### Next Steps for ACEs: An Interdisciplinary Approach to Understanding, Treating, and Preventing Childhood Adversity

A Book Review of Adverse Childhood Experiences: Using Evidence to Advance Research, Practice, Policy, and Prevention

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Adverse childhood experiences (ACEs) have become ubiquitous within a variety of disciplines, including the public health, social work, medicine, law, and criminal justice fields. The pivotal 1998 Centers for Disease Control and Prevention (CDC) and Kaiser Permanente ACEs study (CDC-Kaiser ACEs study) highlighted the prevalence of childhood adversity and the lifelong, intergenerational effects of early exposure to toxic stress. Since then, literature on ACEs has developed significantly, yet two decades later, the field is in need of robust, cohesive strategies to reduce or prevent ACEs. The editors, Drs. Asmundson and Afifi (2020), and contributors of this book seek to close this gap by providing historical information on ACEs and childhood trauma, overviewing the current research related to ACEs impact and outcomes, discussing recent controversies and developments of ACEs instruments, and guiding next steps for policy, prevention, and continued research. Central to this book, as noted by the authors, is its relevance to diverse audiences with the shared

mission to understand, treat, and prevent ACEs. Sections I and II examine ACEs through a historical context and highlight current efforts in the field. As mentioned, the CDC-Kaiser ACEs study found that child adversity is common and associated with physical, psychological, and social problems in adulthood (Dube, 2020). The adverse experiences examined in this initial study include physical abuse, sexual abuse, emotional abuse, physical neglect, emotional neglect, violence against a mother, parental divorce, household member with substance use/abuse issues, household member with mental illness, and incarcerated household member (Dube, 2020; Dube et al., 2003; Felitti et al., 1998, as cited in Afifi, 2020). Research indicates that childhood exposure to one or more ACEs increases the risk of physical health (e.g., cardiovascular conditions or chronic metabolic disorders) (Vig et al., 2020), mental health (e.g., depression, substance abuse) (Sheffler et al., 2020), and behavioral issues (e.g., poor coping strategies) (Ports et al., 2020; Sheffler et al., 2020; Vig et al., 2020). Moreover, children who experience ACEs are more prone to participating in risky behaviors and violence, including sexual violence, perpetration,

<sup>&</sup>lt;sup>1</sup> Toxic stress is defined as "the excessive or prolonged activation of the physiologic stress response systems in the absence of the buffering protection afforded by stable, responsive relationships" (Garner & Shonkoff, 2012).

or victimization (Taillieu et al., 2020; Wekerle et al., 2020). The pervasiveness of ACEs and their impact on various aspects of an individual's life initiated a public health response to address this problem.

In Section III, the contributors McLennan, McTavish, and MacMillan (2020) tackle the issue of universal ACEs screenings. The ACEs instrument, developed initially for the CDC-Kaiser ACEs study, is a questionnaire, based upon other established riskassessment surveys, that evaluates the 10 childhood adversities noted above. The results of the instrument produce a 10-point score (i.e., ACEs score) where the cumulative score range indicates varying degrees of negative health outcomes. Currently, there are numerous variations of the instrument used as screening tools for identifying childhood adversity risk factors. Universal ACEs screen advocates maintain that identifying these risk factors will raise awareness of the prevalence of childhood adversity. However, the authors note that the knowledge gained from the screens does not, in itself, improve health outcomes. Additionally, the collective objective of populationlevel screens (i.e., ACEs awareness vs. reducing/ preventing ACEs) remains unclear, and there is limited empirical evidence assessing these instruments (McLennan et al., 2020). Therefore, the authors recommend that universal ACEs screenings should not be implemented at this time. Rather, researchers, practitioners, policymakers, and other stakeholders should focus on understanding and establishing evidence-based intervention and prevention efforts pertaining to ACEs.

As noted, the number of different tool adaptations raises methodological concerns regarding the ACEs instrument. The contributors Holden, Gower, and Chmielewski (2020) examined eight versions and found that there is limited evidence regarding reliability and validity of the instrument. Accordingly, the authors recommend improvements to the ACEs instrument by increased empirical research on psychometric data, revising the tool to capture the severity, frequency, chronicity, and distress of a participant's adverse experiences and performing a large study evaluating the utility of all the ACEs

instruments (Holden et al., 2020). The goal would be to create a new evidence-based, psychometrically sound instrument to better assess childhood adversity.

Section IV discusses ACEs on a global scale as well as examines prevention programming, the importance of resilience studies, and implementation of traumainformed care to evaluate childhood adversity. ACEs are a significant global public health concern, yet research and program implementation has occurred primarily in the United States and Canada. Although continued evaluation of ACEs programs and data collection efforts are important in these countries, it is also critical to collect quality data from various cultures, contexts, and countries (Massetti et al., 2020). This global insight can aid in targeted prevention initiatives and multi-sector collaboration to advance ACEs prevention policies worldwide.

As the ACEs field continues to expand, several frameworks and models help provide theoretical context for understanding childhood adversity. Prevention programs and policies are rooted in the prevention framework, characterized by primary (i.e., universal), secondary (i.e., targeted/at-risk), and tertiary (i.e., indicated/"after the fact") strategies. Programmatic efforts in the field are defined by the varied stages of prevention. Recently, public health officials have incorporated the World Health Organization's Social Determinants of Health framework to understand the structural, economic, and environmental factors that may influence a person's access to healthcare and susceptibility to adversity. Furthermore, the ecobiodevelopmental framework is a new approach to understanding and evaluating effective child adversity prevention. This framework is a modification of the social-ecological framework and "further builds on neuroscience, biology, genomics, and social sciences to provide a new perspective on the interaction between experience, environment, and genetic predisposition" (Brennan et al., 2020, p. 254). The ACEs field is also advancing its understanding of the neurodevelopmental impact of childhood adversity. The contributors Sheridan and McLaughlin (2020) present the dimensional model of adversity and psychopathology (DMAP).

<sup>&</sup>lt;sup>2</sup> Social determinants of health are defined as "the circumstances in which people grow, live, work and age, and the systems put in place to deal with illness" (World Health Organization, 2013, as cited in Brennan, Stavas, & Scribano, 2020, p. 236).

The DMAP takes an alternative, multidimensional approach to understanding how a wide range of adverse experiences, including environmental factors, threat, and deprivation, influence developmental (i.e., cognitive, emotional, and neurobiological) processes (Sheridan & McLaughlin, 2020). In practice, these models are reflected in prevention programs. For example, home visiting prevention programs (e.g., Healthy Families America) target a particular adversity (i.e., child maltreatment) using a multifaceted approach (i.e., building the parent-child relationship). In other words, interventions tactics are not a "one size fits all" solution and require support at the individual, relational, communal, and societal levels.

In addition to the advancement of ACEs theoretical frameworks, there has also been progress in understanding the role of resilience and traumainformed care (TIC) in the treatment and prevention of childhood adversity. Resilience is the developmental process in which children positively adapt to adversity and are able to function effectively and sometimes thrive in the world (Oshri et al., 2020). The distinction between resilience promotive factors (i.e., positive adaptation) and protective factors (i.e., reducing ACEs burden through interaction and heightening positive adaptation) is imperative to advancing this body of research (Oshri et al., 2020). Moreover, promoting resilience via prevention-based interventions may further benefit youth affected by adverse experiences. Yet, continued cross-disciplinary research is needed to understand the importance of resilience.

Furthermore, the practice of trauma-informed care is a promising method to address the long-term and severe effects of ACEs. TIC applies a holistic approach to recognizing how trauma impacts society at different levels. Importantly, one's environment and culture influence how they perceive and process traumatic events. Therefore, the interdisciplinary practice of TIC prioritizes these contexts into the development, delivery, and evaluation of services (Piotrowski, 2020). TIC provides a systematic approach to understanding the complexity of trauma and resilience, while providing cost-effective programming to minimize poor health and developmental outcomes throughout the life course (Piotrowski, 2020).

The public health approach to ACEs, thus far, has been successful in defining the problem, raising public awareness regarding the seriousness of the issue, and understanding the severe consequences of early exposure to adversity. However, work remains to advance the best clinical practices, programs, research, and policy to prevent childhood adversity. Comprehensive ACEs prevention strategies must prioritize an interdisciplinary, evidence-based, and data-driven approach to inform definitions, screenings, programmatic interventions, and public policies (Afifi & Asmundson, 2020). This book provides audiences with a thorough guide for reducing and preventing childhood adversity, supporting children and families, and breaking the intergenerational cycle of ACEs.

The knowledge gained from the CDC-Kaiser ACEs Study is profound and provides a baseline for understanding the consequences of childhood adversity. Yet, as this body of research continues to grow, the field needs to be cognizant of and focus on the impact of structural, economic, and environmental conditions that may intensify the effects of the 10 original ACEs and other adversities. The editors and contributors of this text opine that future research should look to expand the definitions of ACEs to include items such as economic hardships, generation trauma (e.g., dislocation or forced migration), exposure to community violence, and peer victimization, among others (Afifi & Asmundson, 2020; Afifi et al., 2017; Cronholm et al., 2015; Finkelhor et al., 2013, as cited in Ports et al., 2020). Moreover, current ACEs instruments use a 1-to-1 ratio, cumulative scoring method, wherein each of the 10 constructs holds the same weight despite the disproportionate frequency, severity, chronicity, and overall impact one adversity may have over another (Afifi & Asmundson, 2020; Merrick et al., 2020; Ports et al., 2020). Furthermore, historically disadvantaged groups (e.g., women, racial/ethnic minorities, or the LGBTQ+ community) may also suffer a higher prevalence of certain types of adversity or victimization (Wekerle et al., 2020). Expanding the ACEs definitions, incorporating the varying degrees of adversity, and bolstering insight of the effects of adversity on diverse populations may increase the complexity to the current understanding and

implementation of the ACEs tool. However, the benefit of integrating these items into a robust assessment is that it would increase accuracy of capturing childhood adversities and their effects on health outcomes among diverse populations (Holden et al., 2020). This understanding can help improve targeted, inclusive, and interdisciplinary prevention efforts at the individual and relational levels as well as provide evidence for broader public health initiatives (i.e., strategies and public policies) on the community and societal level to treat and prevent ACEs.

#### **About the Author**

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