Viewpoint

The role of private practitioners in reducing numbers of homeless dogs and cats and shelter euthanasia rates

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espite the millions of dollars spent annually to address homeless dogs and cats, more than 1.5 million animals are euthanized in US shelters each year. Of these, 80% are healthy, potentially adoptable animals.2 The statistics have been improving in recent years; still, more dogs and cats die of homelessness each year than as a result of any preventable disease, and the number of shelter euthanasias can still be lower.3 In our view, veterinarians have an ethical if not moral obligation to work with shelters to minimize animal suffering and decrease the number of healthy, adoptable animals that are euthanized.⁴ Veterinarians in general practice have a direct platform to reach vast numbers of pet owners, but despite their expertise in animal husbandry, development, behavior, and welfare, many of them may not realize how much impact they can have on the numbers of homeless dogs and cats.^{5,6}

Shelter euthanasia rates most directly reflect intake rates, but intake demographics and reasons for relinquishment vary by region.^{3,7} It is therefore necessary to know the major sources of local shelter intake before attempting to formulate an effective approach to decrease local shelter euthanasia rates.^{7,8} Still, most dogs and cats are relinquished for reasons that fall within a few general categories, and across regions, most shelters will have 1 or more targetable intake factors in common. In the present article, we discuss practical steps veterinarians in general practice can take to decrease the numbers of homeless dogs and cats and reduce local shelter euthanasia rates.

Act Promptly and Proactively on Behavior Problems

Relinquished pets constitute 25% to 50% of shelter intake, and behavior is perhaps the most overlooked

ABBREVIATIONS

TNR Trap-neuter-return (or release)

risk factor for relinquishment to shelters. For higherincome households, behavior problems, particularly aggression, destructive behavior, and inappropriate elimination, are the most common reason for relinquishment of dogs and the second-most common reason for relinquishment of cats.⁸ In a different study,⁹ 18% of cats relinquished to shelters were surrendered because of behavior problems, and nearly 40% of those were surrendered because of house-soiling. Similarly, a survey¹⁰ of cat and dog adopters found that > 50% of the animals had behavior problems within a month after being adopted, notably house training for dogs and chewing and scratching for cats.

It is easy to assume that dogs and cats relinquished to shelters are not regularly visiting veterinarians, but 1 study³ found that 70% of dogs and 50% of cats had been examined by a veterinarian within the year prior to relinquishment. People relinquishing animals commonly report that they did not receive regular behavioral counseling during veterinary visits, with 1 study¹¹ showing that only 25% of dog owners reported receiving routine behavioral advice from veterinarians. A subsequent poll of veterinarians found that only 52% to 65% reported discussing behavior during puppy or kitten visits and only 15% reported doing so during annual visits.⁵ Clearly, reliable information needed to prevent or correct behavior problems is not reaching clients as often as it could be.

Obedience training and socialization decrease the risk of relinquishment. Thus, veterinarians should proactively provide information on obedience training and socialization services during visits, especially for owners of large dogs, given that large dogs have an increased risk for relinquishment. Veterinarians should also promote the use of positive reinforcement training methods, because a recent study suggested that not all methods of obedience training are equally likely to increase retention of animals in homes. Owners that used positive reinforcement, such as providing praise or treats for desirable behavior, had better bonds with their pets and were

less likely to relinquish them, whereas use of positive punishment, such as electronic shock collars, did not increase retention of animals in their homes. Regardless of the form of veterinary consultation, when veterinarians consult with clients on behavioral issues, animals are maintained in their homes more often.¹¹

Given the role of behavior problems in relinquishment of dogs and cats, veterinarians might also consider pursuing continuing education on identifying and treating behavior problems in dogs and cats and developing information on individuals to whom they could refer cases, if necessary. Practice owners should encourage their staff to host and teach training classes at the hospital so that owners are better prepared to prevent and address behavior problems early on, before they become more complicated and more difficult to correct. After that introduction, veterinary staff will be perceived as a resource to consult on behavioral issues if they arise.

Because it may be difficult to address every aspect of animal care during each appointment, practitioners may also consider developing sources of easily digested information on behavior, such as the Oregon Humane Society and San Francisco Animal Care websites, and lists of local resources for dog and cat obedience training and behavior consultation. Materials can be prominently displayed on clinic websites, regularly included in electronic newsletters, and freely distributed in the waiting area and during each appointment. Importantly, these resources should be made available before they are requested, so that clients can address behavior problems as soon as they develop, when they are easier to modify.

Finally, veterinarians who have a background in identifying and treating behavior problems can be extremely useful to local shelters. By consulting with potential relinquishers on behavioral issues, veterinarians may directly influence shelter intake. Alternatively, offering to consult with shelter staff on inshelter behavior modification programs may increase the number of healthy animals that are successfully placed in new homes.

Encourage Early Spaying and **Neutering**

Wide-scale spaying and neutering of dogs and cats, especially at an early age, is one of the more effective ways to reduce local populations of relinquished and stray animals.³ Practitioners likely counsel all owners on the benefits of spaying and neutering but may not discuss timing. Ironically, animals that are spayed or neutered at a later age may be contributing to the homeless dog and cat problem as much as those that remain sexually intact.³ In fact, 1 study in Massachusetts¹⁴ reported that dogs spayed after sexual maturity were nearly as productive as sexually intact females, with close to 90% of new litters in this region produced by animals that were later

spayed. Another study in Nevada¹⁵ found that 16% to 17% of sexually intact cats and dogs had had litters, compared with 21% of spayed dogs that had done so. Importantly, 2 separate studies^{12,16} found that up to half of pet owners were not aware that there was no medical benefit for animals in having a litter prior to being spayed.

Although some studies^{17,18} have suggested that for certain dog breeds, the health of individual animals may be adversely affected by early spaying or neutering, most such studies have been retrospective in nature, and additional studies are needed before causation can be established. These studies have also not focused on the particular breeds of dogs and mixes of breeds that are commonly present in animal shelters or at a higher risk of euthanasia, and it is not possible to extrapolate targeted breed-specific associations to the entire population of dogs.¹⁹ Thus, these studies must be weighed against similar studies^{20,21} suggesting protective benefits of early spaying and neutering, such as prevention of pyometra and tumors of gonadectomized (ie, ovarian, uterine, and testicular) tissues and reduced likelihood of tumors associated with sex hormone production, such as mammary and perineal tumors. Female dogs ovariohysterectomized at 5 to 10 months of age may show more reactivity than sexually intact females when interacting with other dogs. ^{22,23} However, for male dogs, gonadectomy at an early age may have behavioral benefits and has been associated with an overall decrease in relinquishment for any reason.¹⁸

For cats, current AVMA guidelines recommend spaying or neutering by 5 months of age,²⁴ and early spaying and neutering have not been associated with adverse health effects. For example, cats spayed before 6 months of age have a 91% reduction in the risk of developing mammary carcinoma, compared with sexually intact cats, and fewer behavioral issues leading to relinquishment.²⁴⁻²⁶ To balance anatomic and immune development and reproductive risk, the Association of Shelter Veterinarians has suggested that 4 months of age is an appropriate time for most owned animals to be gonadectomized.²⁷

Certainly, the topic of gonadectomy is complex. Nevertheless, a conversation about the implications of spaying and neutering and the appropriate timing should be one of the routine parts of a wellness visit. At the very least, printed materials or links to user-friendly sites could be made available on a routine basis.

Community Cat Management

Stray and free-roaming cats constitute a large portion of shelter intake each year. Feral cats, in particular, account for the greatest shelter intake of cats nationwide; they also constitute the largest proportion of healthy cats euthanized in shelters.²⁸ Decreasing the number of feral cats, therefore, would help decrease the number of shelter euthanasias.

As high as 50% of cats classified as feral at the time of shelter intake demonstrate affiliative or socialized behavior after only a few days. ²⁹ In some of these cats, this may simply represent acclimatization. However, it may also be an indication that at least some of these cats were owned at one time or can be safely adopted with minimal socialization. Other research has found that owned or previously owned cats routinely serve as ready replacements when the population in feral cat colonies decreases. ^a Thus, a major strategy for reducing shelter intake of cats involves educating owners on responsible ownership while also distributing information about local low-cost resources for cat owners who might otherwise relinquish or abandon problematic sexually intact cats.

Numerous studies^{30,31,a} have demonstrated that the most efficient approach to decreasing the number of feral cats is through mass sterilization of owned and feral cats combined with colony management. Trap-neuter-release programs have been shown to reduce feral cat populations and may be an effective way to reduce shelter intake.28 However, TNR programs must be implemented at an appropriate scale to reduce feral cat populations. When appropriately implemented, TNR programs can not only decrease the number of feral cats in a locality but also improve feral cat health. When the health of cats in shelters is improved, kittens and relinquished pets are more easily adopted, and shelter euthanasia rates for cats are reduced. 28,32,33 In contrast, programs that involve removal and euthanasia of feral cats have been shown to increase feral cat colony populations by allowing other nearby cats to immigrate and reproduce.³³ Because fewer feral cats also means less wildlife predation, TNR programs of appropriate scale are good for wildlife populations also.

Veterinarians can help control the number of feral cats by educating clients and community members about colony management programs²⁸ and by assisting with local TNR programs. Volunteering to assist with TNR programs is also good for community relations and offers new veterinary graduates an opportunity to gain experience with spay and neuter surgeries.

Sponsor Pet Identification

Having some means of pet identification is crucial to the return of lost animals to their owners. A recent survey³⁴ of pet owners found that, of the approximately 15% of owned dogs and cats that became lost in their lifetime, 93% of dogs and 75% of cats were recovered. According to this study, 83% of the cats not found by their owners had no identifying information allowing them to be returned to their previous homes, and 56% of all lost cats had no form of identification. Similarly, 11% of lost dogs that were never returned to their owners did not have any form of identification.

Veterinarians should encourage clients to microchip all of their pets, even indoor pets, and should especially encourage cat owners to do so. If that discussion cannot happen as a part of regular wellness visits, the AVMA has drafted information that can be made available to clients.³⁵ Special deals can be offered for microchip implantation when animals are spayed or neutered, and the benefits of retaining regular clients can offset these costs in the long term.³

To be useful, microchips must be registered by the owner after placement. In shelters, however, only 52.2% of microchipped dogs and 38.5% of microchipped cats are returned to their owners.36 These low return rates are often due to unregistered microchips or out-of-date owner information.³⁶ To increase microchip registrations, clinics could offer to help owners complete the forms before leaving the clinic and mail the forms in on their behalf. Practices could also retain copies of microchip registration forms and routinely confirm during future appointments that owner contact information has not changed or, if it has, ensure that the registration information is updated before visits end. Finally, for clients who cannot afford or object to microchipping, clinics might consider providing identification tags and collars at a reasonable cost.

Reduce Fees for Certain Services

Approximately 17% of owned cats and dogs in US households are sexually intact. Most of these animals are in households with annual incomes between \$20,000 and \$35,000,8 and owners of sexually intact dogs and cats frequently cite cost as a factor in why they have not had their animals neutered. Sexually intact dogs are 2 to 3.5 times as likely to be relinquished as neutered dogs, and sexually intact cats are 3.3 to 4.8 times as likely to be relinquished as are neutered cats.^{3,16} Additionally, 40% of owners relinquishing animals reported that free or low-cost veterinary care would have enabled them to keep their pets, and a recent Association of Shelter Veterinarians taskforce confirmed the importance of reaching low-income pet owners in efforts to reduce shelter intake and euthanasia rates.37,38

Obviously, general veterinary practices cannot be expected to reduce the cost of all procedures. However, they might consider implementing some methods for providing services to pet owners who may lack the means to afford necessary procedures at regular costs. At the very least, veterinarians have the information needed to refer owners who cannot afford clinic prices to local low-cost spay and neuter programs.

Actively Engage in Legislative Efforts

Veterinarians should get into the habit of regularly participating in local civic council meetings, especially when animal-related legislative issues are on the docket. Most pet laws and ordinances are enacted at the local level rather than the state or federal level.

By staying informed and engaged, veterinarians can have a direct impact on such legislation and can provide timely input to legislators. General practitioners can also write and propose local ordinances that help shelters, reduce stray populations, or make it easier for owners to adopt from shelters and harder to purchase pets from pet stores and commercial breeders. Other options include supporting requirements for local pet stores to obtain animals from shelters or from certified breeders. Several cities around the country have recently passed bills that require pet stores to sell only animals obtained from shelters or rescue organizations,39 and wording could be taken from these bills as a draft or suggestion for local lawmakers. Regulations and enforcement stipulations requiring breeders to comply with welfare standards can also be developed and proposed at the local level by any veterinarian.

Conclusions

Veterinarians have the requisite knowledge and skills needed to make a substantial difference in the numbers of homeless cats and dogs and local shelter euthanasia rates, and there are several things general practitioners can do at the local level to have an impact. Initiating discussions with local shelter directors and shelter veterinarians can be a good first step for any veterinarian wishing to become involved. Areas for improvement can be identified and ranked so that issues likely to have the highest local impact are given priority while still considering the veterinarian's skills and resources and the shelter's specific needs. In the clinic, a discussion with the entire staff may greatly expand the ability to reduce the numbers of homeless dogs and cats, as technicians and receptionists can be tasked with routine distribution of relevant resources to clients. Veterinarians are the authoritative experts on animal health and welfare. It is both possible and desirable that veterinarians in general practice play a role in decreasing numbers of homeless dogs and cats and reducing shelter euthanasia rates.

Footnotes

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