

Research Article

Pet Owners' Expectations for Pet End-of-Life Support and After-Death Body Care: Exploration and Practical Applications

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A B S T R A C T

Pet owners caring for a pet during the end of its life are faced with aftercare choices and decisions. This study, through the use of an online anonymous survey, explored the perceptions and expectations of United States (US) pet owners regarding end-of-life issues, with a focus on after-death body care. Participants living in the US who were the current owners of at least one cat or dog, had a regular veterinarian, and had made end-of-life decisions for at least one pet were recruited for the study. Survey respondents included 2043 dog and/or cat owners (41.4% male, 57.9% female) of which 68% had made cremation decisions and 32% had made burial decisions for at least one pet in the past. The majority of these owners indicated they preferred to work with a specific crematory (43%) or cemetery (70%) and over 95% of these owners reported feeling it important to work with their preferred after-death body care service. In terms of guidance, most owners indicated they rely on their veterinary team to help them with end-of-life decisions and orchestrating arrangements on their behalf with tertiary pet aftercare services/companies. Participants indicated being more likely to use veterinary staff for pet death and dying as well as after-death body care and memorialization than any other source. When asked about these after-death body care conversations, 73% indicated they need 20 minutes or less. Participants expressed significant concern over several aspects of after-death body care (e.g., body mislabeling, type of container used for short term and long-term storage). Results of this study create the foundation for practical, ethical after-death body care recommendations to help guide veterinary teams acting on their clients' behalf.

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Introduction

Many people view their pets as family members and therefore, it is not surprising that the death of a pet is often accompanied by significant grief.¹⁻⁴ For some individuals, the intensity of the grief experience due to the death of a pet is similar to that experienced with a human loss.¹ Typically, when a human family member dies, survivors engage in traditional funeral rites and rituals. These often include meeting with a funeral director, choosing body disposition options, hosting a funeral or memorial service, and writing an obituary.⁵ In contrast, the death of a pet does not typically have similar procedures or rituals that allow owners to express their grief.^{1,6} In contrast, the death of a pet is often disenfranchised; defined as a loss that is not supported or validated by society.^{7,8} Oftentimes, the griever does not receive the emotional support they need from family or friends; instead often being the recipient of comments that minimize their loss.¹ Veterinary professionals, however, can play a key role in supporting pet owners during their time of loss by validating their grief.⁹

The time prior to death, whether human or animal, typically involves end-of-life (EOL) decisions and care. Much has been written about human end-of-life care and decision making, with an increasing emphasis on the positive aspects of preplanning as a way to create an "appropriate death" – a death which one chooses for him/herself.^{10,11} Recommendations include completing advance directives (a written statement of a person's wishes regarding medical

treatment), as well as prearranging funeral services and plans for body disposition.¹² Preplanning can help ensure people have a voice in their own EOL decisions, as well as reduce the stress on their families, helping them to make more informed decisions at a time when they are not in crisis.¹²⁻¹⁴ Similarly, there are many published recommendations that promote EOL conversations and decision-making for pet owners.¹⁵⁻¹⁷ Yet, these resources typically focus on medical treatment with far fewer that contain information about after-death body care options. Bishop et al.,¹⁶ for example, discussed the need for veterinarians to talk to owners about post mortem body disposition, including how the body will be temporarily stored (e.g., refrigerated, frozen) as well as final body disposition (e.g., cremation, burial, etc.). Similarly, Ellis¹⁸ recommended that veterinary professionals educate themselves on body care options and the nuances involved in each option.

While many aspects of EOL planning for human and pet death are similar, euthanasia is a uniquely veterinary medicine-related EOL option, and in fact, one of the most common procedures conducted by veterinary teams. Previous research suggests that owners are generally quite satisfied with the euthanasia appointment and procedure, including the decision to be present,¹⁹ how the euthanasia was performed,²⁰ the level of compassion showed by the veterinarian and staff,¹⁹ the level of privacy offered,²⁰ and feeling informed and prepared.²¹ Less is known, however, about owners' preferences for their pet's body care after euthanasia.

The veterinarian is the owner's primary source of information about their pet's after-death body care, evidenced by the fact that approximately 90% of pet owners expect their veterinarian to discuss their pet's after-death body care with them.¹⁹ Without these conversations, many pet owners may be unaware of their choices (e.g., cemetery burial, alkaline hydrolysis, choice of urn, legality of home

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burial, funeral services hosted by the crematory, etc). Owners who are not informed of their options may feel angry or believe they missed out on the opportunity to choose the ideal way to memorialize their pet.⁴ In addition to final disposition, owners are also concerned about what happens to their pet's body after death and the timeliness of events. For example, previous studies suggest that owners who choose cremation want assurance they will receive the remains in a timely manner and that the remains they receive are actually from their own pet.^{19,22,23}

Although owners expect the veterinarian to discuss aftercare and bereavement, they do not expect their veterinarian to take on the role of funeral director or counselor.⁶ Yet, many veterinarians are reluctant to broach EOL subjects for a variety of reasons. These include concern that initiating EOL issues may be perceived as premature by the owner or uncertain whether the owner wants to discuss the topic.¹⁹ Others worry that EOL conversations will require too much time or feel they have not been adequately trained to have these conversations.^{20,21} Additionally, some veterinarians do not feel they can adequately answer owners' questions about after-death body care processes once the pet leaves their hospital.²⁴ This reluctance to address EOL issues is even evident on veterinary hospitals' websites. A recent review of 500 US veterinary hospital websites found only 160 (32%) include any reference to euthanasia, and even fewer (103; 20.6%) mention after-death body care. Of those that reference body care, the majority include information on cremation (95.1%), with far fewer (36.9%) mentioning burial.²⁵ Veterinarians reluctant to discuss EOL issues can benefit from utilizing alternative sources of EOL information in the form of brochures, handouts, and books; resources found to be appreciated by many owners.^{4,6,9,20,21}

Despite the growing body of literature on pet EOL issues, there are many unanswered questions including what pet owners want in regards to their pet's after-death body care, and what they expect from their veterinary team during their time of loss, including after-death body handling and storing. This study was designed to help answer these questions and thereby offer guidance to veterinary and pet aftercare professionals in regards to clients' needs pertaining to after-death body care conversations, support, and logistics.

Materials and Methods

An online, anonymous, cross-sectional survey was developed using Qualtrics (Qualtrics, Inc., Provo, UT). When developing this survey, the decision was made to use the more traditional terms "pet" and "owner" instead of "companion animal" and "guardian" because it was felt that, while the terms "companion animal" and "guardian" are becoming more commonplace, they are still not as universally recognized as the terms "pet" and "owner." Therefore, to be as inclusive as possible when surveying the public, the more traditional terms were deemed most appropriate. The survey was designed, reviewed, and tested by the co-investigators, their colleagues and pet owners. The survey was pilot tested by 30 individuals for ambiguity and/or potentially missing or inappropriate response options with revisions made based on these results. The study was approved by the Colorado State University Institutional Review Board (IRB # 20-9995H). Survey respondents were recruited June 25, 2020-July 10, 2020 through Amazon's Mechanical Turk (MTurk; Amazon Inc., Seattle, WA) platform, an open online marketplace providing access to potential survey respondents in which survey respondents receive small monetary compensation for completing surveys. Diversity of participants recruited through MTurk is higher than typical Internet samples or American college-based samples, and the quality of data collected meets or exceeds the psychometric standards considered acceptable in published research in the social sciences.²⁶

In order to minimize the influence of geographic and cultural differences on respondent data, the survey was made available only to responders residing in the United States. Adult (18 years or older)

participants who were the current owners of at least one cat or dog, had a regular veterinarian, and had made EOL decisions, as an adult, for at least one pet were recruited for the study.

Demographic information (age, gender, ethnicity, and profession (veterinary related, animal/pet related, neither)) was collected. Participants were asked if they had made a decision to have a pet cremated or buried, and if they responded positively, they were asked follow-up questions pertaining to specific after-death body options. Next, participants were asked to indicate to what degree they rely on their veterinarian for recommendations, supplies, and several types of pet care, with responses including viewing their veterinarian as a primary source, one resource of many, not a source at all, don't know, or not applicable. They were then asked to indicate how much input they would like from their veterinarian when making choices about their pet's care (with options ranging from minimal to maximum input). Additional communication questions included asking participants how likely they would be to use several potential information sources to learn about their pet's death and dying process and after-death body care/memorialization. Information source options included veterinarian/veterinary staff, animal/pet professionals, friends/family, internet, and pet death related resources (e.g., crematory/cemetery staff). The timing of communication regarding after-death body care and memorialization was queried, with choices including never, while the pet is still healthy, and after the pet's death. Next, they were asked to indicate how much time they felt they would need with their veterinary team to discuss after-death care options and how they would like to receive this type of information (e.g., review in veterinary hospital, given material to view later). Additionally, participants were asked how much information they would like about the different aspects involved with pet death; options included wanting all the details, wanting general information only, or preferring to be told what to do. Pet owners were also asked what level of planning they prefer regarding after-death body care and memorialization with options including wanting everything in place well ahead of time to waiting until after their pet's death.

Another set of questions asked participants how important they view several aspects of after-death body care (e.g., how the body is stored immediately after death) and what option they most prefer (e.g., individual burial, cremation, etc.). Next, they were asked to indicate their concern level with several aspects involved with after-death body care. Examples include "that my pet might be mislabeled or lost" and "the type of container my pet is stored in permanently" and whether their veterinarian has toured the recommended after-care facility. Final questions included views on veterinarian compensation for after-death body care and interest in pet loss support resources. Lastly, they were queried as to whether they would have done anything different regarding EOL decisions for their pet. The survey ended with an open-ended question to give participants an opportunity to provide additional thoughts about what they would like from their veterinarian regarding after-death body care. Data were analyzed using SPSS (IBM, Armonk, NY).

Results

Respondents who did not own a pet, did not have a regular veterinarian or had never made EOL decisions for a pet were not included in analysis; leaving a sample size of 2043. Because everyone did not answer every question, the total responses for each question have been noted.

The mean age of respondents was 39 (± 12.8) years; median = 36 years. Respondents included 1121 (54.9%) dog owners, 454 (22.2%) cat owners, and 468 (22.9%) owners of at least one dog and one cat. The majority of respondents were female, White, and not employed in veterinary or animal-related professions. Most pet owners reported visiting their veterinarian at least 1-2 times a year and having made EOL decisions for 5 or fewer dogs or cats (Table 1).

Table 1
Owner Demographics

	At Least Monthly	3-4 Times/Year	1-2 Times/Year	Less Than Once a Year				
Frequency of veterinary visits (n = 2041)	312 (15.3%)	692 (33.9%)	902 (44.2%)	135 (6.6%)				
Owner gender (n = 2006)	Male	Female	Nonbinary	NA				
	831 (41.4%)	1161 (57.9%)	10 (0.5%)	4 (0.2%)				
Owner ethnicity (n = 2043)	Asian	Black/African American	Hispanic/Latino	Native American/Alaskan Native	Native Hawaiian/Pacific Islander	White	Other	NA
	104 (5.1%)	193 (9.4%)	135 (6.6%)	59 (2.9%)	14 (0.6%)	1623 (79.4%)	15 (0.7%)	12 (0.6%)
Profession (n = 2005)	Veterinary related	Animal/pet related (dog trainer, groomer, etc)	Not veterinary or animal/pet related					
	228 (11.4%)	237 (11.8%)	1540 (76.8%)					
As adult, number of dogs/cats made end of life decisions for (n = 2043)	1-5	6-10	More than 10					
	1874 (91.7%)	132 (6.5%)	37 (1.8%)					

Crematories and Cemeteries

Participants were asked if they had ever made decisions regarding cremation or burial. A total of 1398 (68.4%) had made cremation decisions, of which 43.2% (594/1374) indicated a preference to work with a specific crematory. For the majority of these owners, being able to work with their preferred crematory was important (very important – 243, 40.9%; moderately important – 326, 54.9%). Only 25 (4.2%) reported it was not important. Six hundred fifty-five participants (32.1%) reported they had made burial decisions, of which 457 (70.2%) reported preferring a specific cemetery. Most of these owners reported it was important to them to use their preferred cemetery in the future (very important – 179, 39.2%; moderately important – 256, 56.0%; not important – 22, 4.8%).

Perceptions About After-Death Body Care

Participants were asked to indicate their agreement level using a 5-point Likert scale (1 = does not describe me at all and 5 = describes me very well) with 2 statements reflecting personal views about the importance of after-death body care (n = 2042). The first statement read: "I feel that my pet's quality of life is critically important but after my pet dies, I am not overly concerned about after-death body care" to which 1094 (53.6%) indicated it does not describe them well (selected 1 or 2), 482 (23.6%) indicated they felt neutral (selected 3), and 466 (22.8%) reported it described them very well (selected 4 or 5). When asked to indicate their agreement level with the statement "I feel that my pet's quality of life is critically important and also feel strongly about how best to care for my pet's body after they die," 1151 (56.4%) said the statement described them very well (selected 1 or 2), 433 (21.2%) said they felt neutral (selected 3) and 458 (22.4%) said it did not describe them well (selected 4 or 5).

Pet owners were next asked to indicate their preferred after-death body care option (n = 2031) to which the most frequently chosen options included traditional flame cremation (820, 40.4%) or individual burial at home (708, 34.9%). Other options endorsed less

frequently included individual burial at a cemetery (217, 10.7%), memorial body donation (66, 3.2%), mass burial (53, 2.6%), alkaline hydrolysis (water-based cremation) (38, 1.9%), no preference (65, 3.2%), other (12, 0.6%), or don't know (52, 2.6%).

The impact of religious or spiritual beliefs was queried through a series of questions pertaining to the death and dying process (euthanasia decisions), after-death body care (burial, cremation, etc), and memorialization (pawprints, urn, etc.) (n = 2031). For each of these questions, approximately 25% of respondents noted that their religious or spiritual beliefs had a significant impact (Table 2).

Next, participants indicated their concern level (using a 5-point Likert scale with 1 = not concerned at all and 5 = very concerned) to several statements regarding after-death body care. For example, owners were asked how concerned they are that their pet might be mislabeled or lost (to which 1021, 52.6% reported high concern) and how their pet is physically handled by other people after death (1113, 57.2% reported high concern). See Table 3 for a full list of concern items and responses.

Several follow-up questions were asked to provide additional insight regarding the concern-related statements. For example, owners were asked to indicate their views of several options for body storage immediately after death but before burial or cremation using a 3 point scale (unacceptable, neutral, or acceptable) (n = 2017). Options included blanket/shroud (rated acceptable by 1334, 66.1%), trash bag (rated acceptable by 314, 15.6%), designated cadaver bag (rated acceptable by 1065, 52.8%), and casket (rated acceptable by 1034, 51.3%) (Table 4).

When asked about a preference regarding the period of time in which a deceased pet should remain at a veterinary hospital before being transported to a crematorium or cemetery (n = 2017), the most common response was a preference for less than 24 hours (527, 26.1%). Other common responses included "had not thought about it" (409, 20.3%), ok with the most convenient time for veterinary hospital, crematory or cemetery (369, 18.3%) and a preference for no more than 1-2 days (365, 18.1%). Less common responses included no preference (258, 12.8%), no more than 3-4 days (65, 3.2%) and 5-7 days (24, 1.2%).

Table 2
Impact of Religious or Spiritual Beliefs

	No Impact	Moderate Impact	Significant Impact	NA/Not Religious or Spiritual
Death and dying process (e.g., euthanasia decisions)	737 (36.3%)	505 (24.9%)	530 (26.1%)	259 (12.8%)
After-death body care (burial, cremation, etc.)	800 (39.4%)	49 (2.4%)	436 (21.5%)	296 (14.6%)
Memorializing your pet after death (e.g., pawprints, urn, pictures, etc.)	734 (36.1%)	473 (23.3%)	522 (25.7%)	302 (14.9%)

Table 3
Concern and Views Regarding After Death Body Care

	1 – Not Concerned at All	2	3	4	5 – Very Concerned
That my pet might be mislabeled or lost (n = 1942)	358 (18.4%)	262 (13.5%)	301 (15.5%)	439 (22.6%)	582 (30.0%)
That I won't be able to memorialize or honor my pet the way I want (n = 1950)	393 (20.2%)	300 (15.4%)	375 (19.2%)	423 (21.7%)	459 (23.5%)
The cost of my pet's after-death body care (n = 1950)	227 (11.6%)	186 (9.5%)	346 (17.7%)	545 (27.9%)	646 (33.1%)
How my pet is physically handled by other people after their death (n = 1948)	247 (12.7%)	208 (10.7%)	380 (19.5%)	461 (23.7%)	652 (33.5%)
The type of container my pet is stored in immediately after their death (before burial or cremation) (n = 1938)	360 (18.6%)	292 (15.1%)	390 (20.1%)	440 (22.7%)	456 (23.5%)
The type of container my pet is stored in permanently (n = 1930)	281 (14.6%)	209 (10.8%)	360 (18.7%)	470 (24.4%)	610 (31.6%)
Keeping my pet separate from other deceased pets immediately after their death (before burial or cremation) (n = 1927)	376 (19.5%)	278 (14.4%)	369 (19.1%)	419 (21.7%)	485 (15.2%)
Keeping my pet with the physical keepsakes they loved in life (e.g., toys, blanket) immediately after their death (n = 1945)	358 (18.4%)	241 (12.4%)	328 (16.9%)	427 (22.0%)	591 (30.4%)
Minimizing the amount of time between my pet's death and their final resting state (burial, cremation) (n = 1929)	201 (10.4%)	172 (8.9%)	351 (18.2%)	544 (28.2%)	661 (34.3%)

Table 4
Participants' Views on Acceptability of After Death Body Storage Options (Before Burial or Cremation)

	Unacceptable	Neutral	Acceptable
Blanket/shroud	87 (4.3%)	596 (29.5%)	1334 (66.1%)
Trash bag	1290 (64.0%)	413 (20.5%)	314 (15.6%)
Designated cadaver bag	163 (8.1%)	789 (39.1%)	1065 (52.8%)
Casket	152 (7.5%)	831 (41.2%)	1034 (51.3%)

Communication Regarding Pet Death, Dying and After-Death Body Care

The next segment of the survey focused on pet owners' preferences regarding communication and support by their veterinarian in relation to death, dying and after-death body care. The first set of questions explored the degree to which pet owners rely on their veterinarian for a wide range of services. They were asked if their veterinarian was the primary resource, one resource of many, or not a resource, for several services including preventative care (primary resource: 1211/2013, 60.2%); emergencies (primary resource: 1182/2009, 58.8%); grooming (primary resource: 209/1756, 11.9%); boarding (primary resource: 222/1705, 13.0%); pet medications (primary resource: 1163/1982, 58.7%); recommendations for pet food (primary resource: 383/1961, 19.5%); recommendations related to pet death and dying (primary resource: 974/1995, 48.8%); and recommendations related to after-death body care and memorialization (primary resource: 762/1966, 38.8%).

Participants were next asked to indicate how likely (using a 5 point Likert scale with 1 = not at all likely to 5 = extremely likely) they would be to use potential sources of information including veterinarian/veterinary staff; animal/pet professionals (e.g., dog day care,

groomers, pet sitters etc.); friends, family and other pet owners; internet (websites, blogs, etc.); or pet-related resources (crematory/cemetery staff, doula/chaplain, etc.) as a resource for information about pet death and dying as well as after-death body care and memorialization (n = 2031). Participants indicated being more likely to use veterinarians and veterinary staff for pet death and dying as well as after-death body care and memorialization than any other source (Table 5).

After assessing the likelihood of using veterinarians as an information resource, pet owners were asked to indicate how much information they want from their veterinarian in regards to preventative/wellness care, serious illnesses (e.g., cancer), accidents, EOL issues (if and when to euthanize), and after-death body care (n = 2042). Options included a spectrum of choices from "I typically want minimal input from my veterinarian, I typically know what I want" to "I typically do not need to hear the details; I want my veterinarian to make decisions for me." These results are detailed in Table 6. Related, pet owners were then asked when they would prefer to have conversations with their veterinarian about after-death body care and memorialization options (n = 2023). The most common answer was "after my pet becomes sick but before death" (822, 40.6%), followed by "during my pet's death, such as during a euthanasia appointment" (458, 22.6%), "when my pet is still healthy" (315, 15.6%), "after my pet's death when I've had time to process the loss" (191, 9.4%), "never" (161, 8.0%), "don't know" (61, 3.0%) and "other" (15, 0.7%).

When asked to indicate their preferred level of planning regarding their pet's after-death body care and memorialization (n = 2023), the most common response was "I would likely discuss things with others before my pet died, but not make any decisions until during or after the death" (endorsed by 906, 44.8%), followed by "I would like to make sure everything is in order well in advance of my pet's

Table 5
Stated Likelihood of Using Potential Sources of Information for Pet Death/Dying and After-Death Body Care/Memorialization

	Not at All Likely	Somewhat Unlikely	Neither Likely Nor Unlikely	Somewhat Likely	Extremely Likely
<i>Pet death/dying</i>					
Veterinarian/veterinary staff	32 (1.6%)	83 (4.1%)	180 (8.9%)	733 (36.1%)	1003 (49.4%)
Animal/pet professions (not veterinary - e.g., dog day daycare, groomers, pet sitters, etc.)	442 (21.8%)	351 (17.3%)	408 (20.1%)	560 (27.6%)	270 (13.3%)
Friends, family, other pet owners	129 (6.4%)	214 (10.5%)	435 (21.4%)	952 (46.9%)	301 (14.8%)
Internet (websites, blogs, etc.)	284 (14.0%)	274 (13.5%)	460 (22.6%)	757 (27.3%)	256 (12.6%)
Pet death related resources (crematory/cemetery staff, doula/chaplain, etc.)	333 (16.4%)	254 (12.5%)	447 (22.0%)	740 (36.4%)	257 (12.7%)
<i>After-death body care/memorialization</i>					
Veterinarian/veterinary staff	150 (7.4%)	156 (7.7%)	252 (12.4%)	810 (39.9%)	663 (32.6%)
Animal/pet professions (not veterinary - e.g., dog day daycare, groomers, pet sitters, etc.)	492 (24.2%)	293 (14.4%)	434 (21.4%)	569 (28.0%)	243 (12.0%)
Friends, family, other pet owners	200 (9.8%)	187 (9.2%)	413 (20.3%)	893 (44.0%)	338 (16.6%)
Internet (websites, blogs, etc.)	348 (17.1%)	246 (12.1%)	435 (21.4%)	750 (36.9%)	252 (12.4%)
Pet death related resources (crematory/cemetery staff, doula/chaplain, etc.)	347 (17.1%)	217 (10.7%)	373 (18.4%)	765 (37.7%)	329 (16.2%)

Table 6
Participants' Views on Amount of Input They Want From Their Veterinarian for a Range of Medical Issues

	I Typically Want Minimal Input From My Vet, I Typically Know What I Want	I Typically Want Input From My Vet but I Like to Mostly Make Decisions Myself	I Typically Want Input From My Vet; but I Like to Make Decisions as Equal Partners	I Typically Want Significant Input From My Vet; I Feel Comfortable Mostly Leaving Decisions up to My Vet	I Typically Do Not Need to Hear the Details; I Want My Vet to Make Decisions for Me
Preventative care/wellness	132 (6.5%)	452 (22.1%)	710 (34.8%)	648 (31.7%)	100 (4.9%)
Serious illness	88 (4.3%)	319 (15.6%)	662 (32.4%)	763 (37.4%)	210 (10.3%)
Accidents	86 (4.2%)	277 (13.6%)	601 (29.4%)	827 (40.5%)	251 (12.3%)
End of life issues (when/if to euthanize)	112 (5.5%)	484 (23.7%)	785 (38.4%)	496 (24.3%)	165 (8.1%)
After death body care	386 (18.9%)	611 (29.9%)	554 (27.1%)	357 (17.5%)	134 (6.6%)

passing" (endorsed by 563, 27.8%), "I would likely wait until my pet has died before making any decisions" (endorsed by 486, 24.0%) and I don't know (68, 3.4%).

When asked how much time pet owners would like with their veterinary team to discuss after-death care options (e.g., types of aftercare, cost of services, memorialization, body handling) (n = 2023), the most common response was 5-10 minutes (667, 33.0%), followed by 11-20 minutes (549, 27.1%), 21-30 minutes (300, 14.8%), 1-5 minutes (253, 12.5%), more than 30 minutes (152, 7.5%), and don't know (102, 5.0%). The next set of questions asked how pet owners would like veterinarians to share information about after-death body care options (with an option to select all that apply), to which 1449 (71.6%) indicated they prefer to review and discuss after-death body care options together in the veterinary hospital, and 1116 (55.2%) indicated they would like to be given after-death body care materials to view/read at home later.

Related to the previous question, participants were asked how important they feel it is that their veterinarian visit/tour the recommended aftercare facility (n = 1914). Responses ranged from very important (692, 36.2%), moderately important (915, 47.8%), to not important (307, 16.0%). Pet owners were then asked to choose which of the 3 financial compensation related statements they felt best matched their beliefs about veterinarians and compensation for after-death body care arrangements. The statements included "Making arrangements for after-death body care can be very taxing to veterinary teams and they should be generously compensated" (385, 19.2%); "If a veterinarian is helping to make arrangements for after-death body care, some financial compensation seems appropriate (1248, 62.2%)," and "Only the after-death body care service (e.g., crematorium, cemetery) should be compensated, not the veterinary team" (374, 18.6%).

To ascertain the amount of information pet owners want to know about the death/dying process, they were asked to indicate their preference for the level of detailed information wanted regarding several death/dying and aftercare aspects (n = 2020). Options included "I want all the details," "I want general information but I don't need all the small details" and "I would prefer to just be told what I need to know." The death and dying aspects assessed included the dying process; what happens to their pet after-death while still at the

veterinary hospital (before being transported to cemetery or crematorium); what happens to their pet at the cemetery or crematorium; and options to memorialize their pet. With the exception of "what happens to my pet at the cemetery or crematorium," the most common response was "I want general information but don't need all the details." For this statement, the most common response was "I would prefer to just be told what I need to know." Results are summarized in Table 7.

One of the final questions asked participants to indicate how likely they would be to utilize a variety of pet loss related resources and options if they were available. These options included support groups (in person and virtual/video), private counselor, books, online resources, and funeral or memorial service. Participants reported being most likely to use recommended books and online resources (See Table 8). Lastly, participants were asked, upon thinking back on decisions they have made regarding after-death body care for their pet(s), if there are things they would do differently (n = 2008). The majority (1800, 89.6%) said no, they would not do anything differently while 208 (10.4%) reported they would have done something different. When asked to explain, the most common responses involved the desire to be better prepared and informed about the process and all the possible options for death and dying decisions as well as after-death body care.

Discussion

The results of this study provide insights into how pet owners feel about EOL issues pertaining to their pet, including after-death body care preferences and the role they would like their veterinarian to play during this process. Nearly half of respondents reported that they look to their veterinarian as their primary resource for pet death and dying support. Furthermore, nearly 40% of respondents reported viewing their veterinarian as the primary resource for after-death body care and memorialization (higher than pet food/nutrition recommendations); while only 16% reported that they are likely to use professionals directly related to the pet death care industry (pet crematory/cemetery staff, death doulas, etc.) These results suggest that pet owners expect their veterinary teams to be informed about local

Table 7
Owner Preference for Amount of Information Given About Specific Death/Dying and Aftercare Aspects

	I Want All the Details	I Want General Information but I Don't Need All the Small Details	I Would Prefer to Just be Told What I Need to Know
The death/dying process (euthanasia, hospice)	763 (37.8%)	943 (46.7%)	314 (15.5%)
What happens to my pet after death while still at the veterinary hospital (before being transported to cemetery or crematorium)	618 (30.6%)	770 (38.1%)	632 (31.3%)
What happens to my pet at the cemetery or crematorium	572 (28.3%)	696 (34.5%)	752 (37.2%)
Options to memorialize my pet	912 (45.1%)	687 (34.0%)	421 (20.8%)

Table 8
Pet Owners' Likelihood of Using Pet Loss Related Resources if Available

	Unlikely	Somewhat Likely	Extremely Likely
Support group – in person (n = 1928)	1002 (52.0%)	489 (25.4%)	437 (22.7%)
Support group – virtual/video (n = 1878)	1010 (53.8%)	540 (28.8%)	328 (17.5%)
Private counselor (n = 1888)	973 (51.5%)	515 (27.3%)	400 (21.2%)
Recommended books (n = 1904)	614 (32.2%)	709 (37.2%)	581 (30.5%)
Recommended online resources (n = 1922)	440 (22.9%)	694 (36.1%)	788 (41.0%)
Funeral or memorial service (n = 1868)	769 (41.2%)	612 (32.8%)	487 (26.1%)

after-death body care options and memorialization and be willing to have EOL conversations.

Knowing when to broach conversations around after-death body care and memorialization can be challenging for veterinary teams. This study found that 41% of pet owners would like to talk about aftercare options when their pet becomes terminally ill, but before the death event itself (euthanasia or natural death). Some pet owners feel it acceptable to discuss after-death body care while their pet is still healthy, suggesting that it may be beneficial for some clients to broach the subject during geriatric visits before their pet becomes gravely ill. Talking about the death of a pet and memorialization options is complicated. The fact that nearly 10% of respondents reported wanting time after the death to think about what they want for their pet suggests the potential of negative consequences when owners feel rushed or forced into making decisions before they are ready. Nearly 45% of pet owners, when queried about when they would like to discuss after-death body care with their veterinarian, indicated they would likely not make any decisions until during or after the death of their pet, but 28% said they would like everything finalized well in advance. This suggests that a significant number of pet owners could benefit from preplanning.

Over half of the respondents indicated they were concerned about after-death body care, similar to results from previous studies.¹⁹ When asked what after-death body care option they preferred, the majority indicated traditional flame cremation. These results are not surprising given the prevalence of this option in veterinary medicine. It is unclear how many pet owners would choose differently if provided information about other options. Other aspects of after-death body care that can impact owners' decisions are religious or spiritual beliefs. These beliefs were reported to have a significant impact on aftercare decisions for approximately 25% of respondents. While perhaps less important to some, it is suggested that those who feel strongly about integrating their beliefs into their choices be invited to do so. Their preferences are ideally identified during preplanning or through inquire during the euthanasia procedure.

The responses to a series of questions related to after-death body care concerns illuminated several areas worth noting. For example, over half of the respondents shared their concern over the mislabeling of their pet's body. Certainly, veterinary personnel have the potential to make mistakes; there are many moving components to the daily operations of a working veterinary hospital and mistakes are possible regardless of intent.²⁷ Yet, the utmost care should be taken to minimize error risks. One potential solution may be to shift more responsibility to pet aftercare companies who can work directly with pet owners to decrease the veterinary hospital's workload and risk of error. A substantial number of pet owners also reported concerns about how their pet's body is physically handled after death, including body holding time, direct body containment, and storage. When asked, the most common response regarding a preferred holding time was less than 24 hours. When applicable, veterinary hospitals are advised to share these preferences with local aftercare providers to facilitate expedient collection times, including same day, if possible.

When it came to sharing their preferences on how their pet's body should be contained, the most popular response was in a blanket or

shroud. This reflects behavior in-line with the human-animal bond; similar to tucking the body in a sleep-like state or how the owner may want to care for the body themselves. The use of designated cadaver bags or pet caskets was chosen as acceptable by just over half of the respondents. With 85% of pet owners indicating trash bags are unacceptable, it is suggested that veterinary teams select holding containers that align with clients' expectations.

After-death body care options are plentiful in many parts of the United States. If veterinary teams want to support their clients in these decisions, it is suggested they become knowledgeable about available options and package the information in an easy to understand manner. When asked, over 80% of respondents reported feeling it important for their veterinary team to visit any aftercare facilities they recommend. First-hand knowledge of local aftercare facilities has also been deemed important by the American Veterinary Medical Association, which in a recent publication, stated that veterinarians are to perform due diligence in selecting aftercare providers.²⁸ Touring local facilities at least once a year helps to ensure that the level of care within these facilities matches the hospital's standards. It is important to note that veterinarians can be held liable for any wrongdoings or neglect by the aftercare companies with which they choose to work.²⁹ To avoid such responsibility, some veterinary hospitals have decided it best for the pet owner to work directly with the aftercare company. This arrangement with aftercare facilities can also be beneficial to clients, given the fact that, as supported by these results, many pet owners have a preference for a specific crematory or cemetery. At a minimum, it is suggested that whenever possible, teams should ask clients which aftercare company they prefer. Giving pet owners a choice can be empowering, thereby reducing the sense of helplessness often felt during pet loss.

If veterinary teams want to facilitate after-death body care and memorialization themselves, this study revealed that nearly 72% of pet owners would like to learn about options through conversations in the hospital. The remainder indicated a preference to be sent home with literature or access to other materials for later review. Pet owners are likely best supported with a combination of both. Hospital website space dedicated to aftercare options, including links to aftercare companies, as well as offering printed informational materials are practical, yet underutilized ways to educate pet owners on available options.²⁵

In terms of talking to veterinary teams about after-death body care and memorialization, nearly 75% of respondents indicated that they would like 20 minutes or less to review available options, although a minority did indicate they would likely need more than 20 minutes. Without knowing exactly how much time a client may need to discuss options, the first step to streamlining these conversations may be to ask about previous experiences, preferred crematory/cemetery companies with which they want to work, and whether they would like to speak directly with aftercare companies to make arrangements. Partnering with pet aftercare companies to help with these conversations and provide printed literature may be useful.

When pet owners were asked how much detail they wanted regarding information about aftercare, the common response was a desire to be told general information rather than all the details, however a sizable minority indicated they wanted to know the details. The topic in which owners were most likely to want all the details was memorializing options (45%). This suggests that a significant number of owners want to carefully review such options and that time spent reviewing aftercare options with pet owners is best facilitated by asking owners the level of detail they prefer.

A feature of this survey, not previously assessed, pertained to owners' perceptions regarding financial compensation of veterinary teams for assisting with after-death body care preparation. Respondents were asked how they feel charges should be set for aftercare support, with 62.2% agreeing with the statement "If a veterinarian is helping to make arrangements for after-death body care, some

financial compensation seems appropriate.” An additional 19% thought generous compensation was appropriate while an equal number (19%) reported feeling that “Only the after-death body care service (e.g., crematorium, cemetery) should be compensated, not the veterinary team.” What was not identified is what monetary amounts equal “appropriate” or “generous”; an area for further research. Setting the price for aftercare services can be difficult. One option is for veterinary teams to assess how often owners are unable to afford the type of aftercare they want. If owners routinely must choose, based on cost, something other than their preferred option (e.g., communal/group cremation rather than private cremation), the veterinary team may want to either lower their fees to more closely align with the aftercare company’s fees or determine if the pet owner would be better off handling arrangements on their own. Regardless of the implemented solution, increased pricing transparency is suggested to minimize risk of damaging the client-hospital relationship.

One of the last areas assessed was the likelihood of using, when available, pet loss related resources. A substantial number of respondents indicated they were extremely interested in support groups, reading books, utilizing online resources, and participating in funeral or memorial services. This provides deeper insight into the importance of informing pet owners about available support options, especially when the loss of the pet is recent and the need to understand and navigate grief is high. Distribution of printed pet loss literature is a reasonable way of assuring every pet owner has some level of grief support.

Based on these results, we offer the following practical recommendations to veterinary teams seeking to enhance pet owner support in after-death body care. As increasing numbers of veterinary hospitals are choosing to include EOL services in-house, it is critical these services are conducted in a manner that minimizes the potential for error and best aligns with pet owners’ needs and expectations. To this end, the following ethical aftercare recommendations were designed to encourage all veterinary teams to practice veterinary medicine in a benevolent, ethical manner; one that preserves and enhances a positive veterinary image by prioritizing pet owners’ preferences when making decisions about aftercare policies and procedures.

Ethical Aftercare Recommendations:

- Dissemination of Information:
 - Take the time needed to address owners’ aftercare concerns and options (typically 5-20 minutes)
 - Ask owners if they have a preferred crematory/cemetery and respect their decisions
 - If owners have no preference, present a choice of local pet aftercare options
 - Provide written explanations of aftercare services/offers including cost considerations (e.g., aftercare company brochures, website links)
 - Utilize proper forms (e.g., crematory authorization, burial forms, etc.) to reduce liability risk and increase transparency
- Procedures
 - Follow pet owners’ choices closely
 - Use respectful, designated cadaver bags or containers (e.g., caskets, shrouds) in-line with state mandates
 - Perform procedures with due diligence (e.g., procedural checklist, use technology to track body, etc.) to prevent mistakes
 - Properly label bodies immediately (i.e., within 30 minutes of appointment completion)
 - Submit pet information to aftercare companies as soon as possible (i.e., within 1 hour)
 - Ensure pet bodies leave the hospital with proper labeling and instructions
 - Partnering with aftercare companies
 - Visit local pet aftercare facilities annually to familiarize yourself with their offerings and policies and ensure they meet industry standards

- Encourage aftercare companies to:
 - Provide emotional assistance to pet owners (i.e., grief support facilities for visitations/services, etc.)
 - Obtain bodies as quick as possible (e.g., within 24 hours)
 - Demonstrate high quality body handling standards (i.e., proper containment and cleanliness; respectful conduct with or without owners present)
 - Play an active role in pet owner education and preplanning

Conclusions

This study examines pet owners’ preferences and expectations related to EOL and, specifically, after-death body care; offering insights for veterinary teams on how best to support their clients during these times. Limitations to this study include the fact that the data collected represents the views of US pet owners willing to take an online survey regarding EOL issues and may not be generalizable to other populations. The survey was not available to owners who do not have internet access and was limited to those able to complete a survey in English. Further research and the establishment of best practices are warranted in several areas including: preplanning conversations, the holding process of deceased pets, the process of returning ashes to owners, the creation of memorial keepsakes, payment for aftercare services, and EOL services for other species besides dogs and cats. Additionally, exploration regarding the potential benefits and challenges of veterinary hospitals partnering with pet aftercare companies/services could be of use.

The results of this study suggest that most pet owners are concerned about their pet’s aftercare and want their veterinary team to help guide them through the process. A veterinary team’s handling of deceased pets is a blend of hospital-mandated protocols, in accordance with space and personnel logistics, and the desire to compassionately prepare the pet’s body for disposition. Pet owners hold a high level of trust in the veterinary team to properly carry out their wishes, with respect, accuracy and efficiency. In conclusion, this study introduces the concept of ethical aftercare, derived from the foundational premise that pet owners want their beloved pet’s body to be cared for in a respectful manner. It is imperative that veterinary teams properly inform and deliver on promised aftercare services in a manner befitting pet owners’ trust.

Authors’ Contributions

Study design, survey development, data analyses and manuscript preparation performed by all authors.

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