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Euthanasia-related strain and coping strategies in animal shelter employees

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Objective—To identify and evaluate coping strategies advocated by experienced animal shelter workers who directly engaged in euthanizing animals.

Design—Cross-sectional study.

Sample Population—Animal shelters across the United States in which euthanasia was conducted (5 to 100 employees/shelter).

Procedures—With the assistance of experts associated with the Humane Society of the United States, the authors identified 88 animal shelters throughout the United States in which animal euthanasia was actively conducted and for which contact information regarding the shelter director was available. Staff at 62 animal shelters agreed to participate in the survey. Survey packets were mailed to the 62 shelter directors, who then distributed them to employees. The survey included questions regarding respondent age, level of education, and role and asked those directly involved in the euthanasia of animals to provide advice on strategies for new euthanasia technicians to deal with the related stress. Employees completed the survey and returned it by mail. Content analysis techniques were used to summarize survey responses.

Results—Coping strategies suggested by 242 euthanasia technicians were summarized into 26 distinct coping recommendations in 8 categories: competence or skills strategies, euthanasia behavioral strategies, cognitive or self-talk strategies, emotional regulation strategies, separation strategies, get-help strategies, seek long-term solution strategies, and withdrawal strategies.

Conclusions and Clinical Relevance—Euthanizing animals is a major stressor for many animal shelter workers. Information regarding the coping strategies identified in this study may be useful for training new euthanasia technicians. (*J Am Vet Med Assoc* 2009;235:xxx-xxx)

Many people who work in animal shelters are assigned the difficult task of euthanizing unwanted or unadoptable cats and dogs. The HSUS estimates that 3 to 4 million cats and dogs are euthanized at animal shelters in the United States each year.¹ Euthanasia technicians often experience guilt,² grief, and frustration³ as a result of their job. They are also at risk of experiencing a unique type of stress that is not typical to other workplaces.^{4,5} At the same time, workers with euthanasia-related responsibilities often feel stigmatized for the work they do, despite the fact that they perform work that is often necessitated by pet-owner irresponsibility and negligence.⁶

Qualitative research such as employee observation and interviews has provided valuable information about the experience of animal shelter workers. In a study⁵ of euthanasia-related strain, attendees were surveyed at the annual HSUS Animal Care Expo educa-

ABBREVIATION

HSUS Humane Society of the United States

tional conferences in 2001 and 2002. Of the 491 attendees who completed the survey, 220 (44.8%) reported direct involvement in euthanasia. Euthanasia-related strain (independent from general job strain) was prevalent among animal shelter euthanasia technicians in particular and was associated with higher degrees of overall job strain, work-related conflict with family members, somatic complaints (eg, headaches or poor appetite), and substance abuse and a lower degree of job satisfaction than in other shelter employees. These findings were consistent with those of other qualitative studies^{2,3} of euthanasia-related stress and strain and with findings⁷ regarding the negative consequences of job-related stress on health and well-being.

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Coping refers to the mental and behavioral changes that people exert to manage specific stressful burdens or circumstances.⁸ In other words, coping is the manner in which people respond to or otherwise make sense of stressors. This definition implies a thought process; part of coping with stressors involves actually thinking about the problem and its effect on the people and circumstances it involves. In addition, people may change the way they cope over time as they continually reassess their environment.⁹ Researchers of occupational stress can use several approaches to evaluate coping strategies. Some investigators have examined relationships between personality traits and chosen coping strategies,¹⁰ influences of control versus avoidance coping techniques on stress outcomes,¹¹ coping strategies used by new employees,¹² and influences of various perceptions of stressors on a worker's choice of coping strategy.¹³ The purpose of the study reported here was to qualitatively analyze suggestions from experienced euthanasia technicians to new euthanasia technicians regarding strategies for dealing with euthanasia-related stress.

Materials and Methods

Study participants—A list of animal shelters was compiled from information obtained from 10 regional offices of the HSUS, the HSUS Companion Animals Department, and HSUS Animal Care Expo conference registration lists. With the assistance of HSUS personnel, 88 animal shelters in which euthanasia was conducted and for which the director's name was available were selected from throughout the United States. Directors were contacted and informed about the study. Directors who agreed to have their personnel participate were mailed study packets that contained a description of the project, employee surveys, survey instructions, and stamped, preaddressed return envelopes for survey submission.

Survey—Respondents were asked to provide their age, gender, and highest level of education achieved. They were also asked to indicate whether they were directly engaged in euthanasia of animals and, if so, the months of experience in that role (including euthanasia-related experience in previous jobs) and whether they were certified euthanasia technicians. To collect data on advocated coping strategies from employees directly involved in euthanizing animals, the following open-ended question was used: "What recommendations would you give to someone who is just starting out in this career field? That is, what would you tell them to do, or not to do, to deal with the euthanasia-related aspects of this job?" The survey also included questions regarding topics unrelated to euthanasia-related stress (eg, employee perceptions of management).

Data analysis—Survey responses were used to classify respondents into 2 groups: euthanasia technicians or animal shelter workers not directly involved in euthanasia. Content analysis was performed to thematically categorize responses to the open-ended coping question. Consistent with qualitative analysis techniques used in other studies,¹⁴ 2 raters independently analyzed

all responses to develop an initial set of coding categories. This step required raters to determine the common themes repeated in the response set and to group sets of similarly themed comments into categories. Then, the raters discussed their coding categories with each other until they agreed upon a final set of 26 distinct categories (eg, seek external help, focus on success, vent your feelings, or keep work separate from personal life). The 2 raters used these categories to independently code a selected portion of the response data and compared results. Because of a high rate of initial agreement, no additional revisions to the coding scheme were made. The raters then proceeded to independently code all of the responses and compare results.

Interrater agreement was estimated by calculating the Cohen κ statistic. Apparent agreement was calculated by dividing the number of comments coded exactly the same by the total number of comments. When responses were coded differently between raters (which was infrequent), the differences were discussed until resolved. Descriptive statistics were calculated to summarize survey responses. Associations between various personal characteristics of euthanasia technicians (male vs female technicians, technicians certified in euthanasia techniques vs those uncertified, technicians with a high degree of euthanasia involvement [1 SD above the mean] vs those with a low degree of euthanasia involvement [1 SD below the mean], and technicians with tenures of < 32 months [1 SD below the mean] vs those with tenures of > 124 months [1 SD above the mean]) and coping strategies advocated were evaluated by use of χ^2 goodness-of-fit tests. A value of $P < 0.05$ was considered significant. All statistical analyses were performed by use of commercial software.^a

Results

Study participants—Directors of 72 shelters located in 31 states agreed to participate. However, because of changes in management once the study began, personnel from 62 shelters actually participated. Most shelters were privately run organizations with operating budgets of between \$500,000 and \$1.5 million. Shelter size ranged from small organizations with < 5 employees to large shelters with approximately 100 employees.

The survey was completed by 505 employees. Exact calculation of overall response rate was not possible because the surveys were sent to a large number of shelters with various numbers of employees; however, on the basis of shelter estimates regarding number of employees and the number of surveys returned, a response rate of approximately 40% was estimated. Of these 505 respondents, 194 (38.4%) reported no direct involvement with euthanasia and 305 (60.4%) reported direct involvement with euthanasia; 6 respondents did not indicate whether they were directly involved in euthanasia. Among those who reported no direct involvement with euthanasia, the largest proportion (55/194 [28.4%]) were between the ages of 35 and 44, most were female (156/194 [80.4%]), and few (4/194 [2.1%]) were certified euthanasia technicians. With respect to highest level of education, 2.1% (4/194) of respondents had "some high school," 13.4% (26/194)

Table 1—Percentage of experienced workers (n = 242) directly responsible for euthanasia of animals who suggested various coping strategies for dealing with euthanasia-related strain in a survey of animal shelter employees from 62 US animal shelters.

Coping category	Percentage of workers	Examples of actual survey responses
Vent your feelings	15.7	Cry. Get your feelings out. Talk about your feelings.
Alter your emotional attachment level	15.3	Do not get attached to any animal. Not to take things personally, but still have compassion. Do not become uncaring ... Do not build up a wall. Treat each one as you would your own.
Know that euthanasia is sometimes the best option	14.1	Try to remember that they're not getting hit by cars or slowly starving to death. The animal is better to be euthanized than to possibly go to a home where they might be mistreated or thrown out on the street to fend for themselves.
Take it slow	11.6	I would tell them to let me know when they are ready to do it. Go slowly—don't just block your mind and tell yourself you can handle it.
Seek education and training	11.2	First thing I tell them is to read the "12 imperative steps" of a euthanasia tech. Make sure you understand the goals/mission of your organization.
Don't blame yourself	11.2	You're not the bad person. You're doing all you can to help the situation. Know that it is not our fault.
Get a different job if necessary	8.3	Do not work here unless you want to. Don't get involved at all if you can't deal with it ... Not just anyone can do this job.
Know that the job is not for everyone	7.4	Either the numbers (which bother me) or certain type or certain animals will bother you. Very hard physically too. Not for everyone. A person must have a "thick hide" to handle this job. Either you have it or you don't.
Understand that euthanasia is part of the job	5.8	Realizing that in most shelters, euthanizing does occur at some point in the job. Knowing that euthanizing an animal is ... more humane than letting it live in misery.
Get informed on the reality of sheltered animals and overpopulation	5.0	Understand why we euthanize and the consequences if we do not euthanize the stray animals. Get informed about the reality of sheltered animals and overpopulation.
Talk to and comfort the animals during euthanasia	5.0	Just make sure the animal is as comfortable as possible while putting it to sleep. Give them very tender and loving arms to take their last breath with.
Get a different job (categorically)	5.0	Find another job that does not involve euthanasia of animals. Find a different career. I felt I would be able to help animals; instead I spend time cleaning up their poop and killing them.
Acknowledge your feelings	4.1	Be honest with yourself about the real effect on you. Notice emotions even if you hold them in.
Keep work separate from personal life	4.1	Do not take your job home with you, and keep it out of your personal life. Not take it home, try not to think about it too much.
Focus on success	4.1	Remember that there are wonderful people who care for their animals very well. Focus on adoptable animals; give them a better chance of getting out alive!
Communicate with management about concerns	3.3	Discuss your feelings with management. Discuss your feelings with your supervisor and have an open and honest relationship with him/her.
Practice proper euthanasia techniques	2.9	Become extremely proficient at the task (physically). Focus on the technical aspects of proper administration of euthanasia.
Learn about and promote responsible pet ownership	2.9	Let people know to neuter and spay their pets and to look for their lost pets at shelters. Preach spaying and neutering; someone might hear you and tell a friend.
Meditate, pray, or reflect	2.5	Say a prayer before you start your job.
Seek a diversion	2.1	Find a hobby ... It helps take your mind off of what you had to do. Shoot pool, start a collection, and plan hiking or camping/fishing trips.
Have someone else euthanize special pets	2.1	Do not ever euthanize an animal you are attached to—have someone else do it.
Seek external help	1.2	Seek counseling, seek counseling, seek counseling. Always ask for help.
Be confident in your training and abilities	0.8	You should always be confident in your skill, training, and decision making.
Take pride in your work	0.8	Be proud if you are a good euthanasia tech.
Don't euthanize large amounts at same time	0.4	Don't euthanize large amounts at 1 time.
Keep the euthanasia room neat	0.4	Keep the room neat. It helps if you do not hate to be in that room.

The question regarding coping strategies was open-ended and yielded 342 strategies that were subsequently grouped into 26 categories.

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were high school graduates, 38.7% (75/194) had “some college” education, 29.9% (58/194) were college graduates, 5.7% (11/194) had completed “some graduate work,” and 9.8% (19/194) had a graduate degree.

The 305 workers that identified themselves as directly involved in euthanasia were diverse in terms of experience, frequency of involvement with euthanasia, and euthanasia certification. For these workers, the mean \pm SD duration of euthanasia-related experience was 78 ± 47 months, including that acquired in previous jobs. Also, among these employees, the largest proportion (102/305 [33.4%]) were between the ages of 25 and 34, most were female (227/305 [74.4%]), and most (210/305 [68.9%]) were certified euthanasia technicians. With respect to highest level of education, 3.3% (10/305) of respondents had “some high school,” 23.3% (71/305) were high school graduates, 40.7% (124/305) had “some college” education, 19% (58/305) were college graduates, 3.6% (11/305) had completed “some graduate work,” and 7.9% (24/305) had a graduate degree. A large proportion of euthanasia technicians (88.5% [270/305]) responded to the open-ended question regarding advocated coping strategies; however, 28 of the 270 (10.4%) did not respond by suggesting a coping strategy. Consequently, their answers were not included in the analysis of coping strategies.

Coping strategies—In general, responses to the open-ended question about coping advice for new or just-starting animal shelter euthanasia technicians were clear. Many respondents (41.3% [100/242]) provided an answer that contained > 1 distinct piece of advice, in which situation, each piece of advice was coded separately. In total, codes were assigned to 342 distinct coping suggestions as provided by the 242 respondents. Independent coding by the 2 raters resulted in a high degree of agreement¹⁵ (73% apparent agreement between raters for primary pieces of advice [$\kappa = 0.72$] and 71% apparent agreement between raters for secondary pieces of advice [$\kappa = 0.69$]).

The 342 pieces of coping advice provided by respondents were classified into 26 categories of coping strategies (Table 1). Coping strategies varied on emotional, cognitive, knowledge, and behavioral dimensions. The most commonly mentioned coping strategies were those categorized as “vent your feelings,” followed closely by “alter your emotional attachment level.” These coping strategies were those that suggested emotional attachment, detachment, or some type of healthy balance of attachment and detachment regarding the animals in a respondent’s care. The third most common coping strategy was “know that euthanasia is sometimes the best option.” When the data were examined for between-group differences with respect to coping techniques on the basis of gender, tenure, frequency of involvement with euthanasia, and euthanasia certification, no significant differences were detected.

Although each of the 26 coping categories was distinct, the categories could generally be reclassified into 1 of 8 broader types of coping strategies. These 8 broader groups were of 2 basic types: those related to methods of dealing with euthanasia-related stress on the job and those related to methods of dealing with stress after conducting euthanasia-related work. The 4

broad groups of strategies for coping on the job and the basic categories that they comprised were as follows: competence or skills strategies (“seek education and training,” “practice proper euthanasia techniques,” “be confident in your training and abilities,” and “take pride in your work”), euthanasia behavioral strategies (“take it slow,” “talk to and comfort the animals during euthanasia,” “have someone else euthanize special pets,” “don’t euthanize large amounts at same time,” and “keep the euthanasia room neat”), cognitive or self-talk strategies (“know that euthanasia is sometimes the best option,” “don’t blame yourself,” “understand that euthanasia is part of the job,” “get informed on the reality of sheltered animals and overpopulation,” and “focus on success”), and emotional regulation strategies (“acknowledge your feelings,” “vent your feelings,” and “alter your emotional attachment level”). The 4 broad groups of strategies for coping outside of work and the basic categories that they comprised were as follows: separation strategies (“keep work separate from personal life,” “meditate, pray, or reflect,” and “seek a diversion”), get-help strategies (“communicate with management about concerns” and “seek external help”), seek long-term solution strategies (“learn about and promote responsible pet ownership”), and withdrawal strategies (“know that the job is not for everyone,” “get a different job if necessary,” and “get a different job”).

Discussion

In the present study, we specifically chose to examine types of coping strategies advocated by euthanasia technicians instead of coping strategies already practiced by them. This approach was used because the aim was to identify strategies that technicians considered the most meaningful, regardless of whether they actually used the strategies. In addition, it allowed us to solicit a wider range of suggestions from respondents because the suggestions would not be limited to strategies in which employees were capable of engaging.

Each coping strategy included in the broader category of “competence or skills strategies” appeared to be positive methods by which euthanasia technicians could enhance their feeling of confidence on the job, which in turn could alleviate some of the anxiety resulting from involvement in euthanasia. Indeed, a study¹⁶ of nurses providing palliative care revealed that feelings of self-efficacy predicted lower degrees of emotional distress, suggesting that becoming more knowledgeable, trained, and able to do one’s job is 1 way to reduce occupational strain. To this end, training opportunities provided by shelter managers and supervisors may improve the health and well-being of euthanasia technicians by increasing their abilities and confidence on the job. Training programs such as that offered by the HSUS for euthanasia technicians¹⁷ and Web sites such as those maintained by the AVMA,¹⁸ Welfare Information Center,¹⁹ and the HSUS Animal Sheltering²⁰ program provide advice for employees and shelter managers who deal with euthanasia of animals. Practical suggestions for dealing with euthanasia-related strain at an organizational level have been identified.²¹ Such suggestions include management supportiveness, employee counseling, job rotation, more assistance while performing euthanasia, and time off.

In the present study, coping strategies classified broadly as euthanasia behavioral strategies dealt directly with the manner in which euthanasia technicians approached the physical, mental, and emotional act of euthanizing animals. Talking to and comforting animals during euthanasia may help euthanasia technicians mentally reframe the negative aspect of euthanasia (ie, death of the animal) as something positive for the animal (ie, ending of pain or anguish associated with illness). Because animal shelter workers become emotionally attached to certain animals, it makes sense that euthanasia technicians would suggest that another worker euthanize those animals. Keeping the room in which euthanasia is performed neat could help to mitigate euthanasia-related stress by maintaining order within the physical workspace. Given that exposure of hospice nurses to death contributes to emotional exhaustion,²² avoiding the euthanizing of several animals in a short period may help euthanasia technicians feel less exposed to death and thereby reduce the emotional strain of their job.

The broad category of cognitive or self-talk strategies included methods by which euthanasia technicians could deal with euthanasia-related stress by thinking about the positive outcomes associated with their roles. Self talk refers to means by which people conceptualize and mentally process their surroundings and circumstances, and positive self talk is a widely accepted means of constructively managing stress.²³ The manner in which people think about a particular situation determines the degree to which the situation elicits an emotional response.²⁴ The suggested coping strategies in this category may aid euthanasia technicians in dealing with stress by helping them view themselves as contributing to animal welfare.

Emotional regulation strategies were also advocated as methods for dealing with euthanasia-related stress on the job. For some euthanasia technicians in the present study, it appeared that simply acknowledging their emotions was a way to cope with euthanasia-related stress. For many others, expressing those feelings or changing the degree of emotional attachment to the animals was important; neither of these 2 strategies can be considered a completely productive or counter-productive approach to mitigating occupational strain. For example, expressing feelings can be productive for an individual under strain. To the extreme, however, frequent sharing of feelings with a coworker could adversely affect that person's well-being and the coworker may develop compassion fatigue.²⁵ With regard to emotional attachment, 3 coping strategies were recommended: stay emotionally attached to the animals, remain emotionally detached from the animals, and maintain a distant yet compassionate approach toward the animals. Results of a study²⁶ on stress and coping among hospice and palliative care workers suggest that the third of these strategies, maintaining a caring attitude while not becoming too emotionally attached to the animals, may be the most productive. In humans, emotional detachment is a symptom of burnout among end-of-life caregivers, and this detachment is more likely to develop because caregivers often become overinvested in their relationships with patients.²⁷

Outside of the workplace, separation strategies advocated by euthanasia technicians were similar to those suggested for human hospice workers, who are encouraged to deal with their grief and occupational strain by finding non-work-related amusements and by trying to release daily tension through self-reflection prior to returning home.²⁸

With respect to the broad category of get-help strategies, results of studies on perceived support (from one's employer, supervisor, and coworkers) suggest that employees who perceive that their contributions and well-being are valued at work experience health benefits and increased job satisfaction²⁸ and a lessened propensity to develop a depressed mood, compared with those who lack similar perceptions.²⁹ Therefore, it seems that shelter managers could help euthanasia technicians cope with euthanasia-related strain by regularly checking in on their status and well-being during staff meetings or informal chats and by providing external resources for stress management when necessary.

The broad category of seek long-term solution strategies contained only 1 basic type of coping strategy ("learn about and promote responsible pet ownership"). Many comments in this category related to recommendations that euthanasia technicians get involved in programs that advocate neutering and spaying (presumably to decrease the number of animals entering shelters and therefore the number requiring euthanasia) or educate the public about animal welfare. One way that shelter managers could address this strategy is to provide community outreach opportunities that would allow euthanasia technicians to promote responsible pet ownership.

The last of the broad categories of coping strategies in the present study encompassed the means by which euthanasia technicians may withdraw from their jobs when the strain becomes unbearable. The suggestions in this category of withdrawal strategies, including advice to leave the job should the strain become unbearable ("get a different job if necessary") or recommendations that new euthanasia technicians find other jobs, are important because they revealed the negative feelings some euthanasia technicians had toward their job.

Health-care workers specializing in palliative and end-of-life care²⁷ appear to use coping strategies similar to the ones identified in the present study. These workers, similar to euthanasia technicians, experience strain as a result of their working near death. A notable difference between hospice workers and euthanasia technicians is that hospice workers deal with end-of-life issues arising from natural situations. Euthanasia technicians, on the other hand, must deal with results of the specific societal problem of pet overpopulation. This difference was evident in some of the coping strategies advocated by euthanasia technicians, particularly in the cognitive or self-talk category, in which becoming informed about pet overpopulation and learning and promoting responsible pet ownership were suggested.

A review²⁷ of studies on compassion fatigue and burnout among hospice caregivers identified several productive or positive coping strategies used by caregivers to deal with occupational stress. Although many of those strategies were similar to the strategies identi-

fied in the present study, several others that could possibly benefit euthanasia technicians were not identified in our study. These strategies included the following: combat stress by eating healthily and getting adequate sleep and exercise, strive for balance in your family and professional life, cultivate a supportive and enjoyable social network, adapt your job rather than accept it as handed to you, try to perceive each task as a challenge rather than a hassle, and learn to say no and ask for what you need. The fact that respondents in the present study did not mention the 6 coping strategies as techniques they would recommend to newcomers was particularly interesting because it suggested a possible lack of awareness regarding other healthy coping strategies that they could use.

The present study was limited in that, whereas respondents were asked for coping advice in the present study, they were not asked to report strategies actually used. Furthermore, there was no attempt to determine the effectiveness of any coping strategies. However, the information that was obtained advances existing knowledge regarding coping strategies advocated by euthanasia technicians and provides strategies that other animal shelter workers may find beneficial. Identification of coping strategies recommended by experienced euthanasia technicians can benefit the animal-welfare community in 2 ways. First, it elucidates the strategies that experienced euthanasia technicians may be recommending to new employees, and shelter managers may find this information useful for discussion and training. Second, it provides insight into euthanasia technicians' responses to euthanasia.

a. SPSS, version 16, SPSS Inc, Chicago, Ill.

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