



Policy Brief

The Adverse Effects of Toxic Stress in Early Childhood

Traci Sawyers, April 2014

THE PROBLEM

Childhood exposure to traumatic events is a major public health problem. Research shows that traumatic stress early in life impacts brain development and has negative consequences throughout childhood and adolescence, and into adulthood.¹

Children exposed to one or more traumas can develop reactions that affect them long after the events end.² These kinds of traumas include witnessing or experiencing physical or sexual abuse, violence in families and communities, loss of a loved one, refugee and war experiences, living with a family member suffering from substance abuse or mental health issues, having a life-threatening injury or illness and extreme poverty. According to the Centers for Disease Control and Prevention, almost 60 percent of American adults say that they were abused or experienced other difficult family circumstances during childhood.³

BACKGROUND

Anything that threatens a person's stability and well-being is a stress. When this occurs, the body focuses on fighting off the threat. This can cause a variety of physical symptoms like increased heart rate, headaches, fatigue, high blood pressure, loss of appetite, insomnia and restlessness.⁴

The Harvard University Center on the Developing Child outlines three types of stress a child may experience. The first is actually called 'positive stress' and is considered a normal part of growing up. This stress might come from going to a new child care or school, meeting new people, dealing with frustration, or even basic developmental tasks like learning to walk and talk. The second is 'short-term stress' which is generally linked to events like divorce or a natural disaster. These can cause intense distress for a child, but with support from caring adults, the child can adapt. The third kind of stress - frequent or continual stress - is a different matter. This kind of stress - called 'toxic stress' - keeps the body's alarm system on high, which physically impacts children's developing brains and organ systems and can negatively effect learning, behavior, and health throughout life.⁵

In the late 1990s, Vincent Felitti and Robert Anda conducted a landmark study that looked at the specific effects of adverse childhood experiences (ACEs) — including abuse, neglect, domestic violence and family dysfunction — on 17,000 mainly white, well-educated, middle class people in San Diego.⁶ They found a strong connection between traumatic events in childhood and later health and social problems in adulthood. They also found that ACEs were more common than they expected. Forty percent of those they studied reported experiencing two or more ACEs, and 25 percent reported three or more. Other studies have shown consistent findings.⁷

And the health issues that result go beyond those you might think would be related, such as smoking, substance abuse or depression. This study and others found that it can impact asthma, diabetes, high blood pressure, rheumatoid arthritis, liver disease, heart disease, obesity and cancer.⁸ This happens because high levels of toxic stress in childhood interferes with the normal development of the body's neurological, endocrine and immune systems and this leads to increased and ongoing susceptibility to disease.⁹

The 2010 Vermont Behavioral Risk Factor Surveillance Survey included some of the ACE Study questions and thirteen percent of Vermont adults had four or more ACEs. Adults with at least four ACEs generally experience higher rates of smoking, recent marijuana use, obesity, depression, and chronic disease compared to the general population.¹⁰

The good news is that parents and other caregivers can play a crucial role in buffering stressful events with love and support. And studies have also found that early identification and treatment of toxic stress can lessen the long-term negative health and behavioral outcomes.¹¹

WHAT IS BEING DONE

There has been important work nationally and in Vermont focused on building resiliency in children. Resilience is the ability to adapt well over time to challenging situations and stress. While many things contribute to resilience in a child, caring and supportive relationships are key. Resilience can be enhanced by families, schools and communities and can counteract stress. Building resiliency in children is aimed at building coping skills early in their lives, instead of trying to repair disorders later.¹²

The Strengthening Families framework is also being used in Vermont. Strengthening Families is focused on building five protective factors: Parental Resilience; Social Connections; Concrete Support in Times of Need; Knowledge of Parenting and Child

Development; and Social and Emotional Competence of Children. When these protective factors are present, families are less likely to experience child abuse or neglect and are more equipped to build nurturing environments that promote healthy outcomes.

Vermont's Integrated Family Services (IFS) is working to bring services together into one seamless continuum of care for children and families prenatal to age 22. These efforts are happening within the context of health care reform and with a focus on both mental and physical health needs. IFS is strongly committed to prenatal and early intervention for children and families as a way to prevent or address problems as early as possible, before they develop or escalate. Children's Integrated Services (CIS) is a model of the IFS approach focused on children prenatal – age 6 and their families.

The American Academy of Pediatrics (AAP) has identified the prevention and treatment of toxic stress as one of its top priorities. This group sees it as a way to both improve patient health across the lifespan and improve the country's health. In January 2012, the AAP published two major reports in its journal *Pediatrics* on the science of toxic stress and the pediatrician's role in mitigating its effects.

Vermont has also taken significant steps over the last several years to specifically improve trauma-informed services within the community mental health system. The Vermont Child Trauma Collaborative is a project that supports these efforts as well as works to improve trauma-informed care in the larger system of care. With a federal grant from 2009 to 2012, the Vermont Department of Mental Health collaborated with key stakeholders in the children's mental health system of care, including public and private community mental health providers, to provide trauma training and implement a best practice called the Attachment, Self-Regulation and Competencies (ARC) Framework in Vermont's community mental health system. The public private

workgroup that oversaw this grant then planned an Adverse Childhood Experiences conference in Vermont in the fall of 2013 and Vincent Felitti of that landmark study was there to present. As follow-up, regional meetings are taking place focused on preventing or addressing childhood trauma in local communities through screening, referral, engaging primary care practices and more.

Home visiting is also an important mechanism for minimizing the lifelong effects of early childhood adversity and has been a longstanding practice in Vermont. In 2013, Act 66 was passed, that addresses shared training, quality standards and common outcomes for home visiting programs. The Vermont Home Visiting Alliance, a group of providers, business leaders, and agency personnel, was convened by the Vermont Business Roundtable (VBR) in 2012, and continues to inform the implementation of Act 66 and focus on quality standards. Nurse Family Partnership and Parents as Teachers are just two of the evidence based home visiting programs in Vermont that can positively impact toxic stress. Early Head Start's longstanding home-visiting program also does much to build responsive caregiving and address this problem.

RECOMMENDATIONS

There are many important steps that Vermont needs to take to continue to prevent and treat toxic stress in children:

- Help parents and other adults reduce children's exposure to toxic stress and build resiliency. This primarily needs to happen through increased parent education and support. It also includes training for child care providers, teachers, and other adults who interact regularly with children so that they can identify and care for children who have been exposed to traumatic experiences.
- Create/support policies that mitigate barriers to family well-being including poverty, family violence, and child neglect.

- Ensure the availability of mental health care and substance abuse treatment programs for parents. Policies that promote access to needed care can have a big impact on reducing the risk of toxic stress for children whose parents struggle with mental illness or substance abuse.
- Ensure that specific trauma services and treatments are available and accessible in the larger system of care for children and families and that they include culturally competent practices that reflect the needs of diverse child and family populations.
- Promote and expand screening for toxic stress risk factors in well-child visits or through expanding home visiting programs.
- Continue to spread awareness about childhood trauma to child-serving professions and to the public - its signs and symptoms, and where to get help. The National Child Traumatic Stress Network (<http://www.nctsn.org>) provides many resources on its website.
- Increase the use of evidence based home visiting as a key parent education and support strategy.
- Increase opportunities to introduce or support protective factors, such as strong social networks, that can increase children's resiliency and enable them to successfully deal with adversity.

The effects of toxic stress cannot be overstated. Prevention is the best route, but if this does not happen, it is crucial to intervene as early as possible to prevent or minimize significant and ongoing damage.

Sources:

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- ³ Middlebrooks, J.
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- ⁶ Felitti, V. Anda, R, Nordenberg, D. Spitz, A., Edwards, V. Koss, M. *The adverse relationship of adult health status to childhood abuse and household dysfunction*. American Journal of Preventative Medicine, 1998.
- ⁷ Ibid
- ⁸ Miller, G., Chen, E., & Zhou, E. If it goes up, must it come down? Chronic stress and the hypothalamic-pituitary-adrenocortical axis in humans. *Psychological Bulletin*, 2007.
- ⁹ Felitti, et al.
- ¹⁰ Vermont Department of Health, 2012.
- ¹¹ American Academy of Pediatrics Policy Statement. *Early Childhood Adversity, Toxic Stress and the Role of the Pediatrician: Translating Developmental Science Into Lifelong Health*. PEDIATRICS, 2012.
- ¹² Pizzolongo, P, Hunter, A. *I Am Safe and Secure: Promoting Resilience in Young Children*, National Association for the Education of Young Children, 2008.

About These Policy Briefs:

This is one in a series of issue briefs designed to focus our collective attention on issues that affect our young children and families. These briefs, as well as an annual

How Are Vermont's Young Children? Report are part of an initiative by Building Bright Futures Early Childhood Advisory Council and connected to the Vermont Early Childhood Framework recently unveiled at Governor Shumlin's Early Childhood Summit in 2013-to remind ourselves, in every aspect of daily life, to ask the question: "How are the Children?" For more information, call Building Bright Futures at 802-876-5010 or find out more on line: www.buildingbrightfutures.org)

About Project LAUNCH:

Project LAUNCH (Linking Actions for Unmet Needs in Children's Health) is a federal initiative funded by the Substance Abuse and Mental Health Services Administration (SAMHSA). The Vermont Department of Health (VDH) received a five-year SAMHSA Project LAUNCH grant in 2012. Project LAUNCH is being piloted in Chittenden County and is grounded in a comprehensive view of health that addresses the physical, emotional, social, cognitive and behavioral aspects of well-being. Building Bright Futures serves as the grantee of VDH for LAUNCH implementation.

About the Author:

Traci Sawyers holds a M.A. in public policy from Tufts University and has 25 years experience in child and family policy, maternal/child health and behavioral health. In these areas, she has been a writer, lobbyist, researcher, planner, program administrator, consultant, facilitator, grant writer/administrator, elected official, and organizational director. She is currently the Early Childhood Health Policy Expert for Building Bright Futures and Vermont's Project LAUNCH initiative.