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Handling End-of-Life Situations in Small Animal Practice: What Strategies do Veterinarians Contemplate During their Decision-Making Process?

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ABSTRACT

This study researched end-of-life (EoL) decision-making processes in small animal practices in the Netherlands, focusing on strategies veterinarians contemplate during this process. Fourteen veterinarians were interviewed about animal end-of-life decision-making. The results of these interviews show that the decision-making process consists of three steps. The first step is to *assess the animal's health and welfare*. During the second step, veterinarians consider *the position of the owner*. Based on steps 1 and 2, veterinarians decide in step 3 whether their advice is to a) *euthanize* or b) *contemplate one or more strategies* to come to a decision or potentially alter the decision. These results can support members of the veterinary profession to reflect on their decision-making process. If veterinarians know what strategies their peers use to deal with EoL situations, this can help to reduce the stress they experience in such situations. In addition, veterinarians may find inspiration for new strategies in the study results. For the veterinary profession itself, the current results can be used as a starting point for describing best practices for EoL decision-making in small animal practice.



KEYWORDS

Euthanasia; end-of-life care; companion animals; moral stress; veterinary medical ethics


Introduction

In small animal practice, veterinarians are frequently involved in conversations with animal owners regarding the ending of an animal's life. During these end-of-life (EoL) situations, the veterinarian and the animal owner discuss the best course of action resulting in either euthanasia of the animal or continuation of the animal's life after veterinary treatment. However, determining the best course of action in EoL situations can be complex: when is a life worth living and when would it be the best to end a life by a "good death"?

In this study, we focus specifically on the context of veterinarians in the Netherlands. Therefore, we consider the rules regarding the ending of animal lives prescribed in the Dutch "Law for animals" and "Regulation for animal keepers." For mammals, reptiles, amphibians, and birds three general rules are defined, including 1) the avoidance of potential pain, suffering, and distress, 2) the use of

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a method that ensures that death occurs immediately or after stunning while the animal is still unconscious, and 3) the person who ends an animal's life possess the necessary knowledge and skills to perform the act humanely and effectively (Besluit houders van dieren, 2014). For cats, dogs, and geese additional rules are applicable, determining the situations in which these animals may be killed. These situations include killing an animal a) to avoid or end the immediate danger to a human or an animal, b) as a veterinarian has determined the ending of the animal's life is in the interests of the animal, c) as a consequence of national or European law, d) to end unbearable suffering, and e) as a consequence of dangerous behavior that cannot be corrected (Besluit houders van dieren, 2014). Notably, the legislation restricts the prescribed situations in which the lives of animals may be ended to specific species. Moreover, the described situations are still open for some level of interpretation and thus rely on the judgment of the decision-maker. With respect to when is an animal's life worth living or when would it be the best to end a life by a "good death" the Dutch law provides no specific guidance."

Likewise, the European Veterinary Code of Conduct (hereafter: The Code) provides limited guidance regarding determining the best course of action in EoL situations, stating the following: *Veterinarians shall ensure/restore the welfare of the animals under their care in whichever section of the veterinary profession they work, bearing in mind the five freedoms and promoting positive welfare. Animals should experience both a good life and a humane death without unnecessary suffering (Federation of Veterinarians of Europe)*. The Code's recommendation regarding EoL discussions is more concrete but remains ambiguous on how to come to a decision: *Veterinarians should attempt to relieve animals pain and suffering. If their condition is untreatable, the option of euthanasia should be discussed with the animal's owner' (Federation of Veterinarians of Europe, n.d.)*.

Besides the complexity of ascertaining when an animal's life is worth living, determining the best course of action is further complicated by the fact that there are interests of multiple stakeholders at stake (Batchelor & McKeegan, 2012; Hartnack, Springer, Pittavino, & Grimm, 2016; Meijboom & Stassen, 2016; Springer et al., 2021; Springer, Sandøe, Bøker Lund, & Grimm, 2019). These interests include the interests of the animal, the interests of the animal owner, and the veterinarian's interests. In case the interests of these stakeholders align, the veterinarian and the animal owner will likely reach a consensus regarding the best course of action. However, sometimes situations occur in which the interests of the different stakeholders conflict. Examples include cases where an owner requests euthanasia of an animal whose life is still worth living according to the veterinarian or an owner wishing to continue the animal's life where the veterinarian advises that it would be best to end the animal's life by euthanasia. Dealing with competing interests adds complexity to EoL discussions. This complexity is further extended as the animals are considered the legal property of an animal owner according to Dutch legislation (Burgerlijk Wetboek Boek, 2022). As a result, the ultimate decision-maker power is in the hands of the owner. Accordingly, previous studies reported that EoL discussions and navigation of the decision-making process are perceived as one of the most challenging aspects of veterinary practice, especially when interests at stake are competing (Matte, Khosa, Coe, & Meehan, 2019; Morris, 2012; Shaw & Lagoni, 2007).

In some of these challenging EoL situations, the veterinarian is unable to resolve the conflict between the competing interests. In such a situation the Code prescribes that: *A veterinarian has a variety of legal, moral and ethical obligations towards animals and their owners, clients, colleagues, the veterinary team, society and Competent Authorities. On occasion, these obligations may conflict with each other and present veterinarians with a dilemma. In such situations, it is veterinarians responsibility to balance their obligations, having regard first to animal health and welfare and to public health' (Federation of Veterinarians of Europe)*. Although the Code states that the veterinarian must prioritize the animal's interest in case of conflicting interests, the owner may have a different perspective on how the veterinarian should serve the interests of both the animal and the owner. Consequently, it can remain unclear to the veterinarian how to prioritize competing interests of equal moral weight. In such a situation, an ethical dilemma arises (Morgan & McDonald, 2007). Several studies have reported EoL-related situations that veterinarians experience as ethical

dilemmas with regard to cases including euthanasia of healthy animals, euthanasia requests based on financial grounds, compromised veterinary care as a result of an owner's limited finances, or the owner's desire to continue the treatment of an animal that is terminally ill (Batchelor & McKeegan, 2012; Hartnack, Springer, Pittavino, & Grimm, 2016; Kipperman, Morris, & Rollin, 2018; Knesl et al., 2017; Morgan & McDonald, 2007; Moses, Malowney, & Wesley Boyd, 2018; Persson, Gerdts, Hartnack, & Kunzmann, 2023; Quain, 2021; Rathwell-Deault, Godard, Frank, & Doizé, 2017). In these types of situations, the veterinarian must ultimately decide whether to agree to end the animal's life or to let the animal live.

Existing literature shows that decision-making in EoL-related ethical dilemmas is stressful for veterinarians (Batchelor & McKeegan, 2012; Florian, Skurková, Mesarčová, Slivková, & Kottferová, 2023; Kipperman, Morris, & Rollin, 2018; Moses, Malowney, & Wesley Boyd, 2018). Rollin describes this as moral stress: stress resulting from the tension between what veterinarians consider to be obliged to do and their alternatives in practice (Rollin, 2011). Frequent exposure to these stressful situations is likely to negatively affect veterinarians' well-being and job satisfaction (Batchelor & McKeegan, 2012). Besides the reported moral stress, previous research shows that the decisions that veterinarians take are not always equivalent to the decision they would have wanted to take. Yeates and Main (2011) identified that refusing a request to euthanize an animal is uncommon. Several reasons can lead a veterinarian to agree with a euthanasia request although they prefer to refuse. Reasons include being pressured into euthanasia, concerns about what would happen to the animal if not euthanized, and financial limitations of the owner (Yeates & Main, 2011). Adding onto the aforementioned reasons, Yeates and Main suggest that some veterinarians who want to refuse euthanasia in the first instance, are able to find ways to let the owner revoke their euthanasia request by for example persuading the owner.

In summary, determining the best course of action in EoL situations can be complex for veterinarians. The European Veterinary Code of Conduct provides limited guidance on how veterinarians should determine the best course of action. The resulting ambiguity regarding EoL decision-making can contribute to moral distress among veterinarians. This research aims to address this ambiguity by investigating the EoL decision-making process of veterinarians, focusing on the strategies they use to come to a decision. Exploring the decision-making process in-depth can provide insights into 1) how veterinarians navigate the EoL decision-making, 2) the relevance of contemplating strategies during this process in relation to, 2a) the final decision, and 2b) the experience of the veterinarian. The ultimate goal of providing these insights is to reduce moral distress among veterinarians by 1) creating more clarity on current strategies used by veterinarians to determine the course of action in EoL decision-making and 2) providing a starting point for the veterinary profession that is useful in describing best practices for EoL decision-making in small animal practice.

Materials and methods

Study design

This research used semi-structured in-depth interviews to explore and analyze the decision-making process of veterinarians in EoL situations in small animal practice. Interviews with veterinarians working in a small animal practice in the Netherlands were held by the first author between June and October 2021. The inclusion criterion used for the recruitment of participants was: veterinarians who predominantly provide care to companion animals as first-line practitioners in a small animal practice in the Netherlands. To receive a diversity of responses participants were purposefully selected via the snowball method, a method that draws on insiders' knowledge of the field and that can help to include participants that would not have been accessed directly by the research team (Shaw & Holland, 2014). The

following selection criteria were applied: gender, years of working experience as a practitioner, and geographic location in the Netherlands. These selection criteria enabled the research team to form a mixed group of veterinarians, to meet the explorative character of the study. The number of interviews depended on the point of saturation, meaning when no new information emerged in the interviews.

Interviews and data management

Eligible participants were recruited for a voluntary face-to-face interview. After the initial contact, participants received an information letter about the research objective, study design, and data collection (Supplementary material 1). Moreover, an informed consent form was sent to each participant (Supplementary material 2). All interviews were held in person at a location of the participant's choice to secure a comfortable and safe environment. Before the interview started, the interviewer introduced herself and informed the participant about the interview structure. Any potential questions of the participant regarding the interview were addressed. Thereafter, the participant was asked to approve the recording of the interview. With oral and written consent of the participant, the interview started. The interview was structured by an interview guide with open-ended questions, resulting in an interview with a controversial character where participants had the opportunity to share their experiences and thoughts without the constrain of predetermined response options. Questions were not made available to participants in advance of the interview. To gain an overview of how veterinarians approach EoL situations, the interview guide focused on three main subjects including 1) the role and responsibilities of the veterinarian in EoL situations, 2) the considerations that veterinarians take into account in the decision-making process in EoL situations, and 3) the barriers experienced by veterinarians in the decision-making process toward and performance of euthanasia (Supplementary material 3). The draft of the interview guide was tested on two veterinarians meeting the inclusion and selection criteria before the final version was formulated. No major revisions were required after the two test interviews. The veterinarians involved in the development of the interview guide did not participate in the further study.

In total fourteen veterinarians were interviewed. All of the approached veterinarians were willing to participate in the interviews after being contacted. Of the fourteen participants, six were male and eight were female. Of these veterinarians, twelve worked exclusively with traditional companion animal species. Two participants also worked with other species, including horses and reptiles. Two of the participants had less than five years of working experience, four participants had five to ten years of experience, five others had ten to fifteen years of experience and a further three had more than fifteen years of experience.

The interviews lasted between 45 and 120 minutes. Audio files were transcribed using Amberscript™ (Version August 2021, Amsterdam, The Netherlands). To ensure quality and accuracy, all transcripts were reviewed by the first author. Any information related to a specific person or veterinary practice was replaced by nonidentifiable descriptors.

Data analysis

All transcripts were coded using NVivo™ qualitative analysis software (Version Release 1.5.1). The analysis was conducted using an inductive approach. To develop a coding template, five interviews were coded by two of the authors. The findings of this first coding round were discussed between the two authors until a consensus was reached about discrepancies. Using the revised codes, all transcripts were coded by the two authors. Subsequently, the findings of the second coding round were discussed among three of the authors. No major revisions of the codebook were required. After this iterative reflective process, the codebook was finalized and applied to the full data set by the first author (Supplementary material 4). Once all transcripts had been coded, the data were analyzed. During the first analysis phase, we discovered a certain order between the codes. As an example: the

code “financial support” only occurred after the code “owner’s financial position” was coded. Based on this first analysis phase we thus found a structure in the form of a process among the codes. In short, the process consists of three steps: step 1 the animal assessment, step 2 the position of the owner, and step 3 strategies. For step 3, “strategies”, multiple codes were aggregated including “reference frame”, “additional confirmatory diagnostics”, “time to reflect”, “financial support”, “rehomeing”, and “peer consultation”. During the second analysis phase, we analyzed the quotes per code more in-depth. During this in-depth analysis, we revisited each code with its corresponding quotes and searched for patterns within each process step. As a result, we discovered four aspects in each of the codes of step 3, including 1) what a code meant to the participant, 2) in which situations the code was applicable, 3) what participants aimed for with the code, and 4) whether potential risks were related to the code.

Ethical approval

This research project was reviewed and approved by the Science-Geosciences Ethics Review Board (SG ERB) of Utrecht University on May 28 2021, subject ERB Review DGK S-21552.

Results

In the following sections, we present the strategies veterinarians mentioned in EoL situations. During the interviews, veterinarians described their approach to EoL situations in the form of a process consisting of several steps. Before contemplating their strategy, the participants’ first step is to *assess the animal’s state of health and welfare*. Thereafter, they consider *the position of the owner* regarding the EoL decision-making process in step 2. Based on the animal assessment and the position of the owner, participants decide in step 3 whether their advice is to a) *euthanize* the animal or b) *contemplate one or more strategies* that can contribute to coming to a decision or potentially alter the decision in that specific EoL situation. Participants describe several strategies during the interviews including providing a frame of reference aimed at euthanasia or treatment options, performing additional confirmatory diagnostics, facilitating time to reflect, providing financial support, supporting rehomeing, and peer consultation. These strategies are arranged in the text in a random order, as each of the strategies is discussed as relevant to veterinarians in the decision-making process. During the entire process, the process may be terminated at any step. Potential causes include the death of the animal without the involvement of the veterinarian (e.g., natural death) or the animal owner deciding to terminate the client-veterinarian relationship. [Figure 1](#) is a visual representation of the decision-making process.

The results are illustrated using quotes. All quotes are translated from Dutch to English and are slightly edited for readability. Direct quotes from veterinarians are presented in italics. Additional words, inserted to clarify the meaning of the quote, are placed between square brackets. Filler words are replaced by a set of three periods. Quotes are referred to by the abbreviation “Cav” (companion animal veterinarian), followed by a sequential number to identify the individual participant while maintaining anonymity (e.g., “Cav1” refers to companion animal veterinarian number 1).

The assessment of the animal

Before contemplating their options, veterinarians indicate that they start by making an assessment of the animal’s state of health and welfare (hereafter referred to as step 1). Participants indicate that the assessment consists of five factors and that the outcome of the assessment serves as a “go/no-go” criterion in their decision-making process of exploring options for further treatment of the animal. In case the outcome of the assessment is a “no-go,” the veterinarian is directed toward euthanasia, as contemplating other strategies in step 3 is a “no-go.” On the contrary, a “go” outcome of the assessment leads the veterinarian to contemplate other strategies.

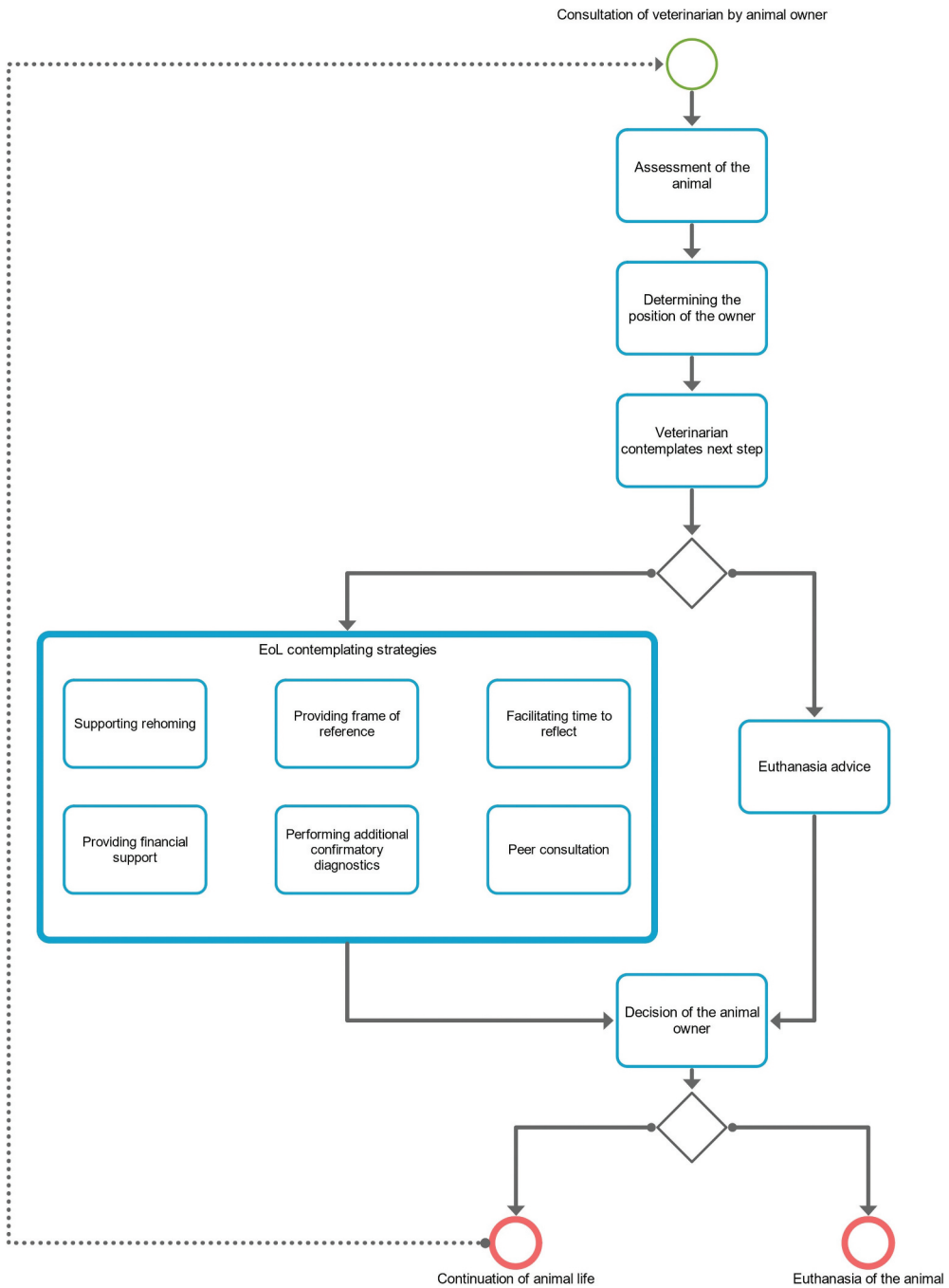


Figure 1. A visual representation of the decision-making process concerning EoL situations in veterinary practice. The scope of this figure is the decision-making process involving a single veterinarian. A green circle visualizes the start of the process, whereas a red circle represents the end of the process. Square boxes represent a process step, whereas diamond shapes visualize a decision step. The decision-making process starts once the animal owner consults the veterinarian. The first step in this process is the *assessment of the animal's state of health and welfare*. After this step, the *position of the owner* is considered in the second step. Based on the animal assessment and the position of the owner, the veterinarian contemplates the next step consisting of the advice to a) *euthanize* the animal or b) *contemplate one or more strategies* that can contribute to coming to a decision or potentially alter the decision in that specific EoL situation. Then, the animal owner decides whether to a) let a veterinarian euthanize the animal, or b) let the animal live. During the entire process, the process may be terminated at any step. Potential causes include the death of the animal without the involvement of the veterinarian (e.g., natural death) or the animal owner deciding to terminate the client-veterinarian relationship.

The assessment of an animal includes: 1) the animal's health history, 2) anamnesis, 3) an inventory of the animal-specific characteristics, 4) a general impression of the animal, and 5) a clinical examination. The animal assessment starts with the animal's health history, information regarding the past medical state of the animal. Information regarding the current reason to consult the veterinarian and the current medical situation of the animal according to the owner is collected during the anamnesis. While questioning the owner, animal-specific characteristics are gathered, for example, but not limited to the animal species, the age, and the life expectancy of the animal. Thereafter, a general impression regarding the current state of the animal is made, including the level of consciousness and (ab)normal behavior (e.g., signs of pain and distress). Finally, a clinical examination is performed. Combining the information gathered in these four steps makes it possible to formulate a list of problems. The list of problems is used to come to a presumptive diagnosis. Moreover, the veterinarian will be able to make an assumption regarding the animal's quality of life and prognosis.

A clear example of a “no-go” outcome described by participants is the assessment showing that the animal is severely suffering without the prospect of improvement. In such a case, veterinarians urge the need for euthanasia instead of considering other strategies. When the outcome of the assessment shows that the animal is not severely suffering, or that this suffering can be alleviated, and the prognosis is (quite) optimistic, veterinarians indicate they contemplate various strategies other than euthanasia.

The position of the animal owner

Participants elaborate on the position of the animal owner in the decision-making process following the assessment (hereafter referred to as step 2). While veterinarians may discuss which strategy is preferable from the veterinarian's perspective, from a legal perspective, the owner has the final decision. Consequently, conflicting situations can arise when the advice of the veterinarian does not align with the decision of the owner. Participants indicate that they do not experience problems with the owner's decision-making power in most cases as the veterinarian's advice frequently aligns with the owner's decision. In a minority of cases, where the advice of the veterinarian and the decision of the animal owner do not coincide, participants express a certain level of dependency regarding the owner's consent in the decisions that follow after the assessment, as Cav10 points out: *“In the end, it is predominantly the owner who determines the course of action.”*

Participants describe two situations in which their advice does not align with the owner's preference. On the one hand, there are situations in which the owner considers or requests euthanasia and the veterinarian prefers other strategies: *“Owners do not want much more at a certain point, however, there is still a lot that can be done with aging animals. ... Euthanasia is something I have to discuss frequently, informing the owners that it [euthanasia] is not necessarily needed yet.”* (Cav12) On the other hand, participants describe situations in which the assessment of the animal directs the veterinarian toward euthanasia, and the owner prefers to take their animal back home.

Both situations are described as challenging or stressful by veterinarians, however, participants describe experiencing a difference regarding the level of dependency, as Cav3 discusses: *“It happens that owners take their animal back home, whereas I think that that decision is not the right one for the animal. I experience such a situation as more difficult than situations in which an owner wants euthanasia and I don't. I mean, I cannot force them to euthanize the animal, but I can reject euthanasia in cases where I don't support it.”* Moreover, participants indicate that the underlying reason for the owner's decision affects their experience of the EoL decision-making process as well. Participants discuss several reasons that, from their perspective, can underly the owner's position, such as a lack of knowledge, the relationship between the animal and the owner, and the owner's financial situation. Reasons that relate to a lack of motivation to provide the needed care are perceived as more difficult or more frustrating than reasons relating to a lack of ability to provide

care, as described by Cav8: “*When people lack the dedication to provide care based on financial considerations it is even more difficult than when people don’t have the money.*”

In considering strategies, veterinarians, therefore, perceive dependency on the owner’s consent. Depending on the assessment of the animal and the position of the owner, the participants decide in step 3 whether their advice is to a) euthanize the animal or b) contemplate one or more strategies that can contribute to coming to a decision or potentially alter the decision in that specific EoL situation. Participants describe several strategies during the interviews including providing a frame of reference, performing additional confirmatory diagnostics, facilitating time to reflect, providing financial support, supporting rehoming, and peer consultation. These strategies are described in the following sections, elaborating on the goal of each strategy in relation to the decision-making process, situations in which the strategy is used, and where relevant potential risks related to the strategy.

Providing a frame of reference

Participants emphasize the need to provide a frame of reference (hereafter referred to as reference) to owners during consultations. Their ultimate goal in providing this reference is primarily to safeguard the animal’s welfare during the decision-making process. This can either be in situations in which the veterinarian provides a reference to support the advice to euthanize an animal as well as in situations in which a reference is provided to motivate an owner to not choose euthanasia but for alternative strategies. Besides safeguarding animal welfare, veterinarians indicate that providing a reference is to support and facilitate owners during their decision-making process.

During the interviews, participants discuss three situations in which a reference is seen as necessary. These three situations have concerns regarding the best course of action in common. A first example discussed by participants is that some owners explicitly ask for a reference, as Cav2 describes: “*People ask very frequently whether their animal is in pain for example, or whether it would be better to stop [and euthanize the animal].*” Second, participants describe cases in which they prefer euthanasia, whereas the owner does not. Last, in some cases the owner requests euthanasia although participants see alternative options. In the second and last situation, the veterinarian takes the initiative to provide a reference. Veterinarians describe several reasons that can underly these situations, including a lack of knowledge of the owner, a clouding of the owner’s perspective on the animal’s situation as a result of frequent exposure, and the relationship between the animal and the owner. The relationship between the animal and the owner can be either very close, causing a certain denial of the owner of the (severity of) the signs, or can be more distant leading to signs being unnoticed by the owner.

In all three situations, veterinarians provide a reference by 1) drawing attention to clinical signs that an owner appears to be unaware of, and/or 2) providing insight into the urgency of clinical signs and findings and potential interventions to treat these symptoms or to reduce the consequences. Besides discussions with the owner, veterinarians consider carefully how they can facilitate a reference as well once the owner is at home. Therefore, participants provide information letters regarding the animal’s illness and/or EoL-specific reading materials. Moreover, some participants encourage owners to keep a diary to document changes in their animal’s condition. The diary could help the owner to obtain a more “objective” perspective on the animal’s situation. This more objective perspective is often perceived as helpful by owners in their decision-making process. Participants indicate discussing the findings resulting from the diary during follow-up consultations.

Performing additional confirmatory diagnostics

Participants describe using additional confirmatory diagnostics, such as blood tests, for two main reasons in relation to EoL decision-making. One important reason is that veterinarians indicate performing diagnostics to confirm a presumptive diagnosis. Confirming a presumptive diagnosis is

important for both the veterinarian and the owner. For the veterinarians themselves, this is important as they express that they want to be convinced about the decision to euthanize an animal. Participants discuss this in two types of situations, 1) animals with health problems, 2) and animals with behavioral problems. Cav4 describes an example of the former as follows: *“If you consider euthanizing an animal, I want to perform diagnostics to confirm why I euthanize the animal. That [euthanasia] is not something you ‘just’ do. I will not euthanize an animal because it might have kidney failure, for example, I want to confirm that.”* Cav10 discusses a case illustrating the latter: *“Sometimes we have an owner who requests euthanasia of his dog, as the dog shows undesired behavior. However, I see a happy and healthy dog during the consultation, not showing strange behavior. In such a situation, I propose that the owner visits a behavior expert, to confirm what is going on. If the expert confirms that we can’t help the dog, I am willing to euthanize the dog. Though I need that expert’s report. If I don’t get that report, I will not euthanize the animal.”*

Besides the importance to the veterinarians themselves, participants also highlight the importance of confirming a diagnosis for the owner’s decision-making process. If the outcome of additional diagnostics confirms the diagnosis, this can help owners to make a better informed and therefore easier decision to euthanize their animal.

A second reason for participants to perform confirmatory diagnostics is linked to preventive care and attempts to alter unnecessary euthanasia decisions. Participants describe that better insights into a diagnosis can help owners to decide on treatment rather than choose euthanasia. Cav12 shares an example: *“When I see aging cats, I try to motivate people to provide preventive care. For cats with high blood pressure for example: if you can start treatment in time, the owner will see the results very quickly and are thus happy we performed diagnostics. Consequently, people will come back more easily for additional diagnostics in the future, allowing us to focus on the treatment of the cat rather than discussing euthanasia at that point.”*

Facilitating time to reflect

As EoL decision-making is often complex, participants discuss the need to give owners time to reflect. This reflection time helps owners to make a carefully considered decision for either euthanasia or treatment. Participants point out that a carefully considered decision is beneficial for the owner’s grief process, as it reduces the risk that doubts about the made decision will raise afterward.

Veterinarians indicate facilitating time for reflection in acute situations, such as when a dog bites someone and the owner requests immediate euthanasia. Cav13 explains this as such: *“If a dog has bitten someone, there is great panic. My main objective is then to get the animal out of that situation, reduce the panic, and create time to consider the best solution.”* Also in less acute situations, reflection time is seen as helpful for owners. On the one hand, owners may prefer to take some time before they start a costly and/or invasive treatment. On the other hand, some owners whose animal needs to be euthanized indicate that they need time to accept the decision to end their animal’s life.

In both situations, participants emphasize the need to safeguard the animal’s welfare while owners are given time to reflect on their decision, as there is a risk that the owner will need more time than is acceptable for the animal. To ensure the animal’s welfare during the reflection of the owner, participants support the animal with proper treatment, e.g., pain medication if needed. Moreover, they make clear agreements with the owner to limit the reflection time, e.g., checkups at the practice. Participants indicate that, despite their efforts to make these agreements, exceptional situations exist in which owners delay their return to the practice or do not come back at all. These exceptional situations are reported as stressful and frustrating by veterinarians.

Providing financial support

In terms of finances, participants share their experiences regarding two situations: 1) financially limited owners, and 2) the situation in which an owner is unwilling to make finances available for

veterinary treatment. In the case of a financially limited owner, participants discuss being willing to help these owners as they want to provide proper care to their animal but are financially not able to. The goal of providing support to these owners is to avoid decisions that lead to the unnecessary ending of an animal's life from the veterinarian's perspective. Veterinarians discuss several options for financial support. This often starts with external financial support from for example family, friends, or charities. Moreover, crowdfunding is discussed to finance treatment. Besides external support, participants discuss three practice-related options to provide financial support: 1) pay-by-installment agreement, 2) reduce costs if possible, and 3) (partial) payment by the practice. In considering practice-related forms of financial support, veterinarians consider their relationship with the owner. A feeling of trust in the relationship is important, as their experience is that a trustful relationship reduces the risk of unpaid bills in the end.

If an owner is unwilling to make finances available for veterinary treatment, participants express a feeling of frustration: *"If my car is broken, I would also prefer to spend that money on something else. However, if you decided to have an animal you are responsible to care for the animal. I understand that you may not always have 3000 euros ready to treat an animal, but I do expect an owner to be motivated to provide the needed care. If someone doesn't want that, that sounds ridiculous to me."* (Cav5) In such a situation, participants try to convince the owner of their duty to care at first. If the owner appears unreceptive, the medical situation of the animal and the costs for treatment influence what veterinarians do next. If the prognosis is (quite) good and the treatment costs are not extremely high from the veterinarian's perspective, veterinarians offer the combination of financial support and the option to rehome an animal (for more details, see 3.7. Supporting rehoming). The animal is then rehomed by the practice against the costs that would have been charged in case of euthanasia. The remaining costs are mostly covered by the practice. If the prognosis is less optimistic and/or when the treatment costs are (extremely) high from the veterinarian's perspective, participants make varying choices. They either offer the option to rehome the animal for the costs of euthanasia or they decide to euthanize the animal. The underlying reasons for participants to choose euthanasia are uncertainty about the ability to rehome the animal, the required time to find a new home, financial pressure on the practice, and the feeling that they need to act to stop the animal from further suffering. To avoid financially based decision-making, participants emphasize the fact that if more animals were insured, it would help to reduce such situations.

Supporting rehoming

Veterinarians indicate consider rehoming in situations when an animal is likely to live a good life if the animal receives proper care, but the owner requests euthanasia. One can think of animals in need of veterinary care such as surgery or care in the form of behavioral therapy. In most cases, the underlying reason for owners to request euthanasia is cost-related (for more details, see 3.6. Providing financial support). Rehoming an animal in such a situation creates an opportunity for veterinarians to avoid performing euthanasia they cannot agree with, as Cav4 narrates: *"We try to rehome frequently so that we don't euthanize animals against our will."*

In contemplating rehoming, participants estimate 1) the likelihood that an animal will be rehomed and 2) the impact of rehoming on the animal. Indicators used are the animal's age, the animal's character, the prognosis, intensity of treatment, and treatment costs. Based on these indicators, participants indicate that young animals with (quite) an optimistic prognosis are seen as eligible for rehoming. Moreover, rehoming is considered beneficial for the animal itself based on the life expectancy and prognosis. Cases where participants indicate that rehoming may need to be considered more carefully include animals for whom the prognosis is less optimistic and older animals. In both cases, participants express that caution is important to ensure that the benefit to the animal outweighs the impact of being rehomed.

Although rehoming creates an opportunity for veterinarians to avoid euthanasia in the described situations, participants share their concerns regarding the way in which some owners do not fulfill

their duty of care. Participants express to be worried about whether an owner may get a new animal that ends up in the same situation. Therefore, participants make a clear appeal to the owner's duty of care during consultations to prevent recurrences.

Peer consultation

In contemplating strategies participants indicate to appreciate peer consultation. Especially in complex cases, participants express to discuss their considerations and concerns with colleagues during the decision-making process. An example of a complex situation in which peer consultation is described as valuable is an animal in an emergency who needs urgent help and the owner is untraceable or unreachable for consent. Besides peer consultation during the decision-making process, participants now and then use peers to reflect on already made decisions. Reflection on the decision-making process is perceived as helpful in more than one way: to emotionally deal with made decisions and by learning from each other, as Cav11 narrates: "*Discussions with colleagues can be really helpful, especially if you had a bizarre experience it is really helpful to share that with others.*"

Discussion

This study aims to explore EoL decision-making in more detail by researching what the process looks like and what strategies veterinarians in small animal practices contemplate in their EoL decision-making process. Below the findings of the study are summarized, followed by sections in which we discuss 1) the relevance of the decision-making process and related strategies in relation to a) the final decision, b) the experience of the veterinarian, and 2) the potential side effects of the role of the veterinarian during the decision-making process on both the veterinarian and the animal owner.

In summary, the EoL decision-making process consists of three steps. The first step in the process is an *assessment of the animal's state of health and welfare*. In the second step, veterinarians focus on the *position of the owner* regarding the EoL situation. Depending on the assessment of the animal and the position of the owner, participants decide in step 3 whether their advice is to a) *euthanize* the animal or b) *contemplate one or more strategies* that can contribute to coming to a decision or potentially alter the decision in that specific EoL situation. Strategies contemplated by veterinarians include providing a frame of reference, performing additional confirmatory diagnostics, facilitating time to reflect, providing financial support, supporting rehoming, and peer consultation.

The interview data provide insight into the extensiveness of the participants' decision-making process in EoL situations. The discovered stepwise approach and multiple strategies are found relevant for the participants in their decision-making process. The extensiveness of the process can be interpreted as a high level of care and willingness of veterinarians to contribute to the owner's decision. This finding resonates with previous research that documented the desire of veterinarians to facilitate a "good death" in EoL situations (Matte, Khosa, Coe, & Meehan, 2019; Selter, Persson, Risse, Kunzmann, & Neitzke, 2022). Providing a "good death" was perceived as a positive act that allows the veterinarian to end the suffering of an animal. Also, the relevance of a "good death" was related to supporting the well-being of the animal owner (Matte, Khosa, Coe, & Meehan, 2019). Our findings add to this literature by presenting the strategies veterinarians contemplate to come to the decision to provide a "good death" or to facilitate a "good life" if life is considered a life worth living. Besides the numerous strategies veterinarians contemplate, it is notable that they fulfill a proactive role in these strategies themselves, e.g., the veterinarians themselves search for a new owner when an animal is eligible for rehoming. This proactive attitude can be interpreted as another sign of the will of veterinarians to contribute to the decision-making process. Kondrup et al. (2016) report comparable findings regarding the willingness of veterinarians in small animal practices to provide veterinary care to animals of animal owners with limited finances. The care provided by Danish veterinarians often went beyond the legally required minimum to provide first aid to animals in need of immediate care (Kondrup et al., 2016). Whereas the study of Kondrup et al. (2016) provides

insight into the proactive role of veterinarians with regard to providing support to financially limited clients, our study contributes to this literature by documenting the proactive role veterinarians fulfill in several other strategies considered and used in EoL situations.

Besides the relevance of the stepwise approach and the strategies in relation to the final decision, these aspects seem to affect the way participants experience EoL situations. During the interviews, veterinarians shared several feelings related to the decision-making process and the final decision, including signs of relief, satisfaction, frustration, and incomprehension. Research by Morris (2012) and Matte, Khosa, Coe, and Meehan (2019) reported comparable findings, showing that the ability to facilitate a 'good death from both the animal's and the owner's perspective affected the veterinarian's well-being. Moreover, the manner in which veterinarians could perform euthanasia and the way they could support the animal owner in an EoL situation influenced the veterinarian's feeling of professional accomplishment (Matte, Khosa, Coe, & Meehan, 2019; Morris, 2012). Whether the feelings of participants affect the decision-making process itself would be of interest as future research.

Contributing to EoL decision-making processes is perceived as highly relevant to the participants. At the same time, this high relevance raises questions about the potential side effects of this strong desire to contribute. For veterinarians themselves, we can expect both positive and negative side effects. Depending on the alignment of the decision of the owner and the veterinarian, two potential *positive* side effects can be expected. If the owner's decision aligns with what the veterinarian had hoped for, veterinarians may experience a feeling of satisfaction or accomplishment for the commitment they showed. If the owner's decision does not align with the outcome the veterinarian hoped for, they could feel positive regarding their contribution to the decision-making process to the best of their ability. Potential *negative* side effects that could occur include compassion fatigue (Figley & Roop, 2006), signs of stress, or even signs of burnout.

Likewise, positive and negative side effects on the animal owner may be seen as well depending on the owner's preference regarding the involvement of the veterinarian in EoL decision-making. Previous research found that owners have different preferences regarding the veterinarian's level of involvement (Christiansen, Kristensen, Lassen, & Sandøe, 2015; Littlewood, Beausoleil, Stafford, & Stephens, 2021; Spitznagel, Marchitelli, Gardner, & Carlson, 2020). In essence, three different forms of involvement are reported: 1) a paternalistic role of the veterinarian providing the owner with clear instructions about what should be done, 2) a role as an information provider respecting the autonomy of owners to make a decision themselves, and 3) a form where both the owner and the veterinarian are actively involved by exchanging information and preferences to reach a consensus on how to proceed. This form is known as shared decision-making. Depending on the owner's preference regarding the involvement of the veterinarian, owners may experience *positive* effects in terms of support and guidance in their decision-making process (Christiansen, Kristensen, Lassen, & Sandøe, 2015; Littlewood, Beausoleil, Stafford, & Stephens, 2021; Spitznagel, Marchitelli, Gardner, & Carlson, 2020). Potential *negative* side effects could include either a desire for more autonomy and less interference from the veterinarian or an unfulfilled desire for greater involvement of the veterinarian.

Conclusion

This study increased our understanding of the EoL decision-making process of veterinarians in small animal practices in the Netherlands. Moreover, it identified current strategies used by veterinarians as part of this process are identified. Providing clarity about EoL decision-making and the strategies that are currently used by members of the Dutch veterinary profession can support individual members of the profession to reflect on their decision-making process. If veterinarians know what strategies their peers are using to deal with EoL situations, this may help to reduce the stress they experience in such situations. In addition, veterinarians may find inspiration in the study results for a helpful and systematic approach. For the veterinary profession itself, the current results can be used as a starting point to describe best practices

for EoL decision-making in small animal practice. These best practices could be used as an extension of the current European Veterinary Code of Conduct, to provide more guidance and support in terms of strategies that veterinarians can use to come to decisions in EoL situations. As our results focus on veterinarians in small animal practice, future research among veterinarians working with animals kept on farms or horses could provide insight into the applicability of our findings beyond our scope. Moreover, this study only involved veterinarians in the Netherlands. Future cross-national studies or studies conducted in another country in a way that allows for comparison with the present study would help to learn more about the generalizability of the current results. Finally, a subsequent quantitative study, such as a questionnaire-based survey, could provide insight into the representative results relating to the themes presented in this paper.

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Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

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