Prevention and Treatment of Traumatic Stress in Children: Few Answers, Many Questions

This month’s issue of Pediatrics brings us the executive summary of an Agency for Healthcare Research and Quality–sponsored comparative effectiveness review (CER) by Forman-Hoffman and others,1 of evidence directed at a timely question, “How can we best intervene to help children who have been exposed to traumatic events?” For the purposes of their review, the authors define traumatic events as those that do not occur in the context of personal relationships, but rather natural or man-made disasters, war, accidents, and school shootings, such as the recent tragic event in Newtown, CT. A full report of the methods and findings is available online.2 The most important conclusion derived from this rigorous review is: when it comes to empirical evidence to prevent or treat symptoms from traumatic events, we don’t know much of anything.

There are numerous barriers to progress on this topic, including lack of consensus on best frameworks and operational definitions for understanding trauma exposures and outcomes, as well as failure to design studies that account for parental, family, and community factors and the impact of chronic trauma. Some studies include children exposed to traumatic events, whereas others start with those who have symptoms, 2 overlapping but importantly different groups. Rigor in research is clearly lacking. Of 6647 abstracts reviewed, a mere 21 trials and 1 cohort study with low or medium risk of bias were identified. No study replicated findings from effective interventions and no drug therapy demonstrated efficacy. Nearly all evaluated only short-term symptoms. Although this CER may be criticized for using too strict inclusion criteria resulting in a predictably large number of exclusions, the return is indeed paltry.

On the other hand, our understanding of the impact of childhood exposure to trauma has grown exponentially. An expanding body of convergent knowledge generated from distinct disciplines (neuroscience, behavioral science, sociology, medicine) has been generated, and points to the need for attention to prevention and treatment. The literature on the impact of adverse childhood experiences provides firm evidence that interpersonal traumatic events before the age of 18, such as physical, sexual, and emotional abuse; parental addiction; or parental death (among other events) significantly impact later physical and mental health.3–5 Importantly, there now exists an extensive body of research on childhood stress and its relationship to brain development. It is now well understood that healthy development can be disrupted or impaired by activation of the physiologic stress response with significant and lifelong implications for learning, behavior, and adult functioning.6 Although this CER focused on noninterpersonal traumatic events, it is likely there is a common physiologic response.

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KEY WORDS
stress, trauma, children & adolescents, crisis management, disasters

ABBREVIATION
CER—comparative effectiveness review

Opinions expressed in these commentaries are those of the author and not necessarily those of the American Academy of Pediatrics or its Committees.

www.pediatrics.org/cgi/doi/10.1542/peds.2012-4020
doi:10.1542/peds.2012-4020

Accepted for publication Dec 28, 2012
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PEDIATRICS (ISSN Numbers: Print, 0031-4005; Online, 1098-4275).
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FINANCIAL DISCLOSURE: The author has indicated she has no financial relationships relevant to this article to disclose.

FUNDING: No external funding.
We also understand that traumatic experiences in childhood are not necessarily destiny. Plenty of children survive and even thrive despite acute and chronic traumatic events in their lives. In these children, adverse experiences are counterbalanced with protective factors that, when experienced together, create resilience. We know several factors that are positively related to such protection: capacity for cognition; healthy attachment relationships (especially with parents); the motivation and ability to learn and engage with the environment; the ability to regulate emotions and behavior; and supportive environmental systems that include education, cultural beliefs, and faith-based communities. A trauma exposure prevention and treatment research agenda can and should include focus on resilience.

Too often, progress on significant child health problems is hampered by the silo effect. Professionals from different disciplines become so fortified by their own language, paradigms, and audiences that they fail to take advantage of the depth and breadth of each other’s knowledge and insight. Social workers, psychologists, physicians, and educators all have a hand in identifying and intervening in children exposed to trauma, yet interprofessional approaches are sorely lacking. This review serves as a call to action to bring together stakeholders from multiple disciplines to create a consensus-based research agenda around childhood trauma exposure.

Although the experts are sorting out the best operational definitions and frameworks, pediatricians encounter children and their families who need help on a daily basis. Unlike the Newtown tragedy, these traumas are mostly hidden from public view and occur in neighborhoods with endemic violence and poverty. Traumatic events and the stress they generate will always be with us and most children will be exposed to some form or another. We want to protect all children from such events, but that is impossible.

A PARTING THOUGHT

Although research is clearly needed, some basic insights helpful to children exposed to trauma may never be proven by empirical means. Some factors are so important that if they are not present, interventions proven as effective will likely not work. In the words of Betsy McAlister-Groves in her excellent book, *Children Who See Too Much*, “The desire to find a particular helpful strategy or intervention sometimes leads professionals to forget that the basic tool of establishing relationships is the greatest weapon against hopelessness and vulnerability in children.”

The first and most important principle is that we must recognize the power of a nurturing and caring relationship with an adult to help a child recover from trauma. We do not need to wait for published evidence to make an impact in this way.

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Pediatrics 2013;131;591; originally published online February 11, 2013; DOI: 10.1542/peds.2012-4020

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