Psychosocial Care for Injured Children: The Impact of Traumatic Medical Events on Children, Parents, and Healthcare Providers

Studies regarding the impact of trauma on children and their families who experience “indirect” trauma (meaning that they are not the ones going through the medical procedure) have clearly established the negative effects on the physical and mental recovery of the whole family. Pediatric medical traumatic stress is a set of psychological and physiological responses of children and their families to pain, injury, serious illness, medical procedures, and invasive or frightening treatment experiences.1,2 Childhood injuries and illnesses are common: 5 out of 100 American children are hospitalized for a major acute or chronic illness, injury, or disability; 20 million children in the US each year suffer unintentional injuries; over 11,000 children are diagnosed with new cancers each year in the US, and there are an estimated 250,000 children who are cancer survivors; and more than 1,000 children have organ transplants each year and several thousand more are awaiting transplants.

After pediatric injury, studies have documented traumatic stress symptoms. In a recent study, more than 80% of the children and parents had at least 1 serious symptom of acute stress disorder in the first month after a child was hurt in a traffic crash.3 Other complications may include traumatic stress disorders, new trauma-related fears, depression, general anxiety, increased family stress, and behavioral changes in the child. In a study of traumatic stress disorders after pediatric injury, almost 1 in 5 injured children and their parents developed post-traumatic stress disorder (PTSD) symptoms that lasted more than 4 months and caused impairment in their daily lives.4 Other research findings suggest that parent and child reactions to injury are connected. Severity of acute stress disorder or PTSD symptoms are correlated between child and parent.

There is a need to identify those at risk for developing traumatic stress disorders after injury. Injury severity is not a good indicator of PTSD risk. There is a need for practical, effective ways to screen in the emergency and primary care medical settings because children and parents rarely seek mental health assistance but may receive urgent and follow-up health care.

In this issue of The Journal, the Psychosocial Care for Injured Children study provides groundbreaking insight into the perceptions and needs of emergency department (ED) workers around the world who have little to no training on how to assess for post-traumatic stress response in patients and family members. In addition, many hospital settings often lack the infrastructure and training to provide comprehensive or even supportive mental health services to these patients. As outlined in the Pediatric Medical Traumatic Stress Toolkit, respond to Distress, offer Emotional Support, and ensure Family-Centered Care (D-E-F) of medical response should be standard procedure in assessment and intervention for these children. This training toolkit, developed by the National Child Traumatic Stress Network, could be an expedient way to address the training needs as outlined in the article and could open the door to exploring other supportive interventions for early identification and risk reduction of trauma associated with emergency pediatric medicine. The D-E-F protocol provides a straightforward method for identifying, preventing, and treating traumatic stress responses at the time of the patient’s need and within the scope of medical practice. In addition to D-E-F protocol, the toolkit includes guidebooks on implementing trauma-informed care, with case studies and examples as well as complementary

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patient handouts for children and parents with evidence-based tips and activities.

It is important to note the larger issue of considering what best practice in trauma-informed care means in emergency medical settings where treating the physical trauma is the clear priority. This article points to the need to elevate the psychological health needs of these children in an overall approach to comprehensive care. It is well documented that mental and psychological wellbeing have a tremendous impact on recovery from physical trauma and illness. Early intervention to reduce the psychological impact of medical trauma on children, their siblings, and caregivers would greatly impact physical recovery and reduce traumatic stress responses. As explained in the Pediatric Medical Traumatic Stress Toolkit, all health care providers encountering children, regardless of discipline, should be “trauma-informed.” It is important to incorporate an understanding of traumatic stress and related responses into routine encounters with children and families. Additionally, all health care professionals should be able to provide basic interventions to children and families that will minimize the potential for ongoing trauma and maximize continuity of care.

From another perspective, training ED staff about the impact of indirect trauma on their own capacity to manage secondary traumatic stress reactions would further improve the quality of care for children. Although this was not one of the factors considered in this study, secondary traumatic stress among ED workers is well documented and impacts staff turnover, workplace stress, and burnout.

Finally, introducing trauma training and implementing basic trauma reduction strategies into common practice in ED settings would significantly reduce the subsequent negative effects of post-medical emergency traumatic responses that can create debilitating lifelong consequences. Providing appropriate training and introducing a new standard of psychological care for traumatized children are essential to healthy outcomes for children and their families.

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References


Subclinical Hypothyroidism in Infancy: To Treat or Not to Treat, That Is the Question

The introduction of newborn screening for congenital hypothyroidism in the 1970s was a public health triumph, allowing for the first time the early detection and treatment of this condition and leading to the near-eradication of intellectual disability due to congenital hypothyroidism in the developed world. Since these early days, significant changes in newborn screening have resulted in a near-doubling of the apparent incidence of the condition, from 1:3000-1:4000 to around 1:2000.1 This increase does not reflect a rise in the incidence of severe permanent cases, which has remained relatively constant (~1:4000). Rather, it is due to a marked increase in the detection of less severely affected infants.2 Factors contributing to this shift include changes in newborn screening strategies (such as the adoption of primary thyroid stimulating hormone [TSH] screens and lower screening cutoffs),3,4 demographic shifts resulting in the migration of ethnic groups with higher rates of congenital hypothyroidism,5,6 and the vastly improved survival of preterm and low birth weight infants, who contribute disproportionately to abnormal results on newborn screening.2,6 Many, though not all, of these milder cases are transient.

In addition, a small proportion of infants have normal results on initial screening but later develop abnormal thyroid function tests, a pattern that has been termed ‘delayed TSH rise’ or ‘atypical’ hypothyroidism.7 Etiologic factors include recovery from sick euthyroid syndrome, genetic conditions such as trisomy 21, exposure to excess iodine or to medications that affect thyroid function, and identical twins.