than their health-related interests as sketched under the definition of medicine as a practice? Whereas this seems clear in the human sphere in most cases, it is not when it comes to animals.

When animals are treated with regard to their health-related interests, it remains open whether a medical intervention that results in a greater balance of goods over harms also *aims* at the animal's benefit and is carried out for the animal's sake. To illustrate this point, we take the example of a veterinary clinician using animals in a clinical trial. If the animal is used to gather data and gain knowledge that can be published and used to treat other animals, we can of course *not* rightly speak of this animal as a patient. Even if an ill (not ill made) animal in a clinical trial recovers from illness through medical intervention, this does not justify referring to that animal as a patient, if the sole intention is to gather data. The reason for this conclusion is that the end of treating the animal in the trial is not to promote and protect the health-related interests[1] of the animal, but instead other animals or also humans by gaining knowledge – therefore the animal is considered as a proband instead. In other words, if an animal is treated with the *intention* that others benefit from knowledge gained by its treatment, this animal is used as an instrument to serve the interests of others even though – as a matter of fact – health-related interests are protected and promoted. In such cases, health-related interests are not the end of the clinical treatment but means to other ends. However, if the clinical trial is carried out in order to protect and promote the health-related interests of the animals in question as an end, the animal is rightly referred to as a patient. Therefore, we believe that also the *right intention* – namely, the end to protect and promote the animal's health-related interests – is a necessary condition to consider animals as animal patients.

In the following we are going to elaborate on this in more depth. For this purpose we use the irritating fact that very strong critics of animal use in research like Tom Regan indicate that some animal experiments can be morally justified (Regan 2004, 387). How is this possible, if – as Regan holds – using animals as means to other ends is morally wrong? According to Regan, experiments can be justified if the ends of the experiment are the health-related interests of the animal in question. If the gained additional knowledge is only a "side product" of the medical treatment, the health-related obligations toward the animal are respected.[2] The experiment is in line with moral respect for the animal just like in the case of managing an injury. The reason for this conclusion is that the animal itself and its health-related interests – and not the benefit of others – are *the end of the actor's action/intention*.

This point is of great importance when we look at different actions carried out by veterinarians. Take for instance veterinary treatments in the farming sector. Not all actions of veterinarians are directed toward the health-related interests of the animal

[1] Whenever we speak of health-related interests in animals *presumed* health-related interests are meant. Whether the presumed interests are the interests of an animal in question is of course a difficult question to be answered and not in scope of this article.

[2] We are claiming that to serve presumed health-related interests is a necessary condition for regarding animals as patients. Whether other or plural ends are in accordance with treating animals with moral respect remains open but seems possible.

as the end. For example, if a pig's health is restored in order to regain productivity, the ultimate purpose of the action is not to promote health-related interests of the animal, and consequently, we should not refer to it as patient. In such cases, other ends like economic efficiency or productivity are served. Veterinary skills are used but obviously not directed toward the health-related interests of the animal as the major end of veterinary medicine.[3] Dehorning of cattle, castrating pigs, artificial insemination, etc. are good examples of actions that serve ends other than the health-related interests of animals. Another example would be a cow with mastitis. If the health of the cow is cared for to sustain its productivity, the end of veterinary action is not the cow's presumed health-related interest but the farmer's (in productivity). The cow's health is only secondary and a means to economic ends. In a nutshell, the argument goes that we can only refer to animals as patients as long as they are treated with regard to medicine's end, which is to protect and promote health-related interests.

We can draw on a debate in human medical ethics to clarify this position. The ethicist Pellegrino (Pellegrino 1999) argues for a sharp linguistic distinction between the goals and the ends of medicine. The ends are "[…] tied to the nature of medicine, to its essence. Ends serve to define medicine. Without certain ends, the activity in question does not qualify as medicine. The ends of medicine distinguish it from other arts and sciences which have different ends. To convert the ends of medicine to the purposes of economics, politics, or professional prerogative, transforms medicine into economics, politics, or professional preference" (Pellegrino 1999). In brief, medical knowledge and skills are used for medicine only when they are used to pursue medicine's ends, which Pellegrino – according to Veatch (2000) – restates as activity that meets the needs of a particular patient, to cure, care, help, or heal. As we have seen, medical knowledge and skills can also be used for other goals or purposes that are not tied to the essence of medicine. And, if actions are not directed to medicine's end, there is no reason to talk about a patient.

From this perspective it is no surprise that the use of the term "animal patient" is generally attributed to companion animals where (supposedly) everything is done for the sake of, and in the presumed interest of, the animal. Even if an animal's clinical treatment harms the animal significantly, like chemotherapy, and the benefits are doubtable (e.g., a few additional weeks to live), the intention to serve the presumed health-related interest of the animal prevails and gives reason to call the animal a patient. This argument can also explain why it is often but not always problematic when the term "patient" is attributed to farmed animals or animal models in research. The health of these animals is mainly a means to other ends – namely, productivity or knowledge – and not for their own sake. If, however, their health-related interests were the aim of clinical intervention, probands could turn into patients.

[3] At this point we leave it open whether there is only one end to veterinary medicine or more, and whether this leads to many medicines (cf. Grimm 2016b). With regard to human medicine, this question was addressed by Veatch (cf. Veatch 2000).

Against this background we complement the two criteria of Chervenak et al. (1996) with a third one and bring their idea to the animal field: An animal is a patient if (a) it is presented to a veterinarian; (b) when there exist veterinary measures that are reliably expected to be efficacious, in that they are reliably expected to result in a greater balance of goods over harms for the animal in question; and (c) the ends of the veterinary intervention are the animal's presumed health-related interests and not the interests of others.

15.4 Recognizing Animals as Patients: Are All Patients Equal?

We have argued that animals are rightly called patients under specific circumstances. In the following, we aim at a clearer understanding of what behavior is in line with treating an animal as a patient. As indicated, this is also to say that animals are treated with moral respect. Therefore, an analysis of duties toward patients in human medicine will be used. In this analysis Tom L. Beauchamp's and James F. Childress' book *Principles of Biomedical Ethics* (Beauchamp et al. 2009) serves as a valuable source. They describe four moral principles that are relevant in medical ethics and applied to patients and to medical contexts in general: *autonomy*, *non-maleficence*, *beneficence*, and *justice*. According to Beauchamp and Childress, these four principles should guide clinical practice. Their principles represent major normative dimensions leading to fundamental obligations toward patients in the field of human medicine. In the following, we will sketch the possibilities and limits of transferring these principles from human to animal patients and illustrate some further ethical dimensions of the term "animal patient."

1. *The principle of autonomy* holds that one should not ignore, insult, demean, or be inattentive to other's rights to self-governed action (cf. Beauchamp et al. 2009, 103).
2. *The principle of non-maleficence* "imposes an obligation not to inflict harm on others" (ibid., 149).
3. *The principle of beneficence* embraces "all forms of action intended to benefit other persons" (ibid., 197). The difference to the principle of non-maleficence lies in the positive duty to support well-being instead of the negative duty *not* to harm others or prevent them from harm.
4. *The principle of justice* is concerned with the distribution of resources, e.g., that everyone gets an appropriate share according to its needs (ibid., 241f). In the field of human medicine, this principle is applied to reflect upon the distribution of organ donations in a morally justifiable way.

Being acknowledged as a patient is identified with being a receiving end of these moral principles and the correlated moral duties of actors in the medical context. There are differences between the four principles regarding their applicability to animals. Initially, we start with the largely uncontroversial claim that we should not

inflict unjustified harm to patients (non-maleficence) and should contribute to their health-related interests (beneficence).

As we have already seen, aiming at the health-related interests of animals and acting in accordance with the *principle of beneficence* reflects respect for the animals' moral status and make them animal patients. The principle is rather uncontroversial when it comes to good nutrition, enrichment of the housing environment, clinical treatment of a broken leg, etc. The principle becomes questionable when, for example, it is not entirely clear whether a clinical intervention has a therapeutic or esthetic aim. Consider a dog with dental braces. Can this treatment indeed be considered therapeutic or just enhancement without therapeutic character? According to the three criteria outlined above, it could be argued that the dog's health-related interests are not the end of veterinary action in this case. However, if the dog suffers from adverse effects due to its tooth position, the aim to end this suffering by means of the positive effects of the dental braces makes the dog a patient. Whether or not all available technical possibilities during medical treatment shall be used to benefit animals is likewise an issue of intense debate. Whereas we usually think that all possibilities should be used to restore human health, this is not so clear in the case of animals (Yeates 2013, 114), where limiting factors are included for instance, the coverage of financial costs. Since clinical treatments for animals presently have to be paid on a private basis, the bandwidth of clinical treatments varies from one extreme to the other according to the owner's financial situation and willingness to pay. We will have a closer look at this issue when we focus on the principle of justice.

The *principle of non-maleficence* is a second fundamental principle that we find in human and veterinary medicine. As Beauchamp and Childress state, physical harm is much easier to detect than mental harm (cf. Beauchamp et al. 2009, 152f). They also dive into the question of euthanasia and frame it within the principle of non-maleficence. Contrary to standard practice in human medicine, there is virtually no hesitation, Beauchamp and Childress claim, to consider killing part of medical care in veterinary medicine (cf. Beauchamp et al. 2009, 184). Although in specific cases, such as convenience euthanasia, this lacks empirical proof (cf. Hartnack et al. 2016), euthanasia is often framed as an important moral responsibility of the veterinary profession when it can be considered mercy killing (cf. Grimm et al. 2016b, 96–98; Hartnack et al. 2016). Basically, the principle of non-maleficence can be understood similarly in the human and the animal field: "Do no harm without justifying reason!" If no harm were allowed at all for whatever reason, most clinical interventions would be prohibited since most of them start by harming in order to promote health-related interests. Interventions in the bodily integrity of a living being are considered as necessary and/or justified because of the presumed interests of the animal patient.

Regarding the *principles of autonomy and of justice*, we can detect significant differences between the application to humans and to animals. Concerning autonomy one could ask: Can an animal be seen as an autonomous being at all? How can we know about its autonomy? How can we respect it? In the majority of human cases, autonomy refers to *informed consent* in clinical contexts. Its fundamental

requirement is that a competent patient must give her consent to clinical treatment voluntarily and on the basis of relevant knowledge. Information about the treatment, a recommended course of action, and the understanding of both are fundamental preconditions. These elements are the necessary conditions to be able to proceed to the "consent elements" in the strict sense, which are the decision in favor of the procedure and the authorization of a physician (cf. Beauchamp et al. 2004, 111–113; Beauchamp et al. 2009, 120f). They constitute a threshold that is not only high for animals but also for many human beings (cf. Rogers 2014) and may even be too high for either in some cases. It requires a clear utterance of preferences against the background of a traceable understanding of the relevant information given by the clinic staff. Since we cannot deliberate with a companion dog about its favored treatment or if it would chose euthanasia, the *informed owner consent* mirrors the idea that the owner has to decide with regard to the health-related interests of her animal.

However, the ethical difficulty with autonomy should not be seen in the lack of verbal expression of volition in animals only. Major difficulties lie in the obligation to take decisions for the animal as a patient. Although some theorists suggest using common-sense intuitions is enough in human medicine (cf. Hoerster 1998, 122f), one can also assume that the patient's individual biography, interests, and preferences play a role in such vital decisions (cf. Huth 2011). This is also true for nonhuman patients. Animals never utter their preferences verbally, but we think to know at least to a certain extent about their state and what is presumably in their interest. If the animal is treated as a patient, the moral duty to take honest effort to find out what is best for the animal according to the animal patient's interest is prior (with all the given limitations).

What we see here is that treating animals as patients might at times present medical staff with even more difficult questions than in human medicine. Since medical treatment has to aim for the benefit of an animal that cannot verbalize its own interests, unlike most humans, people have to take the responsibility to decide for the animal patient without knowing with certainty whether they act in its interest. Questions like "Can it be in the interest of the animal to be euthanized?" and "Is a painful life for the animal worse than no life at all?" emerge. In this field, tough decisions have to be faced.

The principle of justice illustrates a problematic sphere of clinical treatment of animals. Although animal owners are legally bound to take care for their animals and pay for clinical treatment, respectively, in many countries, no public health system for animals guarantees a minimal and fair standard for animal medical care as in human medical care. For this reason, the limits of transferability are quickly reached here. If we frame differences according to wealth or willingness to pay as manifesting injustice, the consequence would be a moral claim on a public health system for (certain) animals. If we frame this question differently and argue that this diverges from the situation in human health, we implicitly admit that justice is another matter when it comes to animals. Therefore, a bundle of questions arise immediately: Are animals our equals insofar we can owe them justice like we owe it to humans? If this were the case, the differences between the access to medical

treatments for animals that depends on the owner's economic situation and willingness to pay would be pure injustice.

Within human medical ethics, the debate about how to understand and apply Beauchamp's and Childress' principles to patients started in 1979 with the first edition of their book. In veterinary medicine we are only at the beginning of elaborating on what it means to apply principles of medical ethics to animal patients. For that reason, only minor conclusions can be made so far. However, taking decisions carefully and deciding after extended deliberation with regard to the animal's health-related interests are probably the best sign that one has considered moral obligations toward animal patients.

15.5 Synopsis: The Complexities of Health

We have tried to show how the concept of "patient" can be transferred to animals. Being an animal patient was introduced as a concept that mirrors moral status in clinical practice. Three criteria were outlined and elaborated in order to give a transparent account of what is to be understood under "animal patient": An animal is a patient if (a) it is presented to a veterinarian; (b) when there exist veterinary measures that are reliably expected to be efficacious, in that they are reliably expected to result in a greater balance of goods over harms for the animal in question; and (c) the end of the veterinary intervention are the animal's presumed health-related interests and not the interests of others. When it comes to moral principles and their transfer from human medical ethics to veterinary medical ethics, we are at the beginning of a debate that may continue in the future. The four principles of biomedical ethics, described by Beauchamp and Childress, are not in every respect easily transferred to animals. In particular, obvious limits of transferability are reached when we deal with autonomy and justice. Finally, we can conclude that although the transfer of knowledge is possible and plausible, we are only at the beginning when it comes to a clear understanding of what it means to respect animal patients morally with regard to the principles of beneficence, non-maleficence, autonomy, and justice.

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