Adverse childhood experiences: Understanding association with child health outcomes and access to health care using a life course perspective

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As the call for the transformation of the US health care system grows, health care leaders, providers and community systems of care are challenged to catalyze and foster a model of health care focused on addressing the early life and childhood origins of health and adult disease. Against this backdrop, a critical mass of research evidence is supporting the importance of addressing childhood adversity, toxic stress and its consequences to health and family well-being as critical components of health care reform. Advances in knowledge and effective prevention of toxic stress and adverse childhood events are emerging as key factors in the reduction of long-term impacts from negative experiences related to maternal stress during pregnancy as well as in the ongoing pediatric intake attachment to restoring physical health risks. Evolving epigenetic and life course research also reveal the potential to not only ameliorate the negative psychological, social and behavioral impacts of toxic stress, adverse childhood events and trauma but also to proactively promote strengths, resilience, self-regulation, and social and positive and resilient health behaviors among children. Further, the potential to reduce burden of disease and improve health outcomes for the nation’s 20% of children who experience chronic conditions and special health care needs (CSCHN) and the many more who are at risk born as a priority as we strive to create an effective and sustainable health care system.

Up until now, missing from the dialogue on the designs of systems of care to optimize child well-being and address childhood adversity and toxic stress has been the population-based data on the prevalence of adversity and resilience and evaluation of associations between these factors and health and family well-being and health care system characteristics and performance.

Adverse Childhood Experiences (ACEs) Demographics

Almost half of US children (46%) experienced at least one adverse childhood event in 2013. Nearly 20% of US children age 0-17 experienced 2 or more such adverse childhood events (ACEs) ranging from 16.3% to 32.6% across US states. Children with ACEs are more likely to be the older, publicly uninsured, and have lower income than children without ACEs. Children with ACEs are systematically less likely to seek or experience positive health outcomes. In the United States, children in homes with parents who are healthy live in homes with ACEs. Demographic characteristics of US children with and without ACEs are shown in Table 1.

National and State Variation

Adverse childhood and family experiences—experienced two or more adverse child/family experiences Out: 2011-12 National Survey of Child Health (NSCH)

Note: Physical and emotional neglect are significant for the outcomes due to social acceptance. As these are lesser to be occurring with other ACEs measured, we may report on the prevalence of the outcome in this table but not the importance in the remaining analyses.

Associations of Adverse Childhood Experiences with Health, Home, School and Community Risk and Protective Factors

Interplay between Contextual Factors and ACEs

When children live in low- and very low-income families or are associated with their likelihood of experiencing adverse child and family experiences. Children may be less likely to experience protective home environment factors (e.g. no exposure to household smoking, family member drugs together), neighborhood safety and support (e.g. neighborhood usually always safe), parent involvement in school activities, and perceived school success (e.g. usually always feels safe at school), participation in extracurricular activities when they experience adverse childhood and family experiences.

Adverse childhood experiences and national, neighborhood and school characteristics among US children

Adverse childhood experiences and family characteristics among US children

Associations between ACEs and Home, Neighborhood and School Factors among US Children

Factors Promoting School Success

Factors promoting school success measures are the following: children who have 1 or more ACEs are less likely to participate in extracurricular activities, they are less likely to report that their school is safe, that they feel safe in school, that they have a mentor at school, and that they have a chance to change their behavior. Among children with 1 or more ACEs, those who have a medical home have a predictor of increased odds of positive health outcomes compared with children with 1 ACEs.

Effect of Medical Home on ACEs

Odds of positive and negative health outcomes by presence of a Medical Home among children with 1 or more ACEs

* Adjusted Odds Ratio (odds of outcome with MH vs odds of outcome without MH among children with 1+ ACEs)

Discussion

Children who experience ACEs are at greater risk for negative health outcomes than their peers without ACEs. We have noted that a child accumulates ACEs, they are at an increased risk for poor health outcomes. Our results are consistent with the existing literature on impact of ACEs on children’s health and its correlation with adverse health outcomes. We have seen that as a child accumulates ACEs, they are at an increased risk of negative health outcomes. These outcomes are associated with the existing literature on impact of ACEs on children’s health and its correlation with adverse health outcomes. We have seen that as a child accumulates ACEs, they are at an increased risk of negative health outcomes. These outcomes are associated with the existing literature on impact of ACEs on children’s health and its correlation with adverse health outcomes. We have seen that as a child accumulates ACEs, they are at an increased risk of negative health outcomes. These outcomes are associated with the existing literature on impact of ACEs on children’s health and its correlation with adverse health outcomes.

References
