Title
Adverse Childhood Experiences and Resilience: Addressing the Unique Needs of Adolescents

Journal
Academic Pediatrics, 17(7)

ISSN
1876-2859

Authors
Soleimanpour, Samira
Geierstanger, Sara
Brindis, Claire D

Publication Date
2017-09-01

DOI
10.1016/j.acap.2017.01.008

Peer reviewed

Adverse Childhood Experiences and Resilience: Addressing the Unique Needs of Adolescents

Samira Soleimanpour, PhD; Sara Geierstanger, MPH; Claire D. Brindis, DrPH

From the Philip R. Lee Institute for Health Policy Studies (Dr Soleimanpour, Ms Geierstanger, and Dr Brindis), and Adolescent and Young Adult Health National Resource Center (Dr Brindis), University of California, San Francisco, Calif
Conflict of Interest: The authors declare that they have no conflict of interest.
Address correspondence to Samira Soleimanpour, PhD, 3333 California St, Suite 265, San Francisco, CA 94143-0936 (e-mail: samira.soleimanpour@ucsf.edu).

ABSTRACT

Adolescents exposed to adverse childhood experiences (ACEs) have unique developmental needs that must be addressed by the health, education, and social welfare systems that serve them. Nationwide, over half of adolescents have reportedly been exposed to ACEs. This exposure can have detrimental effects, including increased risk for learning and behavioral issues and suicidal ideation. In response, clinical and community systems need to carefully plan and coordinate services to support adolescents who have been exposed to ACEs, with a particular focus on special populations. We discuss how adolescents' needs can be met, including considering confidentiality concerns and emerging independence; tailoring and testing screening tools for specific use with adolescents; identifying effective multipronged and cross-system trauma-informed interventions; and advocating for improved policies.

KEYWORDS: adolescent health policy; adolescents; adverse childhood experiences; resilience; trauma

ACADEMIC PEDIATRICS 2017;17:S108–S114

ADVERSE CHILDHOOD EXPERIENCES (ACEs) are increasingly a focus of both research and interventions nationwide, given emerging evidence of their high prevalence and lifelong health impacts. To date, much of the ACEs literature has focused on children and adults. Greater attention should be paid to the distinct developmental needs of adolescents and how the systems that serve them can more adequately respond.

Distinct from both childhood and adulthood, adolescence is a unique developmental stage of rapid growth during which physiologic, cognitive, social, and emotional changes occur simultaneously. During this time (ages 11 to 21 years), adolescents experience physical and sexual maturation, develop more abstract and long-term thinking, and engage in risk-taking behaviors as they establish their independence. Adolescents who have experienced ACEs may be less able to successfully navigate this transformational stage as a result of the damaging effects of traumatic experiences on their emotional and cognitive development and/or lack of or limited positive supports.

A large body of research has demonstrated that investments in early childhood can yield significant social and economic returns in adulthood and that this developmental stage should be prioritized for investments, particularly for disadvantaged youth.[1,2] However, this research also supports the notion that to maximize returns, there is a concurrent need to invest resources to address the needs of adolescents, particularly for those who may not have received needed supports in early childhood and/or who continue to experience ACEs into adolescence.

Thus, adolescence represents a key window of opportunity to ameliorate the short- and longer-term impacts of trauma and positively alter the life course trajectory. High rates of trauma exposure have led to a pressing need to identify youth who have been exposed; recognize the varied ways in which youth respond to these experiences; identify effective strategies to provide trauma-informed care; and develop policy recommendations to prevent and respond to the impacts of ACEs.

There are many aspects of ACEs that affect adolescent health and warrant in-depth exploration. Here we provide an overview of these issues, with the hope that it helps identify areas for further analysis and critique in the literature.

PREVALENCE AND IMPACTS OF ACEs IN ADOLESCENCE

Researchers have defined ACEs as including physical or emotional abuse or neglect, sexual abuse, domestic violence, substance abuse or mental illness in the home, parental separation or divorce, having an incarcerated household member, and not being raised by both biological parents.[3] Recent research indicates that over half (54%) of all adolescents aged 12 to 17 years in the

United States have been exposed to at least one of these experiences, and over one-quarter (28%) experienced 2 or more.[4] Children living in homes with lower household incomes or in less safe and supportive neighborhoods, as well as those who qualified as having special health care needs, were more likely to experience ACEs.[5] Furthermore, certain subgroups of adolescents face heightened risks, including youth who are lesbian, gay, bisexual, transgender, or questioning (LGBTQ) and those who are incarcerated or involved in the juvenile justice system.[5–7] Despite the high prevalence, the majority of adolescents with trauma exposure do not receive needed health services that are critical to identifying and addressing these concerns.[8]

The effects of trauma during childhood and adolescence have impacts on adolescent health and educational status, including a greater likelihood of repeating a grade in school, lower resilience, increased risk for learning and behavioral issues, suicidal ideation, and early initiation of sexual activity and pregnancy.[5,8–10] In fact, there is a much higher prevalence of these negative impacts among adolescents aged 12 to 17 after experiencing more than one ACE. With 3 or more ACEs, nearly half (48%) of youth experience low engagement in school, 44% cannot stay calm and controlled, and 41% demonstrate high externalizing behaviors.[11] Moreover, exposure to trauma in childhood and adolescence can lead to negative consequences in adulthood, including chronic illness and decreased productivity,[12,13] especially when they are experienced cumulatively or chronically.[4,5,14–17]

Despite the negative impacts of ACEs, literature is emerging on the countereffects of resilience and protective factors. Resilience theories focus on strengths that individuals possess internally, such as coping skills, and externally, such as family and community supports, rather than risks and deficits, and how these strengths can help them overcome risk exposure or traumatic experiences.[17–20] Positive individual-, family-, and community-level factors, including high levels of family functioning and parental engagement, are associated with favorable outcomes for children and adolescents who have been exposed to ACEs.[21–23] Family functioning in particular is a protective factor against poverty, neighborhood violence, poor parental relationships, and adolescent mental health concerns.[24–26] One national study found that resilience, defined as "staying calm and in control when faced with a challenge," lessened the impacts of ACEs on grade repetition and poor school engagement.[5] Another study examining similar data found that many factors mediate the relationship between increasing ACEs exposure and negative outcomes, including residing in a safe neighborhood, attending a safe school, and parental monitoring of friends and activities. Understanding, identifying, and nurturing protective home, school, and community elements may help diminish the overall impact of youth's exposure to ACEs.[4]

Responding to the Unique Needs of Adolescents

Adolescence represents a unique period for major social, psychological, and physical development, and a time in which youth frequently have unmet physical and mental health needs. For example, 20% of younger adolescents (10–15 years) and 27% of older adolescents (16–17 years) did not receive annual well-child visits, and 64% of adolescents with mental disorders did not receive services to address their illnesses.[27–29] Furthermore, those from disadvantaged backgrounds are at the highest risk of not having regular health maintenance visits or receiving needed mental health care.[27,29–31] Many adolescents also tend to engage in health behaviors that place them at risk for the leading causes of morbidity and mortality.[32] As adolescents begin to gain greater independence and assume individual responsibility for daily health habits, develop new social relationships, and individuate from their parents, these changes bring new opportunities and challenges for improving health and preventing disease. In response, clinical and community health, educational, and social welfare systems need to carefully plan and coordinate services to support adolescents who have been exposed to ACEs, with a particular lens on special populations—for example, youth who have been in the foster care system; those who have been incarcerated, homeless, or substance dependent; and/or LGBTQ youth.

Confidentiality Concerns

Pediatric care for youth aged 0 to 21 typically includes a strong focus on parental involvement. However, patient privacy is vital to assuring patient-centered services during adolescence, when the complexity of medical and behavioral health needs increase. Professional guidelines recommend that health care providers spend time alone with their adolescent patients beginning in early adolescence (11 to 14 years).[33] These encounters help adolescents learn how to manage their health with greater independence—for example, by learning how to manage a chronic health condition, avoid health-damaging behaviors, and navigate successful relationships with health care providers. However, one study of national data found that only 34% of adolescents had time alone with their providers, with younger girls and Hispanics youths of all ages being less likely than their peers to have time alone.[34] Adolescents who have experienced trauma are particularly in need of time alone with providers, as it provides the opportunity to begin to develop trusting relationships to safely disclose their experiences.

In addition to time alone with providers, adolescents need assurances that sensitive information they share will be confidential. In fact, adolescents who engage in high-risk health behaviors are likely to cite confidentiality concerns as a reason for foregoing health care.[35] There are confidential care laws that allow adolescents to consent to their own health care without parental notification. These laws differ by state, but they appropriately allow

for greater independence in the adolescent–provider relationship, particularly in the delivery of sensitive services, such as reproductive and mental health care.[36]

Empirical research has shown that adolescents are more likely to disclose sensitive information when providers assure confidentiality.[37] A recent study also found that the use of motivational interviewing, to facilitate intrinsic motivation within the client, and the provision of confidentiality assurances increased the likelihood of providers spending time alone with their adolescent patients.[38]

Screening and Identification

Despite high prevalence rates of trauma and the increasing awareness of the importance of this topic, screening for traumatic experiences in adolescent health care settings has been inconsistent. For example, one study of female adolescents seeking health care in urban settings found that while 40% of clinic users had experienced intimate partner violence, less than one-third (30%) reported ever being screened for intimate partner violence in a clinical setting.[39]

Low screening rates are partly attributed to a lack of appropriate assessment tools. Few instruments have been sufficiently validated for use with adolescents, and few examine trauma symptoms beyond posttraumatic stress disorder.[40] Researchers have found traditional diagnostic categories of trauma exposure, including posttraumatic stress disorder, limiting in that individuals are diagnosed on the basis of symptoms triggered by a specific event, and they thus do not capture exposure to multiple adverse experiences or events that may collectively warrant diagnosis. As a result, newer diagnostic categories, such as "developmental trauma disorder" and "complex trauma," have been created to address these limitations. However, corresponding assessment tools have not yet been developed.[40] Existing validated tools for use with adolescents are also lengthy and can be challenging to administer during brief clinical visits where many issues, including sexual activity, mental health, substance use, and school experiences, need to be assessed.

Although in-depth information or critical analysis of available screening tools that assess for ACEs is beyond our scope here, current tools used in adolescent clinical practice include the Center for Youth Wellness (CYW) ACE–Questionnaire Child, Teen, & Teen Self-Report, and the Yale–Vermont Adversity in Childhood Scale (Y-VACS).[41] The National Child Traumatic Stress Network also provides a comprehensive list of validated tools to assess various aspects of trauma exposure.[42] (See also Bethell et al[43] in this supplement for further detail on screening tools.)

Low screening rates also reflect challenges within the health care delivery system, particularly limited awareness of ACEs,[44] lack of consensus and formal training on screening tools, and lack of formal training of providers in the prevalence and incidence of trauma or how to implement trauma-informed care.[45,46] Providers without ready access to behavioral health services may feel hesitant to uncover trauma without having an adequate system in place with which they can respond, such as through referrals to follow-up care. Moreover, screenings are often not conducted because providers do not have either the time or the reimbursement incentive to screen or address many of these issues.

Approaches to screening also present opportunities and challenges. In particular, there is some debate as to whether all youth should be screened during initial encounters with service providers (universal screening) or if select youth should be screened during follow-up visits after patient–provider rapport has been established. Advantages of universal screenings are that they are brief, are less resource intensive, and can quickly identify youth who are at risk and who require additional, more intensive screening and follow-up. Additionally, providers can immediately understand each youth's trauma history and target subsequent encounters and interventions accordingly. However, the screening process itself can potentially retraumatize a patient and hinder progress if there are not appropriate interventions or referrals in place,[47] which would instead support screenings at follow-up visits after initial trust has been established.

Furthermore, emerging research demonstrates that current screenings for ACEs should be expanded to include other events that can impact youth's health and development, such as economic hardship, family relationships, community stressors, peer relationships, discrimination, and school experiences,[48] as well as resilience and protective factors. Clinical and community programs should implement strategies for the early identification of at-risk youth through comprehensive assessments beyond the traditional ACEs while balancing the time required for these comprehensive assessments. A promising area is the inclusion of Bright Futures recommendations of screening for mental health disorders and emotional and behavioral problems as part of an annual checkup (Table 1).[49] This is a requirement of the Affordable Care Act and is reimbursable.[50] Under the act, which requires the incorporation of Bright Futures recommendations, providers have been able to maximize the opportunity for screening, thus resolving traditional barriers of lack of reimbursement for screening and follow-up.

Integrated Systems of Care

Once identifying youth as having been exposed to trauma and suffering from the consequences, there must be a strong network of coordinated care to provide appropriate referrals to individual, group, and/or family services. These should include home-based supports for youth and their families, as well as academic support and school supports for situations where students might experience triggers, situations, or stimuli that bring up memories of traumatic experiences. Mental health and other services, such as medical, education, and juvenile justice, should be integrated to promote coordination of care and efficient use of resources. (See also Brown et al[51] and Vu et al[52] in this supplement.) Not all professionals who work with

Table 1. Recommendations for Annual Adolescent (11–19 Years) Checkups Related to Adverse Childhood Experiences (ACEs) and Resilience[33,50]

Adolescent Annual Check-up Components
All adolescents and parent/guardians should be informed about confidentiality and the following components of the visit should be conducted with parents present and/or with the adolescent alone as appropriate:
1. Health history, including changes in physical or emotional health status warranting further assessment
2. Physical examination, immunizations, and screenings
3. Observations of parent-youth interaction and youth engagement in health decisions
4. Screening/discussion of the following priority topics related to ACEs/resilience:
• *Emotional well-being:* coping; moods, emotions, and mental health; resilience/protective factors
• *Violence and injury prevention:* domestic violence, intimate partner violence, community violence
• *Social and academic confidence:* connectedness with family, peers, and community; interpersonal relationships; school performance

adolescents need to be specialists in trauma, but they should be trained to be able to identify adolescents in need and know how to appropriately refer them to trauma services. While each sector needs to focus on the outcomes that it is designed to influence, together they can achieve a greater overall impact through their complementary approaches and support.[53] It is also important that adolescent perspectives be brought into the development of trauma-infused health services.[54]

Integration and coordination are critical, yet significant challenges remain in practice. One of the largest barriers is information sharing across sectors. For example, the Health Insurance Portability and Accountability Act provides safeguards for protecting individuals' personal health information, which can limit providers' ability to share health information about mutual clients across agencies to better coordinate care. However, there are exceptions to the rule that allow sharing information for the purpose of treatment. Furthermore, written authorizations from patients and their parents can be obtained to share information with entities outside the health care system, such as school mental health providers.[55] Business associate agreements that clearly outline how sensitive information will be handled between agencies can also be implemented; several have been developed and are available through the US Department of Health and Human Services.

Evidence-Based Interventions

Developmentally and culturally appropriate health services are instrumental in mitigating the short- and longer-term risks of ACEs. Evidence is emerging about the effectiveness of clinical treatments to intervene with children who have experienced trauma and adversity. The National Child Traumatic Stress Network recommends a variety of strategies and tested interventions for working with specific age populations.[56] In particular, Trauma-Focused Cognitive–Behavioral Therapy has an extensive evidence base documenting its effectiveness in the treatment of trauma.[57,58] This approach uses individual and group cognitive–behavioral therapy to address the multiple domains of trauma and to teach youth skills in how to regulate their behavior, process the trauma, and improve their sense of safety and trust.

Schools are also uniquely positioned to support adolescents who have been exposed to trauma or violence given the amount of time youth spend there. According to a national survey, nearly all schools nationwide (97%) reported having at least one staff member whose responsibilities included providing mental health services to students; most commonly these are school counselors, nurses, school psychologists, and social workers.[59] Nationwide, there have also been several initiatives to create trauma-informed schools. These efforts focus on the use of multitiered interventions to address the varying needs of youth exposed to trauma and violence.[60] These strategies can be tailored to the degree of trauma individual students are exposed to; in addition, schools are uniquely positioned to build resiliency and strength among young people throughout the school population. An intervention designed specifically for use in schools is Cognitive–Behavioral Intervention for Trauma in Schools (CBITS).[61] CBITS, which is founded on cognitive–behavioral therapy, provides mental health screening and brief therapy sessions to help youth reduce trauma-related symptoms and promote coping skills. CBITS is delivered through 10 weekly group sessions led by a school-based mental health professional, such as a school psychologist or social worker, with groups of 6 to 8 participating youth.[62] CBITS has been shown to lower the negative impacts of trauma exposure, including depression, psychosocial dysfunction, and academic functioning, particularly among diverse, low-income students.[63]

Another emerging approach to address the impacts of ACEs is the use of mindfulness interventions in school and community settings. These interventions focus on increasing individuals' awareness of current experiences and mental states while minimizing thoughts of past or potential future stressful experiences. Mindfulness interventions, which include yoga and meditation, have been found to increase youth resilience and self-regulation of stress, emotions, and behavior.[64–67]

The federal government took an important step toward reinforcing trauma-informed approaches in schools through the Every Student Succeeds Act (ESSA), signed by President Barack Obama in December 2015.[68] This bipartisan measure reauthorized the United States' national education law. Among other strategies, the ESSA provides funding for school-based mental health services and evidence-based, trauma-informed programming (Table 2).

FUTURE PRACTICE, POLICY, AND RESEARCH RECOMMENDATIONS

The field of adolescent health care is in a nascent phase in understanding how to screen and provide services for adolescents with ACEs. In many regards, the focus on ACEs raises the challenge of an overall dearth of available pediatric and adolescent mental health professionals throughout the system. To overcome these issues and a number of gaps, several strategies are needed.

First, given the lack of mental health providers, policies are needed and funding allocated to train and build the capacity of health care providers to assess trauma and provide trauma-informed care with a focus on strengths and fostering resilience.[69] Curricula that address trauma informed practices, including patient-centered, culturally competent, and emotionally supportive care, should be embedded into primary care and adolescent health provider training programs. Educators and social services providers should also be trained in trauma-informed practices, such as providing safe spaces in schools for youth to calm down after experiencing triggers or stressful situations, not taking students' behaviors personally or reacting with punitive or stressful responses, and offering caring, supportive words, which can have immense impacts on traumatized youth.

Second, confidential care and time alone with providers must be emphasized as well, possibly through standardized training to ensure that providers feel comfortable speaking to parents about the importance of nurturing their children's autonomy, as well as education regarding the confidentiality laws that apply to adolescent health care. Effective coordination of care between health care, school, and community services is also needed. Policies that allow for information sharing across sectors are critical to this care coordination as well.

Third, improved screening tools designed specifically for adolescents that are rigorously tested and that are not burdensome in clinical or school-based settings are needed. These validated tools can then be recommended as part of clinical guidelines, similar to Bright Futures' recent addition of suggested screening tools for adolescents' substance use and depression to their preventive care guidelines.[49] Mainstreaming screening and trauma-infused care into existing policies, programs, and practices assures that these efforts are not merely an extra add-on but rather are recognized as core to evidence-based programs and their funding supports. Screenings should only be conducted after ensuring that services or referral sources are in place to appropriately address the unique needs of youth who are identified as needing any level of intervention. This requires appropriate capacity and training among professionals and nonprofessionals who interact with youth, and appropriate community referrals as necessary.

Fourth, those working in health and education settings are all too familiar with the challenge of treating adolescents, only to send them back to the environments in which they are experiencing trauma, which can significantly hinder any progress. It is critical that interventions are identified that can effectively impact the roots of adolescents' adverse experiences and address them in relationship to their family members who may also have been be exposed to ACEs. Interventions should also be coordinated across sectors, including education, health, and social services. Furthermore, these interventions should address health disparities and the social determinants of health that coincide with ACEs, including economic instability, limited education, and unsafe home and community environments.

Fifth, evidence-based interventions in school, health care, and work settings need to be expanded. Interventions should also be tailored to appropriately serve adolescents who may have greater needs as a result of experiencing multiple ACEs without the protective role of supportive families, schools, and communities, such as foster care, LGBTQ, runaway or homeless, and juvenile justice system–involved youth.

Finally, there is a need for expanded research on how ACEs affect adolescents, either the trauma experienced during childhood, which now impacts risk-taking behaviors during adolescence, or accumulated or new trauma that occurs during the adolescent years, including any of the aforementioned ACEs, as well as intimate partner violence in dating relationships and other issues that arise

Table 2. Brief Overview of the Every Student Succeeds Act (ESSA) and Provisions to Support Youth Exposed to Adverse Childhood Experiences[68]

ESSA is the primary statute governing the federal government's role in K–12 education and was signed by President Barack Obama in December 2015. This measure reauthorizes the Elementary and Secondary Education Act (ESEA) that was first passed during President Lyndon Johnson's administration, which was overhauled in 2001 by President George W. Bush's administration as the No Child Left Behind Act. The ESSA includes many provisions to ensure student success, including ensuring access to equitable education for all students; supporting locally developed, evidence-based interventions; increasing access to high-quality preschool; targeting resources to students in schools with the highest needs; and holding states accountable to supporting every child to be career or college ready.

The ESSA also has several provisions that support trauma-informed practices, including but not limited to providing funding for activities and programs that support the following:

- Expansion of school-based mental health services.
- Training of school personnel to understand how trauma affects students and when to refer them for services, as well as in "effective and trauma-informed practices in classroom management."
- Reduction of exclusionary discipline practices and promotion of positive behavioral supports and interventions.

For more information, see http://www2.ed.gov/policy/elsec/leg/essa/essafaqstransition62916.pdf.

in adolescence. Perhaps most importantly, additional research is needed on which interventions can best respond to the unique needs of adolescents, taking into account family dynamics, confidentiality, and community contexts, as well as the specific risk behavior profile of adolescents. Moreover, it will be important to monitor and evaluate implementation of ESSA and similar initiatives on the state and local levels, including whether they remain in place with the change in the presidential administration in 2017.

Without investments to identify and treat the impacts of ACEs in adolescence, there can be tremendous costs at the individual and societal level in future health and productivity. Together, and through the development of multipronged approaches, we have the ability not only to impact adolescence as a critical phase of development but to also reduce the impact of childhood trauma on the life course as adolescents successfully transition into adulthood.

ACKNOWLEDGMENTS

Financial disclosure: Publication of this article was supported by the Promoting Early and Lifelong Health: From the Challenge of Adverse Childhood Experiences (ACEs) to the Promise of Resilience and Achieving Child Wellbeing project, a partnership between the Child and Adolescent Health Measurement Initiative (CAHMI) and AcademyHealth, with support from the Robert Wood Johnson Foundation (#72512).

REFERENCES

1. Heckman JJ. Skill formation and the economics of investing in disadvantaged children. *Science*. 2006;312:1900–1902.
2. Heckman JJ. The case for investing in disadvantaged children. In: *Big Ideas for Children: Investing in Our Nation's Future*. Washington, DC: First Focus; 2008:49–58.
3. Felitti VJ, Anda RF. The relationship of adverse childhood experiences to adult medical disease, psychiatric disorders, and sexual behavior: implications for healthcare. In: Lanius R, Vermetten E, eds. *The Hidden Epidemic: The Impact of Early Life Trauma on Health and Disease*. New York, NY: Cambridge University Press; 2009.
4. Moore KA, Ramirez AN. Adverse childhood experience and adolescent well-being: do protective factors matter? *Child Indicators Res*. 2016;9:299–316.
5. Bethell CD, Newacheck P, Hawes E, et al. Adverse childhood experiences: assessing the impact on health and school engagement and the mitigating role of resilience. *Health Aff (Millwood)*. 2014;33:2106–2115.
6. Andersen JP, Blosnich J. Disparities in adverse childhood experiences among sexual minority and heterosexual adults: results from a multistate probability-based sample. *PLoS One*. 2013;8:e54691.
7. Baglivio MT, Epps N, Swartz K, et al. The prevalence of adverse childhood experiences (ACE) in the lives of juvenile offenders. *J Juvenile Justice*. 2014;3:1–23.
8. Guterman NB, Hahm HC, Cameron M. Adolescent victimization and subsequent use of mental health counseling services. *J Adolesc Health*. 2002;30:336–345.
9. American Academy of Pediatrics. *Adverse Childhood Experiences and the Lifelong Consequences of Trauma*. Elk Grove Village, Ill: American Academy of Pediatrics; 2014.
10. Thompson R, Proctor LJ, English DJ, et al. Suicidal ideation in adolescence: examining the role of recent adverse experiences. *J Adolesc*. 2012;35:175–186.
11. Moore KA, Sacks V, Bandy T, et al. Adverse childhood experiences and the well-being of adolescents [Fact Sheet]. Washington, DC: Child Trends. Available at: http://www.childtrends.org/publications/fact-sheet-adverse-childhood-experiences-and-the-well-being-of-adolescents/. Accessed February 15, 2017.
12. Smith JP, Smith GC. Long-term economic costs of psychological problems during childhood. *Soc Sci Med*. 2010;71:110–115.
13. Florence C, Brown DS, Fang X, et al. Health care costs associated with child maltreatment: impact on Medicaid. *Pediatrics*. 2013;132:312–318.
14. Duke NN, Pettingell SL, McMorris BJ, et al. Adolescent violence perpetration: associations with multiple types of adverse childhood experiences. *Pediatrics*. 2010;125:e778–e786.
15. Chartier MJ, Walker JR, Naimark B. Separate and cumulative effects of adverse childhood experiences in predicting adult health and health care utilization. *Child Abuse Negl*. 2010;34:454–464.
16. De Bellis MD, Zisk A. The biological effects of childhood trauma. *Child Adolesc Psychiatr Clin N Am*. 2014;23:185–222. vii.
17. Cairns RB, Cairns BD. *Lifelines and Risks: Pathways of Youth in Our Time*. New York, NY: Cambridge University Press; 1994.
18. Luthar SS, Cicchetti D, Becker B. The construct of resilience: a critical evaluation and guidelines for future work. *Child Dev*. 2000;71:543–562.
19. Rutter M. Resilience in the face of adversity. Protective factors and resistance to psychiatric disorder. *Br J Psychiatry*. 1985;147:598–611.
20. Masten AS. Ordinary magic. Resilience processes in development. *Am Psychol*. 2001;56:227–238.
21. Balistreri KS, Alvira-Hammond M. Adverse childhood experiences, family functioning and adolescent health and emotional well-being. *Public Health*. 2016;132:72–78.
22. Annunziata D, Hogue A, Faw L, et al. Family functioning and school success in at-risk, inner-city adolescents. *J Youth Adolesc*. 2006;35:100–108.
23. Bethell C, Gombojav N, Solloway M, et al. Adverse childhood experiences, resilience and mindfulness-based approaches: common denominator issues for children with emotional, mental, or behavioral problems. *Child Adolesc Psychiatr Clin N Am*. 2016;25:139–156.
24. Mistry RS, Vandewater EA, Huston AC, et al. Economic well-being and children's social adjustment: the role of family process in an ethnically diverse low-income sample. *Child Dev*. 2002;73:935–951.
25. Schofield TJ, Lee RD, Merrick MT. Safe, stable, nurturing relationships as a moderator of intergenerational continuity of child maltreatment: a meta-analysis. *J Adolesc Health*. 2013;53:S32–S38.
26. Fan Y, Chen Q. Family functioning as a mediator between neighborhood conditions and children's health: evidence from a national survey in the United States. *Soc Sci Med*. 2012;74:1939–1947.
27. Irwin CE Jr, Adams SH, Park MJ, et al. Preventive care for adolescents: few get visits and fewer get services. *Pediatrics*. 2009;123:e565–e572.
28. Black LI, Nugent CN, Vahratian A. *Access and Utilization of Selected Preventive Health Services Among Adolescents Aged 10–17. NCHS Data Brief 246*. Hyattsville, Md: National Center for Health Statistics; 2016.
29. Merikangas KR, He JP, Burstein M, et al. Service utilization for lifetime mental disorders in US adolescents: results of the National Comorbidity Survey–Adolescent Supplement (NCS-A). *J Am Acad Child Adolesc Psychiatry*. 2011;50:32–45.
30. Nordin JD, Solberg LI, Parker ED. Adolescent primary care visit patterns. *Ann Fam Med*. 2010;8:511–516.
31. Alegria M, Lin JY, Green JG, et al. Role of referrals in mental health service disparities for racial and ethnic minority youth. *J Am Acad Child Adolesc Psychiatry*. 2012;51:703–711.e702.
32. Eaton DK, Kann L, Kinchen S, et al. Youth risk behavior surveillance—United States, 2009. *MMWR Surveill Summ*. 2010;59:1–142.
33. Hagan JF, Shaw JS, Duncan PM. *Bright Futures: Guidelines for Health Supervision of Infants, Children and Adolescents*. 3rd ed. Elk Grove Village, Ill: American Academy of Pediatrics; 2008.
34. Edman JC, Adams SH, Park MJ, et al. Who gets confidential care? Disparities in a national sample of adolescents. *J Adolesc Health*. 2010;46:393–395.

35. Lehrer JA, Pantell R, Tebb K, et al. Forgone health care among US adolescents: associations between risk characteristics and confidentiality concern. *J Adolesc Health*. 2007;40:218–226.
36. English A, Bass L, Boyle AD, et al. *State Minor Consent Laws: A Summary.* Chapel Hill, NC: Center for Adolescent Health & the Law; 2010.
37. Ford CA, Millstein SG, Halpern-Felsher BL, et al. Influence of physician confidentiality assurances on adolescents' willingness to disclose information and seek future health care. A randomized controlled trial. *JAMA*. 1997;278:1029–1034.
38. Bravender T, Lyna P, Tulsky JA, et al. Physicians' assurances of confidentiality and time spent alone with adolescents during primary care visits. *Clin Pediatr (Phila)*. 2014;53:1094–1097.
39. Miller E, Decker MR, Raj A, et al. Intimate partner violence and health care-seeking patterns among female users of urban adolescent clinics. *Matern Child Health J*. 2010;14:910–917.
40. Denton R, Frogley C, Jackson S, et al. The assessment of developmental trauma in children and adolescents: a systematic review. *Clin Child Psychol Psychiatry.* 2017;22:269–287.
41. Bethell C, Carle A, Hudziak J. Methods to assess adverse childhood experiences of children and families: towards approaches to promote child well being in policy and practice. *Acad Pediatr.* 2017;17: S51–S69.
42. National Child Traumatic Stress Network. *Standardized Measures to Assess Complex Trauma*. Rockville, Md: National Child Traumatic Stress Network; 2016.
43. Bethell CD, Carle A, Hudziak J, et al. Methods to assess adverse childhood experiences of children and families: towards approaches to promote child well-being in policy and practice. *Acad Pediatr.* 2017;17:S51–S69.
44. Kerker BD, Storfer-Isser A, Szilagyi M, et al. Do pediatricians ask about adverse childhood experiences in pediatric primary care? *Acad Pediatr.* 2016;16:154–160.
45. Flynn AB, Fothergill KE, Wilcox HC, et al. Primary care interventions to prevent or treat traumatic stress in childhood: a systematic review. *Acad Pediatr.* 2015;15:480–492.
46. Szilagyi M, Kerker BD, Storfer-Isser A, et al. Factors associated with whether pediatricians inquire about parents' adverse childhood experiences. *Acad Pediatr.* 2016;16:668–675.
47. Menschner C, Maul A. *Key Ingredients for Successful Trauma-Informed Care Implementation*. Issue Brief. Princeton, NJ: Robert Wood Johnson Foundation, Center for Health Care Strategies; 2016.
48. Wade R Jr, Shea JA, Rubin D, et al. Adverse childhood experiences of low-income urban youth. *Pediatrics*. 2014;134:e13–e20.
49. Geoffrey RS, Cynthia B, Graham AB 3rd, et al. 2014 recommendations for pediatric preventive health care. *Pediatrics*. 2014;133: 568–570.
50. Park MJ, Brindis CD, Vaughn B, et al. *Adolescent Health Highlight: Health Care Services. Publication 2013-10*. San Francisco, CA: Child Trends and University of California, San Francisco; 2013. Available at: https://www.childtrends.org/wp-content/uploads/2013/10/2013-10HealthCareServices.pdf. Accessed February 23, 2017.
51. Brown JD, King MA, Wissow L. The central role of relationships to trauma-informed integrated care for children and youth. *Acad Pediatr.* 2017;17:S94–S101.
52. Vu C, Rothman E, Kistin CJ, et al. Adapting the patient centered medical home to address psychosocial adversity: results of a qualitative study. *Acad Pediatr.* 2017;17:S115–S122.
53. Ko SJ, Ford JD, Kassam-Adams N, et al. Creating trauma-informed systems: child welfare, education, first responders, health care, juvenile justice. *Prof Psychol Res Pract*. 2008;39:396–404.
54. Nair M, Baltag V, Bose K, et al. Improving the quality of health care services for adolescents, globally: a standards-driven approach. *J Adolesc Health*. 2015;57:288–298.
55. US Department of Health and Human Services; US Department of Education. *Joint Guidance on the Application of the Family Educational Rights and Privacy Act (FERPA) and the Health Insurance Portability and Accountability Act of 1996 (HIPAA) to Student Health Records*. Washington, DC: US Dept of Health and Human Services; US Dept of Education; 2008.
56. National Child Traumatic Stress Network. *Empirically Supported Treatments and Promising Practices*. Rockville, Md: National Child Traumatic Stress Network; 2016.
57. Child Welfare Information Gateway. *Trauma-Focused Cognitive Behavioral Therapy for Children Affected by Sexual Abuse or Trauma*. Washington, DC: Child Welfare Information Gateway; 2012.
58. Wethington HR, Hahn RA, Fuqua-Whitley DS, et al. The effectiveness of interventions to reduce psychological harm from traumatic events among children and adolescents: a systematic review. *Am J Prev Med.* 2008;35:287–313.
59. Teich JL, Robinson G, Weist MD. What kinds of mental health services do public schools in the United States provide? *Adv Sch Ment Health Promot*. 2008;1:13–22.
60. Phifer LW, Hull R. Helping students heal: observations of trauma-informed practices in the schools. *Sch Ment Health*. 2016;8:201–205.
61. Jaycox LH, Cohen JA, Mannarino AP, et al. Children's mental health care following Hurricane Katrina: a field trial of trauma-focused psychotherapies. *J Trauma Stress*. 2010;23:223–231.
62. Stein BD, Jaycox LH, Kataoka S, et al. *Helping Children Cope With Violence and Trauma: A School-Based Program That Works*. Santa Monica, Calif: Rand Corporation; 2011.
63. Ngo V, Langley A, Kataoka SH, et al. Providing evidence-based practice to ethnically diverse youths: examples from the Cognitive Behavioral Intervention for Trauma in Schools (CBITS) program. *J Am Acad Child Adolesc Psychiatry.* 2008;47:858–862.
64. Whitaker RC, Dearth-Wesley T, Gooze RA, et al. Adverse childhood experiences, dispositional mindfulness, and adult health. *Prev Med.* 2014;67:147–153.
65. Felver JC, Celis-de Hoyos CE, Tezanos K, et al. A systematic review of mindfulness-based interventions for youth in school settings. *Mindfulness*. 2015;6:1–12.
66. Kallapiran K, Koo S, Kirubakaran R. Effectiveness of mindfulness in improving mental health symptoms of children and adolescents: a meta-analysis. *Child Adolesc Ment Health*. 2015;20:182–194.
67. Sibinga EM, Webb L, Ghazarian SR, et al. School-based mindfulness instruction: an RCT. *Pediatrics*. 2016;137:213–218.
68. US Government. *S. 1177 (114th Congress): Every Student Succeeds Act*. Available at: https://www.govtrack.us/congress/bills/114/s1177/text; 2016. Accessed January 29, 2017.
69. Ginsburg KR, Carlson EC. Resilience in action: an evidence-informed, theoretically driven approach to building strengths in an office-based setting. *Adolesc Med State Art Rev.* 2011;22:458–481. xi.