

The Policy Implications of the Biology of Trauma

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Introduction

Research has revealed one of the biggest public health crises in the United States: the epidemic of toxic stress from Adverse Childhood Experiences (ACEs). Policy is uniquely equipped to prevent toxic stress and ACEs before they occur and create support services for those affected. However, a disconnect remains between scientific research and policy. Through an exploration of existing literature in toxic stress and U.S. policy, I aim to identify the implications of medical research on creating trauma-informed policy responses to the toxic stress epidemic in the U.S.

An ACE score of 4 or higher increases the risk of **7** out of *10* leading causes of death in the

Discussion

What can U.S. policy do to prevent and address the epidemic of toxic stress?

Mass Incarceration of Parents

- Parental incarceration can be prevented by abolishing the cash bail system. A U.S. Office of Justice Report found no difference in or court appearances in the absence of cash bonds.⁷ Reducing pretrial incarceration preserves the parent-child bond and prevents the trauma of incarceration.
- The Future Of Children Center suggests increased visitation and video-visitation for children of incarcerated parents (CIPs).⁸ Increased visitation reduces alienation and separation anxiety for CIPs.
- The Illinois Task Force on Children of Incarcerated Parents found that incorporating trauma-informed practices in prison visitation settings reduces stress among CIPs.⁹ Trauma-informed training and the presence of welfare experts can minimize trauma exposure.



An ACE score of 4 or higher decreases life expectancy by up to **20 years** ⁶

Research Questions

- 1. How does the biology of trauma relate to public policy?
- 2. How can policy be created to address the biology of trauma?

Background

ACEs were identified by Dr. Vincent Felitti in the 1998 Adverse Childhood Experience Study. They are high-stress events which cause long term physiological and psychiatric challenges in developing youth.²

Parental Substance Abuse Disorders

- Several studies have found reductions of ACE exposure from parental substance abuse disorders (SUDs) with parenting-targeted approaches. Parents who received counseling at least once a week over twelve months had reduced post-treatment SUDs.¹⁰ The Parents under Pressure (PuP) program reduced the likelihood of child abuse for substance abusing parents with children under three by providing parents with one-on-one parenting coaching.¹¹
- A National Institute of Health policy review found that individualized parenting programs are effective at reducing SUDs when paired with Family Treatment Drug **Courts** (FTDCs).¹² FTDCs combine the justice system, child welfare programs, and SUD treatment to to reunite families affected by SUDs.

Child Abuse and Neglect

- The Child Parent Centers found that students in family engaged preschools
- experienced 52% reductions in child abuse and neglect.¹³
- Programs utilizing early childhood home visitation have found promising reductions in subsequent child abuse and neglect. The Nurse Family Partnership program found that regular home visits reduced documented child abuse and neglect cases by 48%.14
- The original ACE survey identified ACEs as physical, psychological, emotional or sexual abuse, parental separation or divorce, violence against one's mother, neglect, and the incarceration, mental illness, or substance abuse of parental figures.³
- High ACE exposure can cause the toxic stress response. The toxic stress response is a prolonged physiological stress response, known to interfere with brain and organ development in children, increasing lifelong increased risk for physical and psychological disorders.⁴
- Exposure to childhood trauma has been linked to reduction in telomere length, a biomarker of aging, and of hormonal imbalances including abnormal hypothalamic pituitary adrenal axis and adrenal gland activity.⁵
- Each year millions of children in the U.S. experience ACEs from parental incarceration, parental drug abuse, and child abuse and neglect, with little policy in place to protect them from the harms of toxic stress.
- In 2019, long term consequences of ACE exposure in North America cost an estimated \$748 billion, 3.5% of the North American GDP.¹⁷

- * When abuse occurs, trauma-focused cognitive behavioral therapy (TF-CBT) is an evidence-based treatment for post traumatic stress disorder resulting from child abuse and neglect. TF-CBT has proven effective at reducing symptoms following a twelve-month treatment period, and at sustaining improvements at twelve months post-treatment.^{15,16}

Conclusion

The identification of mass incarceration, child abuse, and parental drug-abuse as contributors to ACE exposure should encourage policymakers to reform these systems to lessen their impact. Science is telling policymakers that exposure to child abuse and parental incarceration and SUDs directly impacts the long-term health of children through exposure to toxic stress. Evidence-based policies should be further explored as a remedy to the epidemic of toxic stress among children in the U.S.

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