**HISTORICAL OVERVIEW**

The therapeutic use of animals can be traced back to the times of the ancient Egyptians, Greeks, and Romans. These practices were abandoned for centuries, however, as a result of changing religious and cultural mores. The resumption of the use of animals for therapeutic purposes can be attributed to the efforts of a Quaker merchant in 18th century York, England. William Tuke, acting on his dismay over the death of a Quaker in the York Asylum, raised funds to open the York Retreat in 1796 to care for the insane. Unlike in other facilities for the mentally ill of that time, patients at the York Retreat were treated with respect, allowed to pursue a variety of activities and freely wander the grounds, which were inhabited by a variety of small animals. Tuke's efforts, combined with a very negative report on conditions in British mental hospitals, gradually led to improvements in the treatment of the mentally ill, including at the notorious Bethlehem Hospital (commonly known as Bedlam), where it had been the accepted practice to charge admission to the public to view the inmates.

In the 19th century, animals also were incorporated into the treatment of individuals with other disorders, including epilepsy, at Bethel, a residential facility in Germany established for young people suffering from epilepsy. Originally established as a working farm, Bethel still exists today and provides assistance to individuals dealing with a broad range of disabilities. During the Crimean War, Florence Nightingale kept cats both for rodent control and companionship, and was known to have had numerous cats throughout her lifetime as well as recommend their companionship for the chronically ill. In the United States, the first documented therapeutic use of animals occurred during World War II at a Pawling, New York, convalescent hospital for injured members of the Army Air Corps. Apparently the hospital was used primarily as a rest home for patients suffering from “operational fatigue,” which today would be called posttraumatic stress disorder.

**DEVELOPMENT OF THERAPY DOGS: A BRIEF OVERVIEW**

In a sense, the use of dogs as therapeutic adjuncts developed accidentally. Although Sigmund Freud was known to have been accompanied by his chow dog during his analysis sessions with patients toward the end of his life, he may not have initially included his dog in the sessions with any specific goal in mind other than the comfort it provided to him. After a while, however, he apparently noticed that the presence of the dog seemed to provide his patients with feelings of security and acceptance, and facilitated their analyses.

The second accidental use of a dog as a therapeutic adjunct tool occurred when Boris Levinson unintentionally exposed a child client to his dog, Jingles. The mother and child had arrived early for their appointment, before Levinson had had time to confine his dog. Levinson had been having difficulty establishing rapport with the child, but Jingles paved the way by playing with the child, thus facilitating the child’s acceptance of Levinson himself. That positive experience led to Levinson’s frequent inclusion of Jingles in his therapy sessions. Although Levinson’s efforts to promote the use of dogs in therapy were not well received publicly within his profession, a survey he conducted among clinicians in the New York State Psychological Association indicated that more than one-third of the respondents had used animals in their practices. Gradually, Levinson’s efforts stimulated research into the mental and physical health effects of including dogs and other animals in therapeutic interactions and also into the effects of keeping pets.

In the 1970s, 2 organizations were established that also contributed greatly to the use of dogs as therapeutic adjuncts. In 1976, Elaine Smith founded Therapy Dogs International (TDI). While working as an American nurse in England, she had observed the way patients responded to the dog that accompanied the hospital chaplain on his visits. Upon her return to the United States, she established TDI in New Jersey and developed a program to train dogs to visit institutions. Therapy Dogs International also certifies dogs and maintains a registry of certified dogs and handlers. The following year the Delta Foundation was established in Portland, Oregon, by a number of medical and veterinary professionals who were interested in the effects of human-animal relationships. That organization became the Delta Society.
in 1981. The Delta Society also trains, certifies, and registers service and therapy dogs (ie, Delta Society Pet Partner teams) and also continues its interest in research into human-animal interactions.12

To bring some clarity to this emerging field, the Delta Society divided animal-associated interactions into 2 categories: animal-assisted activities and animal-assisted therapy, under the following definitions:

Animal-Assisted Activity (AAA) provides opportunities for motivational, educational, recreational, and/or therapeutic benefits to enhance the quality of life. AAAs are delivered in a variety of environments by specially trained professionals, para-professionals, and/or volunteers in association with animals that meet specific criteria. Key features include absence of specific treatment goals; volunteers and treatment providers are not required to take detailed notes; visit content is spontaneous.

Animal-Assisted Therapy (AAT) is a goal-directed intervention in which an animal that meets specific criteria is an integral part of the treatment process. AAT is directed and/or delivered by a health/human service professional with specialized expertise and within the scope of practice of his/her profession. Key features include specified goals and objectives for each individual and measured practice.13

THERAPY DOGS AND CRISIS RESPONSE

The first example of a major disaster response by teams of therapy dogs and handlers was the bombing of the Murrah Building in Oklahoma City in 1995. At the request of the Federal Emergency Management Agency, TDI sent 20 teams to provide comfort to the responders, victims, and their families. In 1998, the work of therapy dogs took another step forward as a result of the response of 2 Delta Society Pet Partners teams to a shooting at Thurston High School in Springfield, Oregon. The teams were deployed by the National Organization for Victim Assistance. Twenty-five people were injured and 4 were killed in that incident. In their work at the school, the 2 Delta teams were able to reach students who had not been receptive to mental health professionals. Cindy Ehlers and her keeshond, Bear, made up one of the teams. While the Thurston High School response was quite small in comparison to the Oklahoma City incident, it was significantly larger in terms of its long-term effect, because it created a champion for the field that was to become known as animal-assisted crisis response.

Ehlers continued her training with Delta, becoming an evaluator and then an instructor. In 1999, convinced by her Thurston High School experience that dogs could contribute greatly to comforting and supporting shocked and grieving people, she founded HOPE Pets and developed the first special crisis response training for pet partner teams. The organization offered its first formal animal-assisted crisis response (AACR) training in July 2000,14 focusing primarily on exposing and training the dogs to deal with situations they might experience traveling to and working at a disaster. A second training, modified to include more information on emotional trauma for the human partners, was held in June 2001.

AACR at Ground Zero

In September 2001, Ehlers, her second keeshond, Tikva, and 3 other HOPE AACR teams were contacted by the American Red Cross and asked to travel to New York City in the aftermath of the terrorist attacks on September 11. Ehlers’ experiences and those of one of the other Oregon Pet Partners teams, Josiah Whitaker and his German shepherd, Hoss, were described in the book, Therapy Pets: The Animal-Human Healing Partnership.15 Both teams spent 2 weeks working 12-hour days walking the perimeter of Ground Zero to provide support to the firefighters and others searching for bodies, visiting the Family Assistance Center where family members awaited word of their loved ones and also applied for assistance, and riding the ferry boats that took grieving families to view the Ground Zero site.

Ehlers and Whitaker were frequently paired with 2 mental health professionals from Ohio, James Rogers and Karen Soyka. In a brief article they wrote a few years after the event, Rogers and Soyka referred to their work with the HOPE teams as “another gift—or experience of grace,”28 reflecting on how the presence of the dogs had allowed them to connect with the recovery workers in ways that would have been very difficult if they had been alone.

In a discussion of appropriate uses of AACR at a disaster, Greenbaum17 identified a number of ways in which the animals were helpful. They served as a therapeutic bridge and helped to establish rapport with a mental health professional. This was certainly the experience of Rogers and Soyka.26 Greenbaum17 also noted that the animals served as symbols of qualities that individuals had or wished they had (ie, afraid, helpless, brave, strong) or they were used to communicate thoughts and feelings indirectly (ie, speaking for the dog: “she’s afraid”). She pointed out that the animals helped to normalize the situation for the responders by reminding them of their
lives outside of the situation. In addition, petting the animals is known to exert a calming effect by facilitating the body’s production of oxytocin, a hormone known to produce a calming effect. These effects were noticeable to the human members of the teams. Last, the animals served as protective shields for the families riding the ferry boats to view Ground Zero and enabled them to begin to find the strength to deal with their losses. Frequently, the animal-handler teams responding to the terrorist attacks were paired with mental health professionals with results similar to those described by Rogers and Soyka. They served a variety of populations, ranging from the first responders actually engaged in recovery operations, to American Red Cross, Federal Emergency Management Agency, and Salvation Army workers, as well as victims of the terrorist attacks.

Approximately 500 animal-handler teams provided assistance in New York, New Jersey, and Virginia in response to the terrorist attacks on September 11, 2001. Numerous breeds of dogs were used in this response, including golden retrievers, Labrador retrievers, greyhounds, collies, cocker spaniels, standard poodles, Shetland sheep dogs, Samoyeds, Portuguese water dogs, Dalmatians, and a variety of hounds and mixed breeds. Even a few cats were used. The teams came from a variety of organizations and geographic locations. Most of the teams had training in AAA/AAT, but, except for the initial trainings organized by Ehlers in Oregon, no formal crisis response training programs existed at the time. This pointed to the need to distinguish between AAT/AAA. How does AACR differ from AAA/AAT? According to Teal, animal-assisted crisis response is the utilization of trained evaluated animals and handlers in crisis and traumatic recovery sites and centers to assist with the psychological needs and physiological stress factors of those persons present. The Visiting Animal is utilized as a transitional object to provide those in crisis and traumatic situations with a reality orienting relationship providing for solace, deep comfort and reduction of psychological stress signs. The utilization of animals in trauma and crisis response may provide critical grounding experiences for the beginnings of future psychological recovery and healing from aforementioned event.

Providing assistance in the aftermath of this event presented a major learning experience for the animal-handler teams. They learned that both animal and handler could be exposed to unaccustomed sights and smells, as well as potentially hazardous substances. They learned that handlers needed to know crisis intervention techniques. Their dogs needed to be able to tolerate frequent handling and bathing, as well as the wearing of booties to protect their sensitive feet. For those dogs assisting on the ferry boat rides, they had to be able and willing to board the boat as well as tolerate the ride and the lack of any down time during the trips.

Perhaps the most important lesson learned was that neither the dogs nor the handlers could tolerate the 12-hour days under the horrific circumstances without detrimental effects. It is likely that many of the handlers, and most likely the dogs, suffered from secondary traumatic stress from their exposure to the severe emotional pain of the responders and the families of the victims. In addition, although respiratory protection was available for the handlers (most, however, chose not to use it for a variety of reasons), there was not then nor is there today any respiratory protection for dogs. They were likely exposed to a variety of hazardous substances, including particulate matter, asbestos, metals, dioxin-like material, and volatile organic compounds. Although there was no formal monitoring program for the therapy dogs, there was one for the search and rescue dogs in which many of the therapy dogs participated. Among the dogs known to suffer from respiratory difficulties is Ehlers’ dog, Tikva (C. Ehlers, oral communication, February 2009).

In addition to the lessons learned cited above, Greenbaum pointed out that it is important to recognize circumstances and locations for which AACR is not appropriate and also to be aware of allergy, phobia, and cultural issues (eg, individuals from some cultures do not react positively to dogs). When considering criteria for both human and canine members of an AACR team, Greenbaum called for education in critical incident stress management for the human team member, and discussed a number of criteria for the canine team members. These include good health and currency of immunizations, freedom from phobias, high comfort levels with diverse populations and dogs as well as other species, acclimation to crowding, good food refusal skills, good basic obedience skills, a calm demeanor, transportation training, confinement training, ability to urinate/defecate on command and on different surfaces, and training for various types of stimuli (eg, sirens, construction equipment noises). In addition, human members of the teams must be able to assess and deal with the stress levels of their canine partners by knowing when to remove them from the field.

*It should be noted that 96 search and rescue teams also were deployed to New York, New Jersey, and Virginia sites. Although their mission was very different from that of the AACR teams, there were many instances where these dogs provided the same type of comfort to the responders.
Greenbaum17 noted that there were 2 days of memorial events held in Liberty State Park in New Jersey and at Ground Zero, September 10 and 11, 2002, on the first anniversary of the 2011 terrorist attacks. Four AACR organizations, Bright and Beautiful Therapy Dogs; Dogs in Service, Inc; St. Hubert’s; and a chapter of Therapy Dogs International (S. D. Greenbaum, oral communication, April 2011), collaborated to ensure that enough AACR teams would be available. According to Greenbaum,17 this was the first time 4 AACR organizations collaborated under a single incident command system. She considered this to be a constructive model for the future of AACR.

**DEVELOPING AACR TRAINING**

After Ehlers returned to Oregon from New York, she changed the name of HOPE Pets to Hope Animal-Assisted Crisis Response to reflect the fact that the dogs were much more than pets. She also incorporated the organization. She then set about developing a 4-day AACR training program that focused on both the canine and the human components of the team. Training topics included animal/handler safety, animal first aid, important canine equipment for deployments, and animal behavior basics. Background information on disaster mental health and stress management also was part of the training. The last 2 days of the training focused on travel/transportation training and disaster simulations. The teams rode on buses, went to an airport, used public restrooms, and boarded an airplane. They then participated in a disaster exercise in which a local fire department played a role. At the end of the 4 days, trainee teams were evaluated for their readiness to continue training with the organization.

Ehlers went on to train numerous teams for Hope AACR and responded to Hurricane Katrina in 2004. Then she left Hope AACR and founded another organization initially called AACR (now known as National AACR). The 2 organizations have trained approximately 200 AACR teams nationwide and present the most consistent and uniform training available in the field. What began with 2 therapy dog teams to a high school shooting has resulted in national recognition of the special talent that dogs have to alleviate stress in civilian life as well as in the military.* Between them, the 2 organizations have responded to the September 2001 terrorist attacks, along with the 10th anniversary memorial; Hurricanes Katrina, Rita, and Ike; California wildfires; Virginia Tech and Northern Illinois University shootings; and countless local incidents. The AACR response to the Northern Illinois University shootings was featured in the “Making a Difference Today” segment of the NBC Today Show on July 14, 2008 (available at: http://today.msnbc.msn.com/id/21134540/vp/25673508#25673508).

Recently, in recognition of the incredible growth of the field and the number of different organizations now offering AACR training and certification, the 2 founding organizations collaborated on the development of Animal-Assisted Crisis Response National Standards. The purpose of the standards is to move toward uniform training and oversight to aid in mutual deployments, as well as to ensure the well-being of the canine members of the AACR teams.25 First, the standards call for training by instructors who are both actively involved in AACR and familiar with the incident command system. Then, the standards then go on to identify requirements for training, evaluation, experience, certification, standards of conduct, and AACR organizations. According to former National AACR President Ehlers, “These standards are the first of their kind…They give emergency response agencies the tools they need to call on the right AACR teams.”26 HOPE AACR President Amy Ridout added, “When emergency response agencies call on AACR teams that follow the national standards, they will know that they are getting teams that are not only committed to helping people, but also are experienced in crisis response.”26 Equally important, the development of these national standards is an indication that the organizations are truly paying attention to the lessons learned after the response to the September 2001 terrorist attacks.

**REFERENCES**


*See articles in this issue highlighting the military use of dogs for operational stress control (page 46), posttraumatic stress disorder (pages 57, 63, 70), and rehabilitation of Wounded Warriors at military medical facilities (page 57).
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