

COMMENT

Health policies to address adverse childhood experiences: taking a whole child approach

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Early childhood experiences, particularly adverse experiences, are strongly associated with morbidity and mortality into adulthood. In a landmark study by Felitti, data demonstrated a graded relationship between the number of adverse childhood experiences (ACEs) and adult risk behaviors, substance abuse, mental health, and adult chronic health conditions. These ACEs included psychological, physical, or sexual abuse; domestic violence; and the household presence of individuals who were substance abusers, mentally ill, or ever imprisoned, and these were hypothesized to create toxic stress responses in the child's brain development. Subsequent studies revised and expanded our understanding of ACEs. Additionally, medical providers, public health officials, researchers, and policy makers now increasingly recognize that health outcomes are influenced by many social determinants of health (SDoH) in addition to ACEs. Factors such as food security, family income, housing stability, and parental wellbeing can also have important implications in a child's growth and development. Ultimately, given the complexities and interactions of SDoH and ACEs, a combination of prevention and targeted interventions are needed to best mitigate the longlasting effects of ACEs. The American Academy of Pediatrics (AAP) Policy Statement on Poverty and Bright Futures both recommend screening for adversity in the medical home,² recognizing that pediatricians are well positioned to connect patients and families with community resources and mental health services, which can help address several ACEs.

In this issue of *Pediatric Research*, Thompson et al. assessed how pediatricians can prioritize screening for ACEs with limited time and resources, and additionally examined the association of these ACEs with asthma as well as emotional, developmental, or behavioral (EDB) problems.3 Using data from the 2016 National Survey of Children's Health, the authors determined that 50% of children experienced at least one ACE. Among the nine ACEs studied, economic hardships (sometimes or very often it has been very hard to get by on your family's income) and divorce (lived with a parent or guardian who got divorced or separated after they were born) were the most prevalent ACEs in the study population. The authors also examined the sensitivity, specificity, positive predictive value, and negative predictive value (NPV) of various combinations of nine ACEs. They determined that a twoquestion screen consisting of (1) economic hardships and (2) divorce offered a high NPV for other ACEs, asthma, and EDB problems, and furthermore concluded that this two-question screener may be more feasible for pediatric practices to implement universally. However, the authors also noted a dose-response relationship between identified ACEs and a higher odds ratio of asthma and EDB problems. Children who had both economic hardships and divorce increased by fourfold the odds of persistent EDB problems. Thus, the results of the study suggest that children who screen positively on the initial two-question screen may benefit from additional screening and intervention.

Screening and addressing ACEs in childhood can mitigate negative health and behavioral consequences in adulthood such as substance abuse, suicide attempts, and high-risk sexual encounters, as well as chronic medical conditions such as heart disease, cancer, stroke, and diabetes. Effective strategies for ACEs can also strengthen children's resilience and potentially break the cycle of adversity. Within the healthcare setting, many ACEs, including economic hardship and divorce, cannot be prevented nor easily be addressed. However, early detection and intervention can reduce the long-lasting effects of EDB conditions that are associated with ACEs and improve outcomes. Unfortunately, there are often delays in identifying and treating EDB conditions. This is attributed to multiple factors including the lack of mental and behavioral health resources, particularly for children from lower socioeconomic status (SES) households.

Health policies that help create a system where ACEs and EDB conditions can be identified and treated in a timely, accessible, and complete manner will help vulnerable children and families. With Medicaid serving as the largest payer of mental health services in the United States, the Center for Medicare and Medicaid Services (CMS) has an opportunity to ensure reimbursement for mental health services. Through the Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) benefit, which was established 50 years ago, Medicaid beneficiaries should receive comprehensive care that includes mental and developmental assessments and treatment for ACE-related conditions. However, our practice of separating health assessments performed during primary care well-visits from provision of mental healthcare divides these services and inhibits payment for mental health. Innovative programs within Medicaid exist, such as the ACEs Aware Initiative in California's Medi-Cal. This initiative specifically increases support for ACEs screening with provision of an online curriculum on ACEs for healthcare providers, and reimbursement of ACEs screening for children and adults with Medi-Cal.⁶ ACEs Aware Initiative applies a specific policy intervention addressing ACEs and EDB conditions through Medicaid and can improve health outcomes. This type of program has potential for replication across all states and practices.

State and national policies need to support children in all of their daily settings including their medical home, school, communities and within their families in order to reduce the

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detrimental effects of ACEs. Although children with Medicaid are assured medically necessary care including mental and behavioral health under the EPSDT benefit, there is variation in state's application of "medically necessary". The overwhelming majority of mental health concerns are addressed by primary care providers, and nearly half of mental health illnesses are diagnosed before 14 years of age. Thus, it is medically necessary to explore mental health concerns among all children and offer preventive care and early intervention in addition to ongoing treatment. Efforts to promote the integration of behavioral and mental health services in the medical home have the potential to provide more timely, accessible, and comprehensive EDB health services to patients. Integrated behavioral health recognizes the importance of treating the whole child and acknowledges the roles that mental/behavioral health have on physical health. Through a team of medical and behavioral health professionals, clinicians collaborate to address problems identified during primary care visits.⁸ These problems may range from SDoH and ACEs to substance abuse and EDB conditions, all of which contribute to overall health. Incorporating mental health services into the medical home has demonstrated improved patient access to EDB health services.⁸ Additionally, children and parents may feel most comfortable seeking mental health and social services in their medical home. While there is growing evidence on improved outcomes with integrated behavioral health models, policies that support these practices are needed. The Tennessee Medicaid payor (TennCare) made a landmark change to reimbursement practices by integrating behavior and physical health benefits in managed care contracts and promoting a continuum of EDB and physical care coverage. This change has allowed for expansion of integrated behavioral health services and improved access to EDB services. Widespread changes in state reimbursement practices are needed to facilitate integrated behavioral health teams and ensure that Medicaid beneficiaries receive the mental and behavioral health services they need to address ACEs.

While medical homes and reimbursement practices are fundamental in meeting the EDB health needs of children, it is crucial to consider other opportunities to reach children and identify ACEs earlier. The effects of ACEs may first be recognized in a child's community or school. Childcare centers and schools should receive training to help identify and link children with needed services in response to ACEs. For example, school personnel should receive education on trauma-informed care, which is an approach that recognizes a child's trauma, responds sensitively, and helps a child build positive coping mechanisms in response to this trauma. Additionally, counseling services are often most accessible in the school, particularly for lower SES populations. School-based mental health services provide an opportunity to address ACEs early. School-based policies at the state level illustrate successful strategies for identifying ACEs and meeting EDB health needs. In 2013, lowa provided a state block grant allocation for school-based mental health projects, capacity building for mental health assessments, and mobile crisis intervention services across public and private schools. Similarly, in 2013, Connecticut approved a law to expand students' access to school-based centers, which included behavioral health services. Further capacity building in the community and schools is an important strategy to address ACEs.

Finally, and perhaps most critically, responding to ACEs requires interventions at the source, which is often within the child's family. As discussed by Thompson et al., parental and child stress are intertwined, and asking parents about their child's ACEs may also be a reflection of the parents' own stressors. The greatest opportunity to prevent a child's increasing exposure to ACEs is to act upstream and intervene within the family, at the parent level. Pediatricians need to regularly take a history that includes parental mental health.¹⁰ Parent's mental health and wellbeing are crucial to a child's health, and the child's ACEs are directly linked

to their caregiver. Conversely, positive childhood experiences (PCEs) within families are linked to improved adult mental health and adult-reported social and emotional health despite exposure to ACEs.⁶ As such, further intergenerational research is needed to demonstrate improved child outcomes by intervening at the caregiver level. CMS is currently funding research programs to address mental health, domestic violence, and substance abuse screening and interventions in mothers. Home visitation programs are particularly promising support strategies for families when implemented correctly. The Nursing Family Partnership (NFP) provides new parents with help navigating the health system and addressing SDoH needs such as employment. NFP is estimated to have reduced child abuse and neglect by nearly 50% in program participants. Several states, including Oklahoma, Rhode Island, and New Jersey, have enacted legislation to provide funding for similar home visitation services. Further research is needed to advance the development of evidence-based intergenerational services that are financially sustainable as CMS reimbursement for interventions within the family is critical for the prevention of ACEs and promotion of PCEs. Given the role of Medicaid in delivering such services to vulnerable families, it is also important to continue to ensure access in the setting of emerging policies such as Medicaid waivers and public charge that may impact enrollment.

The pediatric community has growing evidence of the impact of ACEs on health outcomes and faces the challenge of effectively addressing these events in childhood in order to mitigate enduring harms in adulthood. Screening for ACEs is fundamental but must be combined with evidence-based interventions to meet the needs of children in their medical homes, schools, communities and within their families. Policies that support the whole child can reduce and even prevent adverse experiences in childhood and potentially break the cycle of adversity.

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ADDITIONAL INFORMATION

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REFERENCES

- National Conference of State Legislatures. Preventing and mitigating the effects of adverse childhood experiences. https://www.ncsl.org/Portals/1/ HTML_LargeReports/ACEs_2018_32691.pdf (2018).
- Council On Community Pediatrics. Poverty and child health in the United States. Pediatrics 137, e20160339 (2016). https://doi.org/10.1542/peds.2016-0339.
- Thompson, L. et al. Specific adverse childhood experiences and their association with other adverse childhood experiences, asthma and emotional, developmental and behavioral problems in childhood. *Pediatr. Res.* (2020). https://doi. org/10.1038/s41390-020-0784-y.
- Centers for Disease Control. Preventing adverse childhood experiences (ACEs): leveraging the best available evidence. 2019. https://www.cdc.gov/violenceprevention/pdf/preventingACES-508.pdf.
- Rosenbaum, S. ACEs and child health policy: the enduring case for EPSDT. Acad. Pediatr. 17, S34–S35 (2017).
- Bethell, C., Jones, J., Gombojav, N., Linkenbach, J. & Sege R. Positive childhood experiences and adult mental and relational health in a statewide sample: associations across adverse childhood experiences levels. *JAMA Pediatr.* 173 e193007 (2019). https://doi.org/10.1001/jamapediatrics.2019.3007.
- Kessler, R. C. et al. Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. *Arch. Gen. Psychiatry* 62, 593–602 (2005).

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- 8. Burkhart, K., Asogwa, K., Muzaffar, N. & Gabriel, M. Pediatric integrated care models: a systematic review. *Clin. Pediatrics* **59**, 148–53 (2020).
- Integrated Care Resource Center. State options for integrating physical and behavioral health care (2011). https://www.integration.samhsa.gov/integrated-
- $care-models/Integrated_Care_Briefing_Paper_models_of_integration_analysis_10-6-11.pdf.$
- Zuckerman, B. & Wong, S. L. Family history: an opportunity to disrupt transmission of behavioral health problems. *Pediatrics* 143, e20183383 (2019).