

## VIEWPOINT

# Screening for Adverse Childhood Experiences (ACEs) in Primary Care

## A Cautionary Note

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**Adverse childhood experiences (ACEs)**, such as experiencing or witnessing violence or abuse or living with a parent with mental illness or substance use disorder, have been shown to have a powerful influence on subsequent mental and physical health and life expectancy. Exposure to ACEs has been linked to more than 40 negative health conditions, including poor mental health, substance use disorder, adverse health behaviors, chronic physical disease, and shortened life span.<sup>1</sup> A meta-analysis of 37 studies that examined 23 health outcomes found that individuals who reported more than 4 ACEs had higher odds of cancer, heart disease, respiratory disease, and poor self-rated health (odds ratios ranging from 2 to 3); mental illness, alcohol use disorder, and risky sexual behavior (odds ratios ranging from 3 to 6); and drug use disorder and interpersonal or self-directed violence (odds ratios greater than 7).<sup>2</sup> Early childhood adversity and high levels of “toxic stress” have been found to have widespread and longstanding effects on multiple systems, and have been associated with reduced immunity, high levels of inflammation, shortened telomeres, subsequent poor health outcomes, and premature mortality.<sup>3</sup>

As a result of this extensive body of research, many have recommended that clinicians, especially those in primary care, screen for ACEs and intervene to prevent some of these adverse health effects. The state of

specifically recommended it. Before advocating widespread screening for ACEs, a careful assessment of the risks and benefits of such screening should be done, and the established principles for preventive screening should be applied to ACEs.<sup>5</sup>

### Potential Benefits of ACE Screening

The potential benefits of reducing the negative health effects of ACEs are substantial. Even a 10% reduction in prevalence and severity of chronic physical and mental health disorders related to ACEs would have a major effect on overall public health and health care expenditures.<sup>6</sup> Screening for ACEs in children could have the added benefit of preventing child maltreatment and future ACEs. However, no interventions have been shown to improve outcomes in adult or pediatric patients who have experienced a high number of ACEs. ACEs are not a disease or medical condition, but rather a list of traumatic events, each of which may have a differential influence on health outcomes and require different types of interventions. For example, the type of intervention that benefits an individual who has experienced childhood sexual abuse may be quite different than for an individual who experienced household dysfunction or racial discrimination.

Some have suggested that individuals who screen positive for a high number (>4) of ACEs should undergo secondary screening or an assessment by a mental health professional for specific mental health conditions, such as posttraumatic stress disorder, panic disorder, or depression, and that evidence-based interventions for these specific disorders be offered. Again, there is little or no evidence to support this recommendation (and whether it should be based upon an absolute number of ACEs or a particular pattern of ACEs). It is not clear what kind of intervention should be offered to patients with a high number of ACEs and no symptoms,

or whether these individuals are at similar risk for poor health outcomes as those who have mental health symptoms.

For adults and children who have experienced ACEs, the most commonly recommended treatment is some type of trauma-informed care.<sup>7</sup> Although trauma-informed therapies have been shown to benefit patients with distress from specific traumas, they have never been shown to assist individuals who screen positive for ACEs and are either not experiencing symptoms or are not seeking treatment for these

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California recommends routine screening for ACEs, and has allocated \$40 million in 2020 to reimburse clinicians who screen patients in the Medi-Cal program. The American Academy of Pediatrics recommends that “Pediatric practices [should] consider implementing standardized measures to identify family and community-level factors that put children at risk for toxic stress,” but does not specifically recommend screening for ACEs.<sup>4</sup> The US Preventive Services Task Force has not published recommendations on screening for ACEs, and no major medical organizations have

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symptoms. Several parenting and early childhood interventions have been shown to improve outcomes for high-risk children, but none have been studied among children reporting a high number of ACEs.

### Potential Harms of ACE Screening

There are numerous potential, but no proven, harms of screening for ACEs in adults or children. One risk is whether the respondents will be offended or upset by answering personal questions about ACEs or whether the ACE questionnaire will erode the trust between clinician and patient or parent. This is a particular concern for parents completing the ACE questionnaire when they may be reporting on current childhood maltreatment (abuse or neglect) that could result in a referral to Child Protective Services. Some pediatric practices have tried to avoid this problem with a questionnaire that asks the parent how many stressful experiences a child has experienced from a list of ACEs without asking the parent to identify a specific ACE. Several studies have found that a majority of adult patients and parents report that they were comfortable being asked about ACEs, and few expressed any distress.<sup>8</sup> Whether these generally positive responses to screening for ACEs generalize to more widespread routine screening deserves further study.

Another concern about screening for ACEs is the effect of identifying an adult or child as having multiple ACEs and labeling them as being at high risk of having significant mental and physical health problems in the future. Research has demonstrated the adverse

psychological effects of labeling patients who screen positive for other chronic conditions, especially mental health disorders. Children with a high number of ACEs are at risk for the “expectancy effect” whereby parents, teachers, and clinicians look for aberrant behavior as confirmation of predicted poor outcomes.

Because the evidence supporting screening for ACEs is inconclusive, a clinician must consider whether to perform screening for which there is insufficient evidence in addition to all the other screenings that have been proven to improve outcomes. Surveys have demonstrated that few children or adults have received all of the recommended evidence-based clinical preventive services (including screening for alcohol and drug use disorder, interpersonal violence, lack of exercise, counseling, and vaccinations), in part because primary care clinicians do not have the time to implement all the evidence-based preventive measures.

Although there is substantial evidence that ACEs are associated with adverse effects on subsequent physical and mental health, there is insufficient evidence that these outcomes can be prevented and that screening for ACEs is beneficial. No interventions have been shown to improve outcomes for children or adults who report a high number of ACEs. The harms of ACE screening are also unproven, but potentially substantial. Few of the key criteria for recommended health screening<sup>5</sup> have been met for ACE screening. Because benefits from ACE screening remain unproven and because of potential risks, routine screening for ACEs among children or adults cannot be recommended without further research.

#### ARTICLE INFORMATION

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