Posttraumatic Stress Disorder in Child Victims of Crime:

Making the Case for Psychological Injury

By Laurence Miller

Introduction

Personal injury lawsuits after crime victimization typically focus on palpable physical and financial damages that arise from brain, spinal cord, or orthopedic injuries.[21] This is no doubt because attorneys, and the clinicians who advise them, often have more experience with these physical injuries than with the psychological traumatic disability that can result from criminal assault.[22] This article will describe the major classes of psychological reactions to crime victim trauma, with a special focus on children. The victimization dealt with here will not include chronic abuse and neglect by caretakers, which has special clinical and forensic issues of its own,[23] but will deal with situations where a child is affected by the unexpected assault and possible injury of one person by another.

Child Victims of Criminal Assault

There are five basic ways that children can be psychologically traumatized by criminal violence: (1) children can be the direct victims of criminal assault by adults or other children; (2) children can witness interpersonal violence perpetrated by one person on another, such as parents, other adults, or school peers; (3) children can be the bereaved survivors of violent crime, whether they witnessed it or not; (4) the criminal assault on a child can traumatize the child's whole family, which in turn impairs the recovery of that child from the trauma; and (5) the criminal assault can leave the child with orthopedic or neurocognitive injuries that impair future academic, vocational, and psychosocial functioning, and further contribute to chronic retraumatization, damaged self-image, and reduced lifelong achievement.[24]

Studies have shown that between 10 and 20 percent of all homicides are witnessed by minors,[25] and up to half of child and adolescent residents of some neighborhoods are regularly exposed to direct or secondary criminal victimization and other kinds of traumatization.[26] Finally, crime victim traumatization of children tends to affect a wider circle of professional helpers, such as law enforcement, emergency services, medical, and mental health practitioners who may suffer vicarious traumatization and eventual burnout.[27]

Posttraumatic Stress Disorder: The Clinical Syndrome

Although other kinds of psychological syndromes may follow criminal assault trauma, including phobias, anxiety, panic attacks, and depression,[28] the quintessential psychological syndrome following crime victim traumatization is posttraumatic stress disorder, or PTSD.[29] Diagnostically, PTSD is a syndrome of emotional and behavioral disturbance following exposure to a traumatic stressor that is typically outside the range of normal, everyday experience for that person. As a result, there develops a characteristic set of symptoms, which may include any of the following manifestations, which are fairly similar in both adult and childhood PTSD.

Anxiety: The child describes a continual state of freefloating anxiety, and maintains an intensive hypervigilance, scanning the environment for impending threats of danger. Panic attacks may be occasional or frequent.

Physiological Arousal: The child's nervous system is on constant alert, producing increased bodily tension in the form of muscle tightness, tremors, restlessness, heightened startle response, fatigue, heart palpitations, breathing difficulties, dizziness, headaches, or other symptoms.

Irritability: There is a pervasive edginess, impatience, loss of humor, and

PHOTO: RICK REINHARD

quick anger over seemingly trivial matters. Friends get annoyed, schoolmates may shun the patient, and family members may feel abused and alienated.

Avoidance/Denial: The child tries to blot out the event from his/her mind. He/she avoids thinking about or talking about the traumatic event, as well as games, school subjects, or TV shows that remind him/her of the incident. Part of this is a deliberate, conscious effort to avoid trauma-reminders, while part involves an involuntary psychic numbing that blunts most incoming threatening stimuli.

Intrusion: Despite the child's best efforts to keep the traumatic event out of mind, the disturbing incident pushes its way into his/her consciousness, typically in the form of intrusive images or flashbacks by day and/or frightening dreams at night.

Repetitive Nightmares: Sometimes the child's nightmares replay the actual traumatic event; more commonly, the dreams echo the general theme of the trauma, but miss the mark in terms of specific content. The emotional intensity of the original traumatic experience is retained, but the dream may partially disguise the actual event. The child may be afraid to go to sleep, may repeatedly check for monsters or bogeymen under the bed or in the closet, or insist on sleeping with parents. Rescue dreams are also common in children, in which they are either the rescuer, the one being rescued, or both.

Impaired Concentration and Memory: Schoolmates may tease the child for becoming a "space cadet," while teachers report deteriorating schoolwork. Social and recreational functioning may be impaired as the child has difficulty remembering names, misplaces toys, loses the train of conversations, or can't keep his/her mind focused on reading material or games.

Withdrawal/Isolation: The child shuns friends, schoolmates, and family members, having no patience for the petty, trivial concerns of everyday childhood life. The hurt feelings this engenders in those rebuffed may spur resentment and counteravoidance, leading to a vicious cycle of mutual rejection and eventual social ostracism of the child.

Acting-Out: More rarely, traumatized children may walk off school grounds, wander out of their familiar neighborhood, take unaccustomed risks by talking to strangers, riding bikes too fast, getting into fights with bigger kids, or experimenting with drugs.

Certain child-specific manifestations of PTSD may differ from the adult syndrome,[30] and may be misdiagnosed by inexperienced clinicians.

Repetitive Play: Children may reenact the traumatic event over and over again in play with dolls, toy soldiers, toy guns, and so on. This appears to be a behavioral equivalent of the more cognitive intrusive thoughts and imagery of adults.

Self-Blame: Children, more so than adults, may fixate on what they might have done to bring the assault upon themselves. Children are used to being chastised and "blamed" by adults in authority, and insensitive clinical, law enforcement, and forensic investigations may unwittingly reinforce this feeling by questions such as "What did you do ... ?"

Foreshortened Future: Children may express the belief that they will "never grow up," and that there is little point to preparing for the future by continuing to go to school, listening to adult advice, making new friends, and so on.

Regression: Children may stop growing or regress cognitively, psychosocially, and emotionally. Developmental milestones that have been passed years ago may reappear. Older kids may wet the bed, play "baby games," reacquire tastes for previously abandoned foods, or prefer to play with younger children. Cognitive regression may occur in the form of loss of acquired academic skills, more primitive handwriting, reversion to "baby talk," or even complete mutism.

Atypical Cognitive Disturbance: In addition to impaired schoolwork from concentration and memory problems, global psychogenic amnesia for whole blocks of time may occur, including all memories for events contemporaneous with the traumatic incident, or even loss of memory for all prior childhood experiences. This psychologically self-protective mechanism may be misdiagnosed as malingering.

Somatization: Even children who report little or no emotional distress may communicate with their bodies. Virtually every organ system may be affected, with headaches, heart palpitations, dizziness, stomach aches, and asthma-like breathing problems being especially common. Aside from representing increased physiological arousal, somatization in children may take on a "symbolic" form of communication, such as unexplained visual impairment in a child who saw a homicide, or repetitive vomiting in a child who wants to "clean out" his/her memory of a traumatic event.

Neuropsychology of PTSD

Questions of whether PTSD or other types of mental stress claims constitute a "real" disorder often arise in the litigation arena. Recent research in neuropsychology has helped legitimize PTSD and the role of traumatic stress effects in producing compensable disability. This literature has been covered extensively elsewhere[31] and will be briefly summarized here.

Although many psychologically traumatizing experiences occur in the context of physical and neurological injuries, severe emotional trauma, even in the absence of documentable brain or nervous system injury, is often associated with impaired cognitive functioning on neuropsychological tests.[32] Neurophysiological models of PTSD emphasize cumulative *neurosensitization*, i.e. the build-up of abnormally intense and perseverative electrochemical danger signals in brain systems responsible for emotion, motivation, and memory. In addition, chemical neurotransmitters and stress hormones produced during acute and chronic traumatic stress may lead to actual destruction of neurons in sensitive brain areas.[33] Like the proverbial "broken record," the PTSD program continues to play again and again, affecting wider and wider areas of the patient's experience and behavior and producing progressive psychological disability.[34]

PHOTO: RICK REINHARD

Specifically with regard to children, one recent study[35] analyzed startle reflexes in school-age children suffering from PTSD after witnessing a shooting, and found that their physiological startle patterns actually regressed, the responses of 10-year-old children now resembling those of 5-year-olds. As a result, these children continued to overreact to environmental cues, their physiological danger-detection systems placed on "red alert" by the traumatic scene. In other research,[36] preliminary experimental data suggest that childhood traumatization may impair normal neuron-to-neuron synaptic development in the cerebral cortex of the brain's frontal lobe, leading to deficits in attention, planning, reasoning, and behavioral control, which may produce a form of "acquired" attention deficit hyperactivity disorder (ADHD) in traumatized children.

Torts and Psychological Injury: "Mental Stress Claims" in Psychology and Law

Clinicians who negotiate the legal system need to have some understanding of the forensic issues involved in diagnosing and treating traumatically disabled children and adults in litigation. At the same time, attorneys may appreciate some insight into the sometimes untidy real-life psychological worlds their clients commonly inhabit while pursuing their claims.[37] This section will summarize these overlapping issues.

In a civil tort action, recovery for psychic pain or emotional distress has traditionally been recognized only as an additional or "parasitic" element of physical damages. In the mid-1950's, the courts in various states began to allow an action for the intentional infliction of emotional distress itself, as in the case of a malicious jokester who falsely tells a child that his/her parent has been killed. Later changes in law removed the physical impact or injury limitation in negligence actions, opening the way for so-called "mental-mental" claims, where a mental event (witnessing a shocking scene) causes a damaging mental outcome (developing PTSD), as well as allowing an action for mental distress even for

bystanders witnessing negligent injury, as in the case of a child who sees a sibling or close friend assaulted.

Even though a psychiatric diagnosis is not essential to a cause of action, plaintiffs' attorneys often wish to invoke PTSD in tort litigation for "mental stress," because it supposedly gives the claim more legitimacy by relating the stress syndrome to a specific tortious incident. This allows plaintiffs to argue that all of their psychological distress arose from the index traumatic event, in contrast to a more mundane diagnosis, such as anxiety disorder or depression, which could have many complex causes. However, many authorities assert that, especially in the forensic context, PTSD should be diagnosed only if the facts fit; otherwise the diagnosis risks becoming overused, diluted, and trivialized. In this view, the important point is for the clinician to communicate to insurance carriers, attorneys, or forensic factfinders that the claimant is experiencing significant psychological stress that stems from the actions of the defendant; the precise diagnosis is less important than a thorough description of the symptoms and disability. Where a diagnosis other than, or in addition to, PTSD exists, such as depression, specific phobia, or post-concussion syndrome, this diagnosis should of course be specified.

In conclusion, the successfully pursued tort case for psychological injury in a child victim of criminal assault will make the connection between a direct or negligent action, a resultant injurious event, and the psychological effect on the plaintiff in terms of a diagnosable psychological disorder, such as PTSD, that produces compensable impairment in health, academic, work, social, and/or family functioning. To the extent that these connections can be effectively challenged, defense counsel will prevail. VA

Laurence Miller, Ph.D. is a psychologist in private practice in Boca Raton, Florida, specializing in clinical and forensic neuropsychology, psychotherapy and rehabilitation, law enforcement behavioral science, and corporate consulting and management training. Dr. Miller is the Police Psychologist for the West Palm Beach Police Department and Clinical Director of the Palm Beach County Critical Incident Stress Debriefing Team. He is on the adjunct faculty of Florida Atlantic University and regularly conducts training seminars on topics pertaining to the brain, behavior, health, law, and human relations. Dr. Miller can be contacted at Plaza Four, Suite 101, 399 W. Camino Gardens Blvd., Boca Raton, FL 33432, (561) 392-8881.

21. Taylor, J.S. (1994). Neurolaw: Towards a new medical jurisprudence. *Brain Injury*, 9, 745-751; Taylor, J.S. (1997). *Neurolaw: Brain and Spinal Cord.* New York: ATLA Press.
22. Miller, L. (1994). Civilian posttraumatic stress disorder: Clinical syndromes and psychotherapeutic strategies. *Psychotherapy*, 31, 655-664; Miller, L. (1998b). Psychotherapy of crime victims: Treating the aftermath of interpersonal violence. *Psychotherapy, 35*, 336-345; Miller, L. (1998c). *Shocks to the System: Psychotherapy of Traumatic Disability Syndromes.* New York: Norton; Miller, L. (in press-b). Workplace violence: Prevention, response, and recovery. *Psychotherapy.*
23. Miller, L. (in press-a). Child abuse brain injury: Clinical, neuropsychological, and forensic considerations. *Journal of Cognitive Rehabilitation.*
24. Miller, L. (1993). The "trauma" of head trauma: Clinical, neuropsychological, and forensic aspects of posttraumatic stress disorder n brain injury. *Journal of Cognitive Rehabilitation, 11*(l), 6-20; Miller, L. (1998c). *Shocks to the System: Psychotherapy of Traumatic Disability Syndromes.* New York: Norton; Miller, L. (1999a). Treating posttraumatic stress disorder in children and families: Basic principles and clinical applications. *American Journal of Family Therapy, 27*, 21-34; Miller, L. & Schlesinger, L.B. (in press). Those they left behind: Treating victims and survivors of serial killers. In L.B. Schlesinger (Ed.), *Serial Offenders: Current Thought, Recent Findings, Unusual Syndromes.* Boca Raton: CRC Press.
25. Quinn, K.M. (1995). Guidelines for the psychiatric examination of posttraumatic stress disorder in children and adolescents. In R.I. Simon (Ed.), *Posttraumatic Stress Disorder in Litigation: Guidelines for Forensic Assessment* (pp. 85-98). Washington DC: American Psychiatric Press.
26. Breslau, N., Davis, G.C., Andreski, P. & Peterson, E. (1991). Traumatic events and posttraumatic stress disorder in an urban population of young adults. *Archives of General Psychiatry, 48*, 216-222; Breslau, N. & Davis, G.C. (1992). Posttraumatic stress disorder in an urban population of young adults: Risk factors for chronicity. *American Journal of Psychiatry, 149*, 671-675.
27. Miller, L. (1995). Tough guys: Psychotherapeutic strategies with law enforcement and emergency services personnel. *Psychotherapy, 32*, 648-656; Miller, L. (1998a). Our own medicine: Traumatized psychotherapists and the stresses of doing therapy. *Psychotherapy, 35*, 137-146; Miller, L. (1998c). *Shocks to the System: Psychotherapy of Traumatic Disability Syndromes.* New York: Norton; Miller, L. (in press-d). Helping the helpers: Treating burnout, vicarious traumatization, and compassion fatigue in trauma therapists. In F.M. Dattilio & A. Freeman (Eds.), *Cognitive-Behavioral Strategies in Crisis Intervention* (2nd ed.). New York: Guilford.
28. Miller, L. (1998c). *Shocks to the System: Psychotherapy of Traumatic Disability Syndromes.* New York: Norton; Miller, L. (1999b). Psychological syndromes in personal injury litigation. In E. Pierson (Ed.), *1999 Wiley Expert Witness Update,* (pp. 263-308). New York: Aspen.
29. American Psychiatric Association (1994). *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.). Washington DC: Author; Meek, C.L. (1990). Evaluation and assessment of posttraumatic and other stress-related disorders. In C.L. Meek (Ed.), *Post-Traumatic Stress Disorder: Assessment, Differential Diagnosis, and Forensic Evaluation* (pp. 9-61). Orlando: Professional Resource Exchange; Miller, L. (1994). Civilian posttraumatic stress disorder: Clinical syndromes and psychotherapeutic strategies. *Psychotherapy, 31*, 655-664; Miller, L. (1998c). *Shocks to the System: Psychotherapy of Traumatic Disability Syndromes.* New York: Norton; Modlin, H.C. (1983). Traumatic neurosis and other injuries. *Psychiatric Clinics of North America, 6*, 661-682; Modlin, H.C. (1990). Post-traumatic stress disorder: Differential diagnosis. In C.L. Meek (Ed.), *Post-Traumatic Stress Disorder: Assessment, Differential Diagnosis, and Forensic Evaluation* (pp. 63-89). Orlando: Professional Resource Exchange.
30. American Psychiatric Association (1994). *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.). Washington DC: Author; James, B. (1989). *Treating Traumatized Children: New Insights and Creative Interventions.* New York: The Free Press; Johnson, K. (1989). *Trauma in the Lives of Children: Crisis and Stress Management Techniques for Counselors and Other Professionals.* Alameda: Hunter House; Quinn, K.M. (1995). Guidelines for the psychiatric examination of posttraumatic stress disorder in children and adolescents. In R.I. Simon (Ed.), *Posttraumatic Stress Disorder in Litigation: Guidelines for Forensic Assessment* (pp. 85-98). Washington DC: American Psychiatric Press.
31. Miller, L. (1993). The "trauma" of head trauma: Clinical, neuropsychological, and forensic aspects of posttraumatic stress disorder in brain injury. *Journal of Cognitive Rehabilitation, 11* (l), 6-20; Miller, L. (1997b). Neurosensitization: A pathophysiological model for traumatic disability syndromes. *Journal of Cognitive Rehabilitation, 15*(6), 12- 23; Miller, L. (in press-c). Atyptical responses to trauma: Clinical, neuropsychological, and forensic considerations. *Neurorehabilitation*; Parker, R.S. (1990). *Traumatic Brain Injury and Neuropsychological Impairment: Sensorimotor, Cognitive, Emotional, and Adaptive Problems in Children and Adults.* New York: Springer-Verlag; Weiner, H. (1992). *Perturbing the Organism: The Biology of Stressful Experience.* Chicago: University of Chicago Press.
32. Barrett, D.H., Green, M.L., Morris, M.A.R., Giles, W.H. & Croft, J.B. (1996). Cognitive functioning and posttraumatic stress disorder. *American Journal of Psychiatry, 153*, 1492-1494; Everly, G.S. & Horton, A.M. (1989). Neuropsychology of posttraumatic stress disorder: A pilot study. *Perceptual and Motor Skills, 68*, 807-810; Knight, J.A. (1997). Neuropsychological assessment of posttraumatic stress disorder. In J.P. Wilson & T.E. Keane (Eds.), *Assessing Psychological Trauma and PTSD* (pp. 448-492). New York: Guilford Press; Miller, L. (1993). The "trauma" of head trauma: Clinical, neuropsychological, and forensic aspects of posttraumatic stress disorder in brain injury. *Journal of Cognitive Rehabilitation,* 11(l), 6-20.
33. Bremner, J.D. (1998). Neuroimaging of posttraumatic stress disorder. *Psychiatric Annals*, 28, 445-450; Charney, D.S., Deutsch, A.Y., Krystal, J.H., Southwick, S.M. & Davis, M. (1993). Psychobiologic mechanisms of posttraumatic stress disorder. *Archives of General Psychiatry, 50*, 294-305; Kolb, L.C. (1987). A neuropsychological hypothesis explaining posttraumatic stress disorders. *American Journal of Psychiatry, 144*, 989-995; Sapolsky, R.M., Krey, L.C. & McEwen, B.S. (1984). Glucocorticoid- sensitive hippocampal neurons are involved in terminating the adrenocortical stress response. *Proceedings of the National Academy of Sciences*, 81, 6174-6177.
34. Miller, L. (1997b). Neurosensitization: A pathophysiological model for traumatic disability syndromes. *Journal of Cognitive Rehabilitation*, 15(6), 12-23; Miller, L. (1998c). *Shocks to the System: Psychotherapy of Traumatic Disability Syndromes.* New York: Norton.
35. Pynoos, R.S., Steinberg, A.M. & Ornitz, E.M. (1997). Issues in the developmental neurobiology of traumatic stress. *Annals of the New York Academy of Sciences, 821*, 176-193.
36. Arnsten, A.F.T. (1999). Development of the cerebral cortex: XIV. Stress impairs prefrontal cortical function. *Journal of the American Academy of Child and Adolescent Psychiatry, 38*, 220 - 222 .
37. Barton, W.A. *Recovering for Psychological Injuries* (2nd ed.). Washington DC: ATLA Press; Bursztain, H.J., Scherr, A.E. & Brodsky, A. (1994). The rebirth of forensic psychiatry in light of recent historical trends in criminal responsibility. *Psychiatric Clinics of North America*, 17, 611-635; Meek, C.L. (1990). Evaluation and assessment of posttraumatic and other stress-related disorders. In C.L. Meek (Ed.), *Post-Traumatic Stress Disorder: Assessment, Differential Diagnosis,* a-nd *Forensic Evaluation* (pp. 9-61). Orlando: Professional Resource Exchange; Miller, L. (1996). Making the best use of your neuropsychology expert: What every neurolawyer should know. *Neurolaw Letter,* 1996, 6, 93-99; Miller, L. (1997a). The neuropsychology expert witness: An attorney's guide to productive case collaboration. *Journal of Cognitive Rehabilitation, 15*(5), 12-17; Miller, L. (1999b). Psychological syndromes in personal injury litigation. In E. Pierson (Ed.), *1999 Wiley Expert Witness Update,* (pp. 263-308). New York: Aspen; Miller, L. (1999c). "Mental stress claims" and personal injury: Clinical, neuropsychological, and forensic issues. *Neurolaw Letter, 8*, 39-45; Modlin, H.C. (1983). Traumatic neurosis and other injuries. *Psychiatric Clinics of North America, 6*, 661-682; Modlin, H.C. (1990). Post-traumatic stress disorder: Differential diagnosis. In C.L. Meek (Ed.), *Post- Traumatic Stress Disorder: Assessment, Differential Diagnosis, and Forensic Evaluation* (pp. 63-89). Orlando: Professional Resource Exchange; Schouten, R. (1994). Distorting posttraumatic stress disorder for court.. *Harvard Review of Psychiatry, 2*, 171-173; Simon, R.I. (1995). Toward the development of guidelines in the forensic psychiatric examination of posttraumatic stress disorder claimants. In R.I. Simon (Ed.), *Posttraumatic Stress Disorder in Litigation: Guidelines for Forensic Assessment* (pp. 31- 84). Washington DC: American Psychiatric Press; Slovenko, R. (1994). Legal aspects of posttraumatic stress disorder. *Psychiatric Clinics of North America*, 17, 439-446; Sparr, L.F. (1990). Legal aspects of post-traumatic stress disorder: Uses and abuses. In M.E. Wolf & A.D. Mosnaim (Eds.), *Posttraumatic Stress Disorder: Etiology, Phenomenology, and Treatment* (pp. 239-264). Washington DC: APA Press; Stone, A.A. (1993). Post- traumatic stress disorder and the law: Critical review of the new frontier. *Bulletin of the American Academy of Psychiatry and Law, 21*, 23-36.