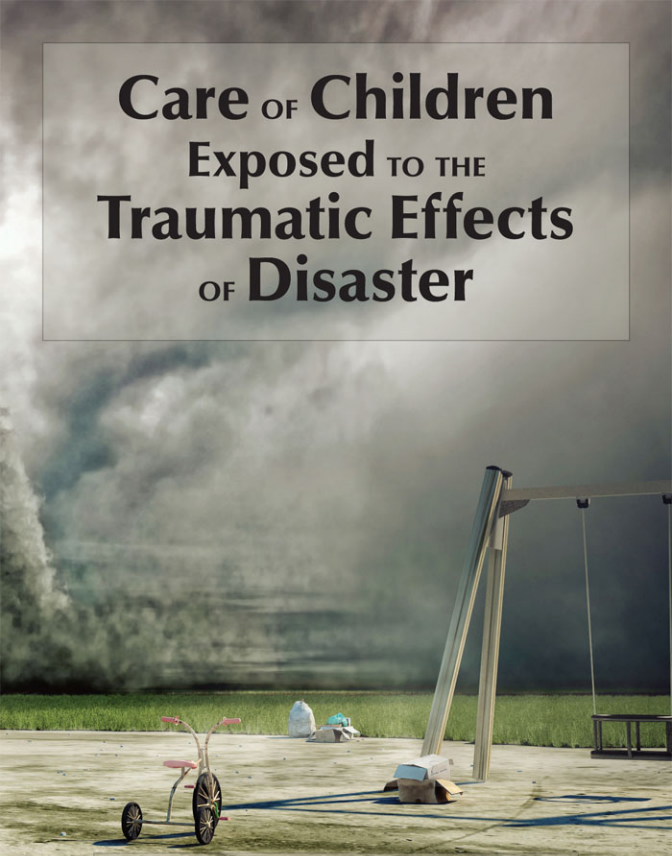
Care of Children Exposed to the Traumatic Effects of Disaster



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Contents

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Preface

One can empathize with the poet William Wordsworth who wrote, "The world is too much with us." People are bombarded almost on a daily basis with news of natural disasters, nuclear accidents, civil strife, ongoing threats of war, and conflicts between nations. Tragically, children and their families are often the victims. This book is an effort to bring together our understanding of the effects of disaster on children and their families and the various means available for helping them in their hour of need. Although children are generally exposed to the same spectrum of hazards as adults, they are still maturing physically, emotionally, cognitively, and socially. Thus, the impact of perceived threat or physical harm must be understood in terms of the child's developmental level and also within the family and social context in which the child lives.

A recent survey of a representative sample of 2,030 children, ages 2–17 years, in the United States indicates that the lifetime exposure to disaster is 13.9% and that 4.1% of the children had experienced a disaster in the preceding year (Becker-Blease et al. 2010). Copeland et al. (2007) estimated that between 25% and 67% of children will be exposed to a significant traumatic event before reaching adulthood.

The National Commission on Children and Disasters (2010) recognizes the unique vulnerability of children to disaster, noting their cognitive and emotional immaturity and their elevated risk for emotional and behavioral problems, including posttraumatic stress disorder (PTSD), depression, anxiety, bereavement, academic failure, delinquency, and substance abuse. The commission indicates that the psychological consequences and mental health effects of disasters are frequently not prioritized in disaster management. Mental health and psychosocial support is typically omitted or provided in a delayed and suboptimal manner during response and recovery efforts. The commission further notes that postdisaster, children and families have limited access to mental health and treatment services. Consequently, "communities depend on persons who are not mental health professionals but who routinely interact with children—such as teachers and school staff, first responders, health care professionals, child care and early education providers, child welfare and juvenile justice professionals, and members of the faith-based commu-

nity—to provide basic support services and brief interventions" (p. 35). These individuals need to be provided the skills necessary to recognize children in distress, to actively support positive coping skills, to monitor children's well-being in the aftermath of disaster, and to identify those who need more intensive evaluation and intervention. Our manual provides a knowledge base that will be helpful for the broad spectrum of professional and volunteer disaster responders who care for children affected by disasters.

Disasters, whether natural or human generated, involve an encounter between forces of harm and a human population in harm's way (Shultz et al. 2007). One hears almost daily the horrific accounts of the effects of natural disasters and extreme events, including earthquakes, tsunamis, monsoonal rains, flooding, blizzards, tornadoes, hurricanes, and droughts. As if the acts of nature were not enough, one increasingly sees the derivative effects of human-generated violence. Wars, civil strife, ethnic conflict, and acts of terrorism encircle the globe. Acts of terrorism against the United States have occurred in recent history and will occur again.

Millions of children are growing up in families and communities torn apart by armed conflict. In 1997, UNICEF reported that in the preceding decade, 2 million children had been killed in wars, 5 million had been disabled, and 12 million had been left homeless. However, these data probably misrepresent the true consequences of war on children. For example, half of the approximately 5.4 million deaths in the war in the Democratic Republic of the Congo were thought to be children (UNICEF 2009).

The child's psychological reactions to disaster are shaped by the unique forces of harm inherent in each type of disaster, as well as the degree of life threat and physical injury. In this book, we define terms essential to understanding the psychological effects of being exposed to disaster, such as *stress, primary and secondary stressors, acute traumatic moment,* and *traumatic reminders.* We note that the child's psychological responses to disaster occur across a timeline. These responses resonate with the impact phase and the cascade of secondary adversities in the aftermath of disaster and the complex array of contextual factors operating at individual, family, community, and societal levels. As a general benchmark for the postimpact phase, the acute or immediate phase lasts approximately 3–6 months, the intermediate phase lasts 6–18 months, and the longer, sustained recovery period may extend 2–5 years.

The child's psychological reaction is determined by individual factors such as age, gender, race, educational level, medical and psychiatric history, trauma history, and the child's level of functioning before and during the disaster. Powerful predictors of the child's response to disaster are family variables such as family structure, cohesiveness, communica-

tion patterns, parental response to disaster, and the family's postdisaster level of functioning. Salient community and societal factors include culture, ethnicity, socioeconomic status, social support, and postdisaster community functioning.

When a community is impacted by disaster, some identifiable groups of children will require additional, customized, or specialized approaches to assure their protection and to facilitate their recovery from the extreme event (Flynn 2006). Children with special needs include children who are developmentally disabled, children who are medically or psychiatrically ill, children living in poverty, foster care children, and children who have suffered from repetitive exposure to interpersonal violence or maltreatment.

Survivors of disaster are frequently exposed not only to individuals with life-threatening injuries but also to scenes of cruel and violent death. Children may suffer not only from exposure to the loss of family members but also concomitantly from exposure to their traumatic deaths. These children are said to suffer from child traumatic grief. Psychological and physiological reactions to bereavement (the fact of loss through death) are processed differently by children than by adults because of the children's cognitive, emotional, and physical immaturity. We discuss various strategies for support and intervention for the bereaved child.

Timely assessment and intervention are essential to mitigate the child's risk for ongoing distress, impairment, and psychiatric illness following traumatic exposure to disaster. We discuss the various parameters for understanding the psychological responses to trauma and disaster, as well as the procedures for a careful ongoing clinical assessment of children's and families' psychological reactions. As research on traumatized children and their families has increased, so has the level of thoughtfulness regarding psychosocial interventions to facilitate recovery.

Psychological reactions to disaster evolve or dissipate across a timeline through the postdisaster and recovery phases. Increasingly, emphasis is given to evidence-informed interventions to reduce psychological morbidity in the aftermath of disaster. One of these interventions is Psychological First Aid (National Child Traumatic Stress Network and National Center for PTSD 2006), an early intervention that is implemented in the immediate aftermath of disaster and was designed to reduce the initial distress and to foster adaptive coping for survivors of all ages. More recently, Skills for Psychological Recovery (Berkowitz et al. 2010) has been proposed as an evidence-informed intervention to be implemented in the intermediate phase following the application of Psychological First Aid to facilitate positive coping with postdisaster stressors and adversities. Other available interventions during the intermediate phase include

psychoeducation, crisis intervention, cognitive-behavioral therapy, bereavement counseling, social supports, and psychopharmacology when indicated. Effective therapeutic intervention restores function and enhances recovery; creates a safe and secure environment; reduces uncertainty, fear, and anxiety; and mobilizes family and social supports.

Working with children exposed to traumatic events is emotionally demanding because of the painful confrontation with the child's lost innocence and premature exposure to the uncertain realities of everyday life and the inevitable losses that are part of the life cycle.

This book is a further elaboration of an earlier text, *Children: Stress, Trauma and Disasters,* and a continuing effort to facilitate an understanding of that process to help readers become better able to support children and their families as they cope with and adapt to the traumatic effects of disaster.

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1

Disaster, Stress, and Trauma

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On successful completion of this chapter, you should be able to:

- Define *disaster* and its classifications of *natural disasters* and *human-generated disasters*.
- Define *stress* and describe the spectrum of different stressors.
- Describe the stress response.
- Identify acute and chronic effects of stress.
- Understand resilience as a mediator of the stress response.
- Define *traumatic reminder.*
- Identify the cumulative effects of trauma exposure.

Introduction

Throughout the course of the life cycle, we all are confronted with threats to well-being or even to life itself. Although children are generally exposed to the same spectrum of hazards as adults, they are still maturing physically, emotionally, cognitively, and socially. The impact of perceived threat, psychological trauma, or overt physical harm may become woven into the tapestry of their emergent personalities and their repertoire of adapting and coping capacities. In this chapter, we define terms essential to understanding the psychological effects of trauma exposure: *disaster, stress, primary and secondary stressors, acute and chronic stressors, resilience, traumatic event, acute traumatic moment,* and *traumatic reminders.*

Disaster

Disaster is defined as a severe ecological and psychosocial disruption that greatly exceeds the coping capacity of the community (World Health Organization 1992). Disaster occurs across a timeline that includes preimpact, impact, and postimpact phases (Shaw et al. 2007). During the preimpact phase, community leaders have the opportunity to work with emergency managers to define the range of potential disasters and to develop a comprehensive emergency management plan to provide guidance for the coordination and mobilization of resources in anticipation of the consequences of disasters. The impact phase occurs when the forces of harm impact the community with a likelihood of bodily injury and death and the compromising of community infrastructure and resources. The postimpact phase includes the immediate, intermediate, and subsequent recovery period. Interventions during the postimpact phase are characterized by emergency/rescue efforts and medical/psychosocial interventions to help those affected, to mobilize systems of care, to facilitate resilience, and to address the cascade of secondary adversities such as shortages of food and water, the lack of social supports, economic hardships, and the interruption of utilities and other infrastructure support systems.

Disasters are generally divided into natural or human-generated disasters. *Natural disasters* include weather-related events (hurricanes, tornadoes, and floods), seismic events (earthquakes, tsunamis, and volcanoes), droughts, and pandemics. *Human-generated disasters* are further subdivided into nonintentional versus intentional events (Shultz et al. 2007). Nonintentional human-generated incidents include transportation crashes, hazardous materials spills, and structural collapses reflecting accidental failures of human technologies. In other instances, harm is clearly intended during acts of aggression toward individuals (child maltreatment, assault, rape, and torture) and acts of mass violence (war, civil strife, ethnic conflict, and terrorism). A *mixed,* or *multidimensional, disaster* encompasses elements of both a natural and a human-generated disaster, such as occurred with the 2011 Japanese tsunami and the failure of their nuclear plant safeguards. Disasters, because of their sudden and unpredictable nature, are great sources of stress for the human population.

Stress

Stress is a nonspecific response of the body to any demand placed on the organism. It can be defined as a real or imagined threat to the psy-

chological or physical integrity of the self or as a threat to one's equilibrium or homeostasis. Stress represents an incongruity between the individual's adaptive capacities and the demands placed on the organism (Taylor and Fraser 1981). A child's level of emotional and cognitive development greatly influences his or her psychological response to events in which demands exceed capacities.

It is important to understand the role of subjective appraisal in responding to stress. From a cognitive perspective, stress, like beauty, is often in the eye of the beholder. How one defines a situation determines one's emotional response to it. If a person defines something as real, it is real in its consequences. The same disaster scenario may be perceived by one person as an extremely stressful negative experience but by another person as presenting interesting challenges. As the poet John Milton observed in *Paradise Lost,* "The mind is its own place and in itself, can make a heaven of hell, a hell of heaven." The experience of stress and stressful happenings is an inherent part of the life cycle.

The Spectrum of Stressors

Stressors are events and situations that prompt and provoke the stress response. In this section, we discuss life stressors, contrast primary and secondary stressors, differentiate acute and chronic stressors, and describe distant stressors.

Life Stressors

Life stressors are intrinsic to important milestones in the life cycle. Life/developmental stressors include such events as childbirth, birth of a sibling, early parent death, separation from loved ones, family discord, divorce, aging, hospitalization, surgery, and physical illness. Children who are exposed to such stressors may exhibit clearly discernible behavior changes. For example, a school-age boy who experiences the sudden unexpected death of his father may resume bedwetting, become afraid to sleep alone, and cling to his mother, insisting that he does not want to go to school. Table 1–1 gives examples of stressors in the human experience.

Primary and Secondary Stressors

Primary stressors are associated with acute threats to well-being, physical integrity, and possibly life itself. Primary stressors are associated with direct exposure to the forces of harm during an episode of interpersonal violence or during the period of disaster impact. *Secondary stressors* occur