After Trauma, Helping Children and Adolescents

By Susan Worley
Photos by Tommy Leonardi
Last April, what USA Today characterized as a “stabbing rampage” took place at Franklin Regional High School in Murrysville, Pa. A 16-year-old teen who had been teased was the attacker. To help make sense of the violence and learn what to do in its aftermath, the newspaper sought out Steven J. Berkowitz, M.D., for perspective: “In these kinds of situations, the psychological casualties usually outnumber the physical casualties,” he said. “It’s not just the kids who were stabbed, but all the kids at the school.” He noted the symptoms of psychological distress that the children might experience, including trouble sleeping, intrusive thoughts about the incident, mood swings – and, in some cases, post-traumatic stress disorder (PTSD) or depression. Despite the fears of both children and their parents, however, Berkowitz advised parents to send them back to school and return to their normal routine. “One of the most important things,” said Berkowitz, “is to get back on the horse.”

Last October, in Marysville, Wash., a 15-year-old student shot five other students in the cafeteria, killing four of them, and then took his own life. As has happened elsewhere, the school debated what to do with the specific site of the killings. Should it be closed? Remodeled? Berkowitz, contacted by The Seattle Times, noted the impact that reminders of trauma – or cues – can have. Remodeling and changing the appearance of a building where an emotionally devastating incident took place can be beneficial, he said, but only if done in tandem with treatment. The change “has to be integrated into their lives.”

For Steven J. Berkowitz, M.D. (left), the focus is on healing. Is for students to attend a type of group therapy in a classroom, perhaps their homeroom, and therapy with their families.

Who is Steven Berkowitz, one of the experts most sought after by the media after this kind of horrific event? An associate professor of clinical psychiatry at the Perelman School of Medicine, he is the founding director of the Penn Center for Youth and Family Trauma Response and Recovery. And the sad truth is that his expertise and well-researched advice remain in demand two and a half years after one of the worst massacres of schoolchildren in U.S. history. On December 14, 2012, 20 first-graders and six adults were gunned down by a deranged and heavily armed 20-year-old assailant. A shower of gunfire that lasted less than 25 minutes, the shooting at Sandy Hook Elementary School left not only Newtown, Conn., but the entire country and many parts of the world stunned. Berkowitz was among the recognized experts who fielded countless interview requests in the aftermath of the massacre. Displaying practiced calm, he provided reporters and anxious adults with exactly what they seemed to need most: basic advice regarding what to expect after such an incident and simple guidelines for how to begin to move beyond the horrifying event.

In this particular case, however, Berkowitz was actually at the site. A long-time faculty member at the Yale University Child Study Center before coming to Penn, Berkowitz joined former colleagues in Connecticut shortly after the shooting to prepare intervention materials for local pediatricians and providers of behavioral health care. Soon afterward, he returned home. As he explains, “I have a firm belief that experts should not be flown in to do the one-on-one work. It’s essential that local people are trained to provide interventions, because they need to sustain these efforts over time.” He describes the initial intervention employed in Newtown – psychological first aid (PFA) – as “a stabilization model”; its objectives include identifying and attending to the immediate needs of disaster survivors while instilling both calm and a sense of hope.

The Penn Center for Youth and Family Trauma Response and Recovery can help kids move beyond a horrifying event and avoid toxic stress. For Steven J. Berkowitz, M.D. (left), the focus is on healing.
A Crucial Role for Parents

Although he specializes in treating children and adolescents, Berkowitz has a highly regarded track record of assisting the community at large in the wake of violent tragedies. His work reflects his belief that trauma does not occur in a vacuum. In December 2012, he was featured on WHYY’s Radio Times, along with Joel A. Fein, M.D., M.P.H., G.M.E. ’91, professor of pediatrics and emergency medicine at the Children’s Hospital of Pennsylvania and the Perelman School. Berkowitz emphasized that while children were at the center of the Connecticut tragedy, the event was profoundly traumatizing for parents and the surrounding community as well.

For many of the children who were at the center of the tragedy in Connecticut, the road ahead has been a long one. But many have likely benefited from the admirable early efforts of local professionals. “There will be a range of responses,” says Berkowitz. “Some kids will recover independently and some will need considerable professional help. It’s important after a truly devastating event like this to make sure that the whole community is recovering. Children, particularly the youngest ones, really rely on their parents to mediate this type of experience – and, as you can imagine, many of the parents have been symptomatic and completely overwhelmed.” A significant challenge for mental health care providers in such situations is treating symptoms of post-traumatic stress disorder (PTSD) in order to allow normal mourning to happen. It’s a process Berkowitz says can be fraught with complications. As for predicting how different individuals will fare, many variables play a role in outcomes. Children who were direct witnesses of violence or were close to those who died are, not surprisingly, at greater risk of post-traumatic difficulties. So are those who had experienced earlier traumatic events. One thing is certain for survivors in Connecticut, Pennsylvania, Washington, and far too many other sites of violence: “This is not something any of these children are ever going to forget.” The children who will do best, he explains, are those able to integrate the experience – that is, who allow it to be an experience that is part of their life, but doesn’t define it – as they grow and change and return to their developmental tasks.

Although Berkowitz is someone the media seeks out after children are victims of violence, his professional interests extend to less sensational, more ordinary, situations as well. For example, last fall he was called on by WTOP, the highest-rated radio news station in Washington, D.C. The topic: the best way for parents to guide their children through grief after a death.
According to Berkowitz, the best thing parents can do is to acknowledge, not ignore, their own emotions and the emotions of their child. He said it was all right for parents to cry in front of their children, but it is important for parents to let them know that they will get through their grief together, as a family. He cautioned against telling children that their loved one is “in a better place,” such as Heaven. “Children will think that’s a real place they should go to,” he said. His advice is to explain matters gently but realistically – even if that means telling children they will not see their loved one again.

**Closer to home**

A community’s ability to deal with the needs of children and adolescents who are at risk for traumatic symptoms has become increasingly important – and not simply because of the recent increase in events with numerous casualties. Many children in the United States experience potentially traumatic events (PTEs) in their daily lives – often in neighborhoods riddled with varying degrees of crime and violence. The impact of such events, says Berkowitz, “is just as personally catastrophic as a larger-scale event.” It is not uncommon for children, especially in inner cities, to hear gunshots, witness criminal behavior and even killings, or find themselves victims of random acts of violence such as drive-by shootings. Other sources of trauma, which are wide-ranging and unpredictable, include motor vehicle accidents, serious illness, bereavement, intentional or unintentional injuries, maltreatment, and rare occurrences such as terrorist attacks and natural disasters.

“Trauma is Greek for injury or wound,” Berkowitz notes, “and psychological trauma can be defined as an experience or group of experiences that cause injury to the brain. Psychological trauma causes neurophysiologic dysregulation that can lead to difficulties in cognitive, emotional, and social functioning.” Although we have a tendency to think of traumatic events as isolated, an accumulation of adverse experiences also can cause injury in the form of toxic stress. Such stress is a subject of growing concern for Berkowitz and others in his field.

“Early-childhood exposure to traumatic events is a public health problem of epidemic proportion,” says a long-time colleague of Berkowitz, Arthur Evans Jr., Ph.D. Evans is commissioner of the Department of Behavioral Health and Intellectual Disability Services (DBHIDS) in Philadelphia and a clinical professor at the Perelman School of Medicine. Epidemiologic studies have provided unsettling statistics to support Evans’s contention: each year, about 60 percent of all children are exposed to a PTE, either as a victim or a witness, and one in four children will witness a PTE before the age of four. Evans notes that the latter statistic translates to approximately 25,000 affected children in Philadelphia alone. Statistics on crime and violence explain only part of the problem; many sources of trauma remain relatively hidden. One example in Philadelphia is the widespread and evidently underreported violence in its school district, the topic of a Pulitzer Prize-winning report in 2012 by The Philadelphia Inquirer. Violence within the family and sexual abuse are also significantly underreported. The Penn Center for Youth and Family Trauma Response and Recovery was founded in 2009 to help identify and confront these circumstances.

**An early focus on trauma**

For Berkowitz, a lifelong devotion to working with children began early. As he explains, it developed “partly from an intellectual interest in the nature-versus-nurture debates, back when research was beginning to prove that this was a false dichotomy.” During the early 1980s, his interest led to the famous Orthogenic School in Chicago, where, still in his early twenties, he was profoundly affected by the experience of working with children in long-term residential treatment. “What was most gratifying to me then,” says Berkowitz, “was the realization that, with the right treatment, even children who were severely damaged by trauma could get better.”

During his residency in adult psychiatry at Yale, Berkowitz worked not with children but with Vietnam veterans, during rotations at the West Haven VA. As he listened to the veterans’ personal stories, however, he learned firsthand why early childhood trauma is the greatest risk factor for developing PTSD after combat. The veterans who had been abused as children were essentially more susceptible to the horrors of combat. Their stories, says Berkowitz, “led to my belief that we have a much better chance of effecting change if we can engage in preventive intervention at an early age.”

While on faculty at the Yale Child Study Center, Berkowitz responded to crisis calls and worked at crime scenes. The experience deepened his involvement with children as well as his interest in community and public-sector work. Then, on September 11, 2001, he and his colleagues were put to the
test when Evans, then deputy commissioner of Connecticut’s Department of Mental Health and Addiction Services, relayed an urgent request from the U.S. government to develop guidelines for responding to emergencies. The Yale team collaborated with the state and the University of Connecticut to quickly develop a plan for assisting more than 1,000 families affected by the disaster. Days later, Berkowitz shifted his focus to children and was featured on Nickelodeon News, in a televised dialogue with youths who had witnessed the destruction of the World Trade Center from across the street. In the weeks and months that followed, he and his colleagues continued to attend to the needs of similarly affected children.

**Increasing emotional support**

A few days later, Sam arrived with his mother for the second session. The clinician began the session by meeting with Sam alone, to explain the CFTSI process and to have him answer questionnaires to learn how he evaluated his own mood and symptoms. During a conversation with the clinician, as Sam revealed his preoccupation with his father’s condition, he began to cry. Shortly afterward, Sam’s mother joined her son for a joint session in which the clinician compared their responses to the questionnaires. What they found was a minor discordance between their responses — Sam’s mother had not been aware that he was having nightmares. The session helped increase communication between them, a major goal of the program and a critical step toward the primary aim: to increase the mother’s emotional support of her son.

Earlier during the second session, when Sam’s mother asked why he had been crying, the clinician guarded the child’s confidentiality and offered only a vague explanation. As a result, Sam began to feel he could trust the clinician. At the same time, Sam had a deepening sense of support from his mother, who showed that she was willing to listen while he described his nightmares and other symptoms. Before the end of the session, Sam decided on his own to tell his mother about his concerns for his father. The clinician ended the meeting by giving them handouts on sleep hygiene and coping with depressed feelings, meant to help Sam manage the symptoms that were most distressing. In addition, the clinician reviewed the coping skills outlined in the handouts and taught Sam how to practice them on his own.

When Sam and his mother returned for the third session, Sam reported that talking about his feelings with the clinician had made it easier to share them with his mother. He also expressed relief that his mother was now aware of his feelings about his father’s condition. In turn, his mother said that being aware of Sam’s preoccupation with his father made her more understanding of Sam’s moods and more inclined to give him the attention he needed. The session concluded with a review of Sam’s symptoms, which were improving, and Sam had an opportunity to practice his coping skills with his mother and the clinician present.

As Sam continued to practice his coping skills, he found he could effectively manage his post-traumatic symptoms. In fact, by the fourth CFTSI session, they had resolved completely. At that point, Sam’s mother arranged to have him visit his father for a long weekend. When his father died three weeks after the visit, Sam’s mother accompanied him to the funeral.

**A Composite Case: How Improving Communication Helps Prevent PTSD**

After his younger cousin was shot during a drug-related dispute, Sam, 13 years old, began to experience intrusive thoughts, sleep disturbances, and generalized anxiety. Immediately after the shooting, Sam had run outside to his cousin, lying on the ground and bleeding from a wound to his hip. At the time, Sam — who lived with his mother, stepfather, and two half-siblings — was also struggling with depressive feelings. His father was dying from a chronic disease in a distant city.

It was not a surprise that Sam’s depression and withdrawal grew worse in the aftermath of the shooting. While his mother was aware that Sam was upset, she did not know how preoccupied he was with his father’s condition. Sam had avoided discussing his feelings with her because he knew that his parents did not get along. A social worker who had talked with Sam at the hospital when he accompanied his cousin for treatment referred Sam to the Penn Center for Youth and Family Trauma Response and Recovery.

Sam’s mother arrived alone at the center for the first Child and Family Traumatic Stress Intervention (CFTSI) session, which is designed to allow caregivers to meet privately with the clinician. She listened as the clinician described each step of the CFTSI process, reviewed typical responses to potentially traumatic events, and explained the critical protective role of the caregiver. Next, the clinician administered a questionnaire to assess possible post-traumatic symptoms in the mother’s own response to the shooting. It showed that, despite minor anxiety symptoms, her psychological status was good, and she was eligible to take part in the program. The clinician then questioned her about significant events in Sam’s past, including previous traumatic experiences, and had her assess his mood and potential symptoms of post-traumatic stress disorder.
Lowering the risk for PTSD in children

Well before 9/11, Berkowitz was convinced of the need for an effective and efficient intervention for children at risk for PTSD. Based on research and his own experience, he knew that while many children exposed to a PTE could be expected to recover on their own, as many as two in ten who did not receive treatment were at risk for lasting emotional damage. Randomized controlled studies of successful early interventions did not exist. In addition, research had begun to show that a popular model – critical incident stress debriefing (CISD) – was deeply flawed. Initially developed for adult first responders, CISD encourages the survivors of catastrophic events to express their emotions in a cathartic manner. Although the approach has benefitted some first responders, CISD encourages the survivors of catastrophic events to express their emotions in a cathartic manner. Although the approach has benefitted some first responders, CISD typically fails, partly because of differences in the severity of symptoms among individuals. It turns out as well that the subjective experience of trauma can be somewhat contagious: people not severely impaired by a PTE can be negatively affected by those who are.

Many experts, aware of such drawbacks of CISD and excited by relatively new findings regarding resilience – which is the ability to cope and manage despite exposure to extremely stressful events – concluded years ago that indiscriminately interrogating adults who have experienced a PTE might interfere with their own successful coping efforts. But Berkowitz and a Yale colleague, Steven Marans, Ph.D., went several steps further. They saw the need for a preventive intervention for children, driven not by reaching a catharsis but by promoting factors that lead to resilience. Research repeatedly showed that youths who had a caring and supportive adult in their lives were more capable of coping with upsetting and stressful events; in addition, individuals who felt supported after a PTE were less likely to develop psychological issues. Based on this data, Berkowitz and Marans developed an intervention that features the indispensable participation of a caregiver, most often a member of the child’s family. By 2008, after years of fine-tuning, they had developed a pilot study of the Child and Family Traumatic Stress Intervention (CFTSI).

“The beauty of CFTSI is that it’s practical, it’s brief, and it works,” says Fein, who is also co-director of the Violence Prevention Initiative at the Children’s Hospital of Philadelphia. CHOP’s emergency department refers traumatized children to Berkowitz and his center. The unique four-session intervention, provided within 45 days of a child’s exposure to a PTE, seeks to enhance two crucial factors that help to prevent trauma: social or familial support and coping skills. The goal is to improve communication between an affected child and his or her caregivers, which ultimately increases the caregiver’s support of the child. At the same time, it provides the child with the skills needed to effectively manage symptoms.

In 2011, when the favorable results of the pilot study (those receiving the intervention were 65 percent less likely to develop PTSD) were published, Berkowitz was already at Penn, putting CFTSI and other interventions into action. These included an innovative home-based psychiatric treatment for children and adolescents that he also co-developed at Yale. He was also
busy training professionals to use CFTSI, as well as teaching and lecturing throughout the city and around the country.

To further these efforts, the Penn Center partnered with Philadelphia’s DBHIDS and successfully applied for a grant to be part of the Substance Abuse and Mental Health Administration’s National Traumatic Stress Network. The grant, the Philadelphia Alliance for Child Trauma Services (PACTS), has allowed Berkowitz and colleagues at the Philadelphia department to disseminate both CFTSI and Trauma-Focused Cognitive Behavior Therapy to multiple public-sector agencies throughout the city. (TF-CBT is the most well-researched, effective treatment for children from 3 to 18 years old with post-traumatic stress disorder.) Before this grant, the approximately 30,000 youth in Philadelphia with PTSD had only three options for treatment, all located in the Center City area. Now there are well-trained providers geographically dispersed throughout Philadelphia. In addition, PACTS has facilitated trainings for several other systems in the city, such as juvenile justice and child welfare, to help them become more informed about trauma.

**Treating children and adolescents at Penn**

During the 33 years that have passed since PTSD first entered the *Diagnostic and Statistical Manual of Mental Disorders* as an official diagnostic category, Penn’s departments of psychiatry and psychology have been at the forefront of many developments related to trauma, resilience, and the treatment of psychological disorders in children and adolescents. Pioneering work by Edna Foa, Ph.D., an international expert on PTSD in adults and adolescents, and by Martin Seligman, Ph.D., the founder of the positive psychology movement who designed groundbreaking studies on resilience in children, are among the many notable contributions that preceded and provided fertile ground for the center Berkowitz founded in 2009. In addition, Foa, Seligman, Dwight Evans, M.D. (the chair of psychiatry), and other prominent figures at Penn were instrumental in launching the Adolescent Mental Health Initiative, which analyzes, conducts, and disseminates scientific research on preventing and treating mental disorders in adolescents. What didn’t exist before 2009 was an academic center focused on the impact of trauma on children.

“Steve’s center brings at least two important new contributions to the study of trauma at Penn,” says Foa, “a focus on children and a new spirit of collaboration, which brings together and draws on the expertise of organizations throughout the city.” She adds that she and Berkowitz regularly exchange ideas and have begun to work together on the topic of prolonged exposure therapy for treating traumatic stress. In turn, Berkowitz points out that Foa’s early conviction that
PTSD is a “failure of recovery” helped to provide a framework for much of his own research.

In addition to forging new ties, Berkowitz has helped to reinforce collaborations already established by the university. As Dwight Evans puts it, “The Department of Psychiatry has a longstanding and deep commitment to the study and treatment of child and adolescent mental health disorders.” That includes a partnership with Arthur Evans and Philadelphia’s Department of Behavioral Health and Intellectual Disability Services. He also notes that Berkowitz was jointly recruited by Penn’s Department of Psychiatry and the City of Philadelphia.

Preparation and prevention

While Philadelphia continues to improve trauma-focused resources throughout the city, preparing for a potential large-scale crisis, professionals like Berkowitz think daily about wanting to see an end to rampant violence.

“One of the things we need to talk about is the cycle of violence,” he says. Berkowitz alludes to abundant research indicating that children raised in violent environments are at risk for a broad spectrum of antisocial behaviors, including becoming a criminal. One way to break the cycle, he believes, is to make the most of current pediatric and trauma-focused services. “Each visit from a child or adolescent seeking care is an opportunity to examine the broader context of that individual’s life, to engage in screening, and to identify the need for referrals to appropriate social services.” Intervening in this manner, Berkowitz adds, “can interrupt pathways to poor mental and physical health, homelessness, unemployment, and violence.” As part of the Philadelphia Adverse Childhood Experiences Study task force and the National Child Traumatic Stress Network, he meets with other health-care providers, academics, and community-based groups to identify and evaluate new opportunities for assessment and intervention.

“Another issue we need to examine is access to treatment,” says Berkowitz. “We have to ask ourselves why it is so difficult for children and adolescents to gain access to necessary mental health care.” Although Berkowitz and colleagues around the country recognize numerous barriers to access, they generally agree that two such barriers require immediate attention. First, continued and expanded training of professionals is needed to ensure that more people are able to recognize and take necessary steps to deal with serious mental health problems exhibited by relatives, friends, and coworkers. Second, preventive mental health care services must become eligible for reimbursement by insurance providers; at present, mental health professionals must go to great lengths to prove the “medical necessity” of preventive services to qualify for reimbursement.

Then there is the issue of guns. Few experts in the field of health care want to find themselves steeped in a political battle over the subject of guns; however, Berkowitz and Fein agree with an increasing number of physicians in this country on a few basics. Both believe the ban on assault weapons should be reinstated and that the magazine and ammunition capacity and tissue-destruction capability of weapons must be limited. In addition, they believe that safety regulations such as background checks are sorely needed and that gun owners should be licensed. And they join other physicians in wanting to preserve a doctor’s prerogative to provide safety counseling by inquiring about guns in the home. The American Academy of Pediatrics supports such a prerogative; the State of Florida, on the other hand, has made it illegal.

In a “Perspective” published in The New England Journal of Medicine about two weeks after the killings at Sandy Hook, Garen J. Wintemute, M.D., M.P.H., a professor of emergency medicine and director of the Violence Prevention Research Program at the University of California at Davis, offered some evidence that effective changes can be made: “We know that comprehensive background checks and expanded denial criteria are feasible and effective, because they are in place in many states and have been evaluated.” Even with such a program, some 600,000 firearms were sold in California in 2011. At the same time, Wintemute continued, “The denial policy reduced the risk of violent and firearm-related crime by 23% among those whose purchases were denied.”

Some of the parents of children who died in the Newtown massacre and elsewhere are finding meaning in their loss by taking part in national dialogues of this sort. In so doing, they are, perhaps unknowingly, serving as much-needed models for the surviving children and for others across the nation who must find productive ways to integrate their own tragic experiences as they make their way to healing.

Joel Fein confers with Camilia Kamoun, left, a Penn Med student, and Katie Gensemer, a CHOP nursing resident.