Aspects of Abuse: Consequences of Childhood Victimization

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Childhood maltreatment is unfortunately a common occurrence in the United States, affecting 1 in 8 children annually.[1] The consequences of maltreatment can be considerable, and exact a heavy toll on the individual, family, and society. Child abuse and neglect can cause permanent, heritable changes in the body's response to stress, which in turn inflicts profound changes in the developing brain. While these changes allow a child to contend with a neglectful, chaotic, or possibly violent environment, they strongly influence an individual's behavioral, educational, physical, and mental functioning and well-being throughout his/her lifetime, long after the maltreatment has ended. As the adverse childhood experiences (ACE) studies clearly demonstrate, adult survivors of maltreatment experience significant health harms that can cause significant morbidity and contribute to early death. Further, the lifetime economic cost to society of childhood maltreatment is estimated to be $124 billion dollars.[2] The study of resilient individuals who appear to suffer fewer negative consequences of their maltreatment offers insights into possible interventions for clinical practice as well as advocacy and public policy opportunities that would begin to lessen the significant burdens of childhood maltreatment.

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Introduction

In 2012, over 675,000 children had substantiated cases of maltreatment.[3] Of those children, 1640 died as a result of maltreatment. Of the fatalities, over 70% were younger than 3 years old, with infants (<1-yr old) at the greatest risk (18.83/10,000 children) versus those older than 5 years (1/100,000 children). If we expand the definition of victimization beyond that of child abuse and neglect, the 2013 Youth Risk Behavior Surveillance System reveals that violence and victimization are not rare among high school students (Table).[4] In the late 1990s, Kaiser Permanente in conjunction with the Centers for Disease Control conducted the adverse childhood experiences (ACEs) study of over 17,000 adult participants who were surveyed about their experience with child maltreatment (abuse and neglect) and exposure to other family dysfunction (substance abuse, mental illness, domestic violence, and incarceration), as well as the status of their health and behaviors.[5,6] The results of this study were profound, illustrating that ACEs are not uncommon, with more than 1 in 5 participants having at least 3 adverse childhood experiences, and that ACEs correlate with a number of anticipated and unanticipated medical and behavioral problems. Since that time, ACE data has been collected in a number of states and jurisdictions with similar results.[7]

For those who survive, the consequences of child maltreatment are broad, impacting the individual victim, family, community, and society. At the societal level, the cost is great. Using child maltreatment prevalence data from 2008 and economic data from 2010, Fang et al.[2] calculated the lifetime economic burden of child maltreatment to be approximately $124 billion. Individually, this amounted to $210,012 per survivor of child maltreatment and $1,272,900 per fatal victim of child maltreatment. Included in this cost, though not exclusively, is the significantly greater health care costs for survivors of maltreatment.[8,9]

Risks for Poor Outcomes

Though the economic impact of child maltreatment is great, the impact on well-being across the life span is even more significant. However, all children who experience some form of victimization will not have poor outcomes. Early identification; having a safe, stable, and nurturing home; and of course, cessation of the

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victimization all help to mitigate poor and long-term outcomes. The etiology for poor outcomes is multifactorial and is an area of continued research. These factors include, but are not limited to, the age at which the maltreatment occurred; the form, severity, and chronicity of maltreatment; and the relationship between the child and the maltreater.[10] The Longitudinal Studies of Child Abuse and Neglect (LONGSCAN Studies) that followed up over 1000 families for 18 years in 5 sites across the United States have found that no particular form of maltreatment predicts greater morbidity than another and that social support for caregivers can decrease the consequences of maltreatment.[11]

A longitudinal study of nearly 6000 children demonstrated that chronic abuse was associated with poor health outcomes in childhood and adulthood.[12] So, the early identification of maltreatment can help to prevent further maltreatment and, therefore, the consequences that result from repeated abuse and neglect. The National Scientific Council on the Developing Child further elucidates the factors that increase the likelihood for poor outcomes. These factors include maternal depression, poor-quality child care, and not having a sensitive and responsive caregiver.[13]

While exposure to intimate partner violence is not considered a form of maltreatment in every jurisdiction, it is toxic stress that impacts the health and well-being of children. Furthermore, the co-occurrence of intimate partner violence and child abuse ranges from 30% to 60% of families.[14,15] In a prospective study of over 2000 children, those with parents experiencing intimate partner violence were nearly 2 times more likely to have ADHD and almost 2 times more likely to have received psychotropic medication.[16] In this same study, if the parent also had depression, the child was 4 times more likely to be diagnosed with ADHD and more than 2 times more likely to have anxiety. Additional research has demonstrated that intimate partner violence in the first 6 months of life significantly correlates with the occurrence of physical abuse, psychological abuse, and neglect.[15] Thus, exposure to intimate partner violence is an additional risk that may contribute to poor outcomes for maltreated children.

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TABLE. Forms of victimization reported by high school students (Adapted from Kann et al.[4])

One or more times during the 12 months before the survey	Percentage (number)
Were in a physical fight	24.7% (13,332)
Were injured (requiring medical treatment) in a physical fight	3.1% (13,382)
Were threatened or injured with a weapon at school	6.9% (13,555)
Were electronically bullied	14.8% (13,501)
Were bullied at school	19.6% (13,515)
Were ever physically forced to have sexual intercourse	7.3% (13,507)
Experienced physical dating violence	10.3% (9930)
Experienced sexual dating violence	10.4% (9913)
Seriously considered attempting suicide	17.0% (13,491)
Made a plan about how they would attempt suicide	13.6% (13,485)
Attempted suicide	8.0% (11,982)

Pathophysiology

A child's primary caregiver is essential for the child to understand and ultimately thrive in his/her environment. Caregivers help a child negotiate new experiences and provide reassurance in stressful situations. Through secure attachment relationships, an infant is able to learn self-soothing techniques and communicate his/her needs. Sensitive, reliable caregiving serves as a "secure base" from which a child is able to venture out and explore his/her environment, returning for reassurance or help when needed. These early experiences are vital to a child's development, as they frame a child's understanding of the world and expectations about future relationships.[17] If a child experiences erratic, disinterested, or violent caregiving, he/she is likely to experience his/her environment as unpredictable and threatening and lack the skills to negotiate these stressful encounters. "Toxic stress" is prolonged, strong activation of the body's stress response systems during sensitive developmental periods in the absence of a protective, buffering caretaker.[18] This toxic stress exacts profound changes to the brain architecture,[19] which in turn influences future behavior, learning, and health.[20]

Stress activates the body's "flight or fight response," which is mediated in large part by the hypothalamus-pituitary-adrenal (HPA) axis and the autonomic