VIEWPOINT

Identifying and Preventing Adverse Childhood Experiences
Implications for Clinical Practice

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Adverse childhood experiences, commonly referred to as ACEs, are potentially traumatic events that occur in childhood and adolescence, such as experiencing physical, emotional, or sexual abuse; witnessing violence in the home; having a family member attempt or die by suicide; and growing up in a household with substance use, mental health problems, or instability due to parental separation, divorce, or incarceration.[1] Since the publication of the ACES Study by the Centers for Disease Control and Prevention and Kaiser Permanente in 1998,[2] more than 2 decades of research have documented the association of ACEs with health and well-being across the life span.[1-3]

ACEs are associated with increased risk for numerous negative outcomes, including a wide range of chronic diseases and leading causes of morbidity and mortality such as cancer, diabetes, heart disease, suicide, and drug overdose. Risk is particularly pronounced for individuals who experience multiple types of ACEs.[1-4] ACEs are also associated with negative effects on educational achievement and employment potential.[1,2,5] Importantly, the historical and ongoing effects of racism or poverty, living in under-resourced or racially segregated neighborhoods, and experiencing housing or food insecurity (social determinants of health) can contribute to and exacerbate the effects of ACEs.[1,4] The potential societal costs of ACEs are estimated to be in the hundreds of billions of dollars each year, with a significant proportion of these costs occurring in the health care system.[1]

A large and growing body of research indicates that the underlying mechanism by which ACEs are associated with health outcomes is through the development of toxic stress, a chronic activation of the stress response system. Toxic stress results in dysregulation of the limbic-hypothalamic-pituitary-adrenal axis, elevating levels of catecholamines ("fight or flight" response), cortisol, and proinflammatory cytokines, leading to cascading effects on the nervous, endocrine, and immune systems. These changes can affect attention and other executive functioning, impulsive behavior, brain reward systems, decision-making, and response to stress throughout the life span.[1] The scientific understanding of ACEs and toxic stress maps the pathways for how these early life experiences affect health and provides a potential scientific basis for preventing ACEs.

A report released by the Centers for Disease Control and Prevention on November 5, 2019, using data from 144 017 adults aged 18 years or older from 25 states participating in the 2015-2017 Behavioral Risk Factor Surveillance System found that 60.9% of adults reported they had experienced at least 1 type of ACE in their lifetime and 15.6% (1 in 6 adults) reported they had experienced 4 or more types of ACEs.[5] A graded, dose-response relationship was found between the number of types of ACEs experienced and increased risk for a range of outcomes, including health-risk behaviors (current smoking, heavy drinking), chronic health conditions (depressive disorder, cancer, coronary heart disease, stroke, diabetes, kidney disease, chronic obstructive pulmonary disease, asthma, overweight/obesity), and socioeconomic challenges such as having no health insurance. For example, after controlling for race/ethnicity, sex, and age, compared with adults without exposure to ACEs, adults who reported that they had experienced 4 or more types of ACEs had an adjusted odds ratio (AOR) of 1.8 (95% CI, 1.6-2.1) for having coronary heart disease, 1.4 (95% CI, 1.2-1.6) for cancer, 2.1 (95% CI, 1.7-2.5) for stroke, 2.8 (95% CI, 2.5-3.1) for chronic obstructive pulmonary disease, and 5.3 (95% CI, 4.9-5.7) for depression.[5]

Although prospective, longitudinal studies are needed to examine the association between preventing ACEs and specific health outcomes and financial savings, some studies have indicated that ACEs and the harms stemming from exposure to them can be prevented.[1] For example, a 15-year follow-up study of a randomized trial of 400 women that compared receipt of home visitation program services during pregnancy and the first 2 years after giving birth vs less intensive screening, referral, and visitation services found that women who received the intervention had significant reductions in verified reports of child abuse and neglect. In addition, the subset of women in the intervention group that was not married and was of lower socioeconomic status had reduced rates of receiving food stamps and Aid to Families with Dependent Children, behavioral impairments from use of alcohol and other drugs, arrests, convictions, and number of days jailed during the 15-year follow-up period.[6] Additional studies on this cohort of women and children have also found long-term protective effects, such as lower rates of substance use, better academic achievement, and fewer arrests and convictions, among offspring of the women who received the home visitation services.[1] By preventing ACEs, many of the leading causes of morbidity and mortality in the United States could potentially be reduced.[2,4]

Clearly, prevention of ACEs is a societal and community challenge, but clinicians also have an important role. There are actions clinicians can take in their practice settings that may help prevent ACEs and reduce the harms associated with exposure to ACEs. It is essential that clinicians become educated about and recognize ACEs and learn strategies for prevention and care of patients who have experienced ACEs. Yet, research indicates that many clinicians do not routinely ask about or screen for ACEs, primarily due to lack of training about how to screen for or talk to patients about ACEs, what to do to address

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ACEs, and concerns about time constraints during the patient visit.[7] It is also not clear how screening for ACEs should interact with screening for social determinants of health, another priority of many professional societies, acknowledging these 2 entities overlap.

Incorporating components of primary ACEs prevention into everyday clinical practice may be achievable through talking with parents and caregivers about creating safe, stable, nurturing environments and protective relationships, and reinforcing positive parenting techniques and coping skills at routine clinical visits. In addition, clinicians can refer parents to parenting skills classes or refer higher-risk parents to home visitation programs such as Healthy Families America and Nurse Family Partnership. Home visitation programs have demonstrated significant reductions in rates of child abuse and neglect and have improved substance use, violence, and parenting outcomes.[1]

Opportunities to identify ACEs in the clinical setting are more substantial than clinicians might think. For example, a pediatrician can recognize when a child might be experiencing neglect or witnessing partner violence in the home; an emergency physician may treat an adolescent after assault or a suicide attempt or drug overdose; and an obstetrician may recognize a sexually transmitted infection as a result of sexual abuse. These are all ACEs and present opportunities for prevention. Formal evidence-based programs also could help with screening and referrals. Enhanced primary care programs, such as Safe Environment for Every Kid, screen for ACE exposures and other risk factors in the family environment and work with families to address these concerns. This program has demonstrated fewer reports to child protective services and better adherence to medical care than among similar families that have not been exposed to the intervention.[1] Given the multigenerational effect of ACEs, screening parents for ACEs to implement primary prevention services for families could potentially help break the cycle of ACEs by providing an opportunity to implement protective and preventive strategies. Several screening tools to identify ACEs in children and parents, as well as to assess resiliency, social supports, and protective factors, are available from the National Child Traumatic Stress Network[8] and the American Academy of Pediatrics.[9]

In addition to primary prevention of ACEs, clinicians and health systems are likely important in reducing health harms associated with prior exposure to ACEs by incorporating trauma-informed care and services into clinical practice settings. Important elements of trauma-informed care include understanding how trauma affects health, routinely screening for ACEs and trauma, using culturally responsive assessments, promoting resilience and protective factors, addressing trauma-related somatic and mental health issues, and ensuring appropriate linkage to services and supports for identified issues.[8] The American Medical Association recently passed a policy resolution affirming the role of trauma-informed care to lessen ACEs.[10] Clinicians should realize that some patients who have experienced ACEs may not be achieving optimal outcomes for their health conditions due to the physiological and psychological effects of toxic stress. Addressing underlying trauma through strategies, such as trauma-focused cognitive behavioral therapy, may attenuate the effects of trauma and help individuals adhere to medical treatment protocols and achieve better outcomes.[1] From a systems perspective, data sharing between primary and behavioral health care clinicians can help connect patients to services in a streamlined manner. Colocation of primary care, behavioral health, and other medical services using a team-based approach is gaining popularity given its greater efficiency of addressing the broad needs of patients and their families. This holistic approach to care is particularly important for individuals who have experienced ACEs.

ACEs are prevalent among the US population and can potentially affect health and well-being throughout the life span. Recognizing the important role of clinicians in preventing ACEs before they occur and implementing trauma-informed care to mitigate harms caused by ACEs are key steps in reducing individual, family, and societal effects of ACEs. The best available evidence points to a number of practical steps clinicians can take in their practice settings to address ACEs, especially their prevention. Importantly, these efforts should be pursued in tandem with comprehensive community-based ACEs prevention strategies that ensure a strong start for children; enhance skills to help parents and youth handle stress, manage emotions, and tackle everyday challenges; connect youth to caring adults and activities; promote social norms that protect against violence and adversity; and strengthen economic supports for families.

ARTICLE INFORMATION

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