Connections Among Adverse Childhood Experiences, Exposure to Animal Cruelty and Toxic Stress: What Do Professionals Need to Consider?

Barbara W. Boat

Introduction

Our understanding of human brain development has taken quantum leaps since the invention of functional magnetic resonance imaging (FMRI) and the more recent evidence revealing the impact of stress hormones on overall health. The Adverse Childhood Events (ACE) Study has been instrumental in creating an intense interest in the topic of toxic stress. The ACE Study is an ongoing investigation initiated in 1995 of the association between childhood adversities and later-life medical status. The implications of the ACE Study are profound and point to the importance of asking the right questions to obtain a comprehensive health history. Exposure to animal cruelty in childhood should be one of the “right questions” for child welfare, forensic interviewers, prosecutors, law enforcement and medical personnel to incorporate into their existing protocols. Exposure to animal cruelty is a potential adverse experience that can contribute to toxic stress and long-term related health outcomes.

The Adverse Childhood Experiences (ACE) Study

Over 17,000 Kaiser Health Insurance recipients, who were voluntarily undergoing a comprehensive medical evaluation, responded to a lengthy general medical questionnaire that also asked whether any of 10 potentially “adverse experiences” occurred in their lives before the age of 18. The full range of ACE questions included three types of abuse (recurrent physical or emotional, or sexual abuse); two types of neglect (physical or emotional); and five types of family dysfunction (mother treated violently; household member in prison, mentally-ill, or abusing drugs/alcohol; or parent lost through separation, divorce or death).

The number of categories of childhood ACEs acknowledged was summed and compared with adult emotional, biomedical, and social health outcomes from the participants’ adult health records, and prospectively from 19 years of follow-up. The sum of ACE categories was termed the ACE Score, which ranges from 0 to 10. Nearly 17% of this middle-class population acknowledged four or more categories of ACEs. A “dose response relationship” was routinely noted. The dose-response relationship, or exposure-response relationship, describes the change in effect on an organism caused by differing levels of exposure (or doses) to a stressor after a certain exposure time. In this case, the higher the ACE Score, the greater the potential for the respondent to experience biomedical, emotional, and social problems. For example, participants having experienced four or more categories of ACEs had significantly increased likelihoods of negative outcomes including chronic pulmonary lung disease (390%), hepatitis (240%), depression (460%), and suicide attempts (1,220%). With six or more categories of ACEs, there was a 4,600% greater likelihood of being an intravenous drug user. Not surprisingly, a high ACE Score correlated with shortening the lifespan by almost 20 years.
Toxic Stress: The Mediating Variable Between ACEs and Future Negative Outcomes

One approach to understanding how childhood life experiences translate into negative health outcomes is to view “toxic stress” as a mediating variable. All stress is not negative and some amount of stress actually has positive benefits. It is the compilation of ongoing, unremitting stressors in childhood that creates physiological reactions which can be toxic to the developing child. Toxic stress is a physiologic stress response that is excessive and prolonged. If the child does not receive the support needed to manage this physiologic response effectively, toxic stress has the potential to create stress-induced changes in brain architecture and in gene expression. These changes are documented in the field of epigenetics which studies lifelong, intergenerational changes in how the gene program is turned on and off.

For example, data on brain development in young children who are chronically exposed to domestic violence support that a state of heightened arousal (cortisol flooding) results in smaller brains and loss of up to 8 IQ points. A brain in constant alarm mode cannot take in or retrieve information efficiently. School performance suffers as do sleep, social skills and emotional and physical health. The child’s brain health is compromised.

Exposure to Animal Cruelty and Toxic Stress

We know that more than 70% of American families with children have pets and that the pets share the same environment as the children. Intra-familial violence (child abuse, domestic violence, elder abuse) places children at greater risk for many adverse experiences, including exposure to animal abuse. Animal cruelty is documented to be associated with other forms of violence, and several studies support its prevalence in families where there is child maltreatment and battering. Research also supports that pets are frequently the targets of perpetrators of family violence.

It is estimated that up to 76% of animal abuse occurs in front of children. If witnessing intimate partner violence and experiencing other forms of violence and abuse is potentially toxic to the health of the child’s brain, the costs to the child may be even greater when violence toward a family pet is added. In fact, the environment in which animal abuse is prevalent can be highly stressful to a child who was never the target of a parent’s aggression. For example, some adults in treatment with me have disclosed that, as children, they were terrified of a parent. This fear was not because the parent ever did anything directly to harm them, but because the parent was so cruel to the animals in the home. One client said to me, “When I was growing up my father was very abusive to our farm animals and pets. I lived in terror of making him angry because I knew he was capable of hurting me the same way he hurt our animals.”

Reported frequencies of a batterer threatening to harm, harming or actually killing a pet range as high as 71% in pet-owning women entering women’s shelters. Between 18–48% of battered women report that worries about their pets’ care and safety had either delayed them in seeking shelter for themselves and their children, or influenced their decisions about staying with or leaving their batterers.

In my experience, and one that is shared with others who work with battered women and their children, children can be very worried when a pet is left behind, adding to their fears that they, too, may be abandoned. Battered women shelters are responding by creating facilities and alliances with other agencies to provide shelters that can accommodate the needs of women, children and their pets.

Innovative Legislation Efforts Support Concerns About Exposing Children to Animal Abuse

Existing legislation and numerous bills being introduced nationwide and in local jurisdictions underscore the knowledge that an environment in which acts of violence and neglect against animals occur can negatively impact the wellbeing of a child who shares that environment. For example, legislative bill A706 pending in New York would include animal cruelty in the presence of a child as an element in endangering a child’s welfare, and within the definition of a neglected or maltreated child. Existing laws in several states require that animal control officers be mandated reporters of child abuse and neglect, providing another source of protection for at-risk children.

The Importance of Asking Questions About Animal-Related Experiences

In my experience, and one that is corroborated in discussions with other therapists who work with maltreated children, children will frequently talk about what happens to animals before they will talk about what happens to themselves and to other family members. In recognition that abuse of animals may qualify as an adverse experience and layer onto the other stressors that can change the trajectory of the child’s development, it is vitally important children be interviewed about their experiences with animals.

Forensic interviewers, or anyone involved in interviewing child victims or child witnesses to violence, should consider asking children about animals in their homes. Some helpful questions include: “Do you have any pets?”, “Do you — or have you ever had — a favorite or special pet?”, “Was there ever a time when you were upset and your pet was a source of comfort to you?”, “Do you — or did you — worry about bad things happening to your pet?”, “Has anyone ever hurt — or threatened to hurt — your pet?”. Follow up each positive response with “Tell me about that.”

Informing Future Interventions

The information about experiences with animals can be used to customize more appropriate and effective interventions. For example, stressors related to potential child abuse and neglect (“My Dad shot my dog when it would not stop barking.”; “Mom took the cat and her kittens to the woods far away because we did not have enough money to feed them.”) can be uncovered and addressed. Informed treatment can provide interventions to the child and caregivers that directly address the ongoing stressors in their lives. Many interventions must be multi-systemic including support from the courts and criminal justice professionals to protect the child, therapeutic support to enhance coping and parenting skills, and involvement by the schools and the child welfare system.

Conclusion: Ask About Exposure to Animal Cruelty

The ACE Study points to the importance of asking the “right questions” in interviews to obtain a more accurate and relevant history. Childhood exposure to animal cruelty should be considered an adversity and included in such interviews. Child welfare, legal, medical and mental health professionals can use the information obtained about abusive treatment of animals to highlight its contribution to toxic stress and the subsequent risks to the child’s brain development, impaired potential, and negative health outcomes.
1 Barbara Walling Boat, Ph.D. is a licensed clinical psychologist, an associate professor in the Department of Psychiatry and Behavioral Neuroscience at the University of Cincinnati College of Medicine and Director of the Program on Childhood Trauma and Maltreatment. She is also Executive Director of the Childhood Trust at Cincinnati Children's Hospital Medical Center. In addition to providing evaluation and treatment for children, adolescents and adults, supervising trainees, and presenting at national and international conferences, she has conducted research on the use of anatomical dolls in sexual abuse investigations and currently studies relationships among animal cruelty, child abuse and domestic violence, including dog bites. Dr. Boat participates in a National Center on Child Traumatic Stress grant to assess the implementation and effectiveness of a group intervention with incarcerated youth that addresses trauma and grief issues. She is a Board Member of the Academy on Violence and Abuse whose mission is to advance health education and research on the recognition, treatment and prevention of the health effects of violence and abuse. She is also on the steering committee of the National Link Coalition, a national organization formed to address the linkages of violence to animals, children and adults. Her special clinical interests are treatment of post-traumatic stress and dissociative disorders and the training and utilization of evidenced-based interventions for traumatized children and their families.


3 Felitti, supra at 250.


11 Ascione, supra note 10, at 8; Catherine A. Faver & Elizabeth B. Strand, To Leave Or To Stay? Battered Women’s Concern For Vulnerable Pets, 18 J. of Interpersonal Violence 1367, 1374 (2003).

12 Ascione, supra note 10, at 9.


14 Legislation Addresses Children’s Exposure to Animal Cruelty: Nationwide: Legislation to include pets in domestic violence protection orders has been adopted in 27 states, Puerto Rico and the District of Columbia. Seven states (Arizona, Colorado, Indiana, Maine, Nebraska, Nevada, and Tennessee) define an act of animal abuse that is intended to intimidate a spouse or domestic partner as an act of domestic violence, and Colorado further defines such acts as elder abuse when intended to intimidate a dependent adult. Federal: In 2014, the federal Animal Fighting Venture Prohibition Act (7 U.S.C. § 2156 and 18 U.S.C. §49) added a provision enhancing the criminal penalties for anyone bringing a child under the age of 16 to an animal fighting event. Florida: Fla. S.A. §800.04 increases the penalty for a person who commits bestiality in front of a minor child. Idaho: I.C. §18-1506A provides that animal torture (including as part of a ceremony or rite) committed in front of a child is a felony and deemed ritualized child abuse. Illinois: 720 ILSC 5/12-33 addresses that ritualized child abuse occurs when a person tortures an animal in front of a minor child. HB 3768 would make it a Class 4 felony, with subsequent violations classified as Class 3 felonies, to commit aggravated animal cruelty or abuse in the presence of a minor. Oregon: ORS §167.320 makes it a first degree felony to commit animal abuse in front of a minor child; ORS §167.325 makes it a second degree felony to commit animal neglect in front of a minor child. With a prior conviction for domestic violence, ORS §167.330 makes it a first degree felony if animal neglect is committed in front of a minor child. Massachusetts: SB 1914 would define animal abuse committed in the presence of a child as “extreme atrocity and cruelty” with enhanced penalties. The bill would also create a statewide animal abuse hotline and registry of animal abuse offenders. New York: A-706 would include animal cruelty in the presence of a child as an element in endangering a child’s welfare, and within the definition of a neglected or maltreated child.
