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Adverse Childhood Experiences: A Public Health Challenge

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INTRODUCTION

The life-course approach to health and the critical period model of disease causation posit that adult health is shaped by experiences in early life, specifically during critical developmental periods.¹ Adverse Childhood Experiences (ACEs) are stressful contextual exposures faced in childhood and adolescence that can have lifelong health effects.² Examples of ACEs include physical abuse, emotional neglect, parental substance abuse, and economic hardship.²ACEs elevate levels of stress hormones and impair homeostatic feedback mechanisms, negatively affecting neurodevelopment, as well as emotional and social well-being.3 As a result, ACEs are primordial risk factors for poor mental health outcomes in adulthood, such as depression.³ Individuals with seven or more ACEs are over 50 times more likely to attempt suicide than those without ACEs.⁴ ACEs also increase the risk of developing many physical chronic diseases later in life, including diabetes, cancer, and cardiovascular disease.⁴

Over half of all Canadians and nearly twothirds of all Americans have at least one ACE, and in the United States, it is estimated that ACEs place a \$25 billion burden on annual public health spending.^{5,6} Individuals with more than one ACE use emergency care services up to 29% more than the general population.⁷ Given the complex environmental origins and The McMaster Health Forum strives to be a leading hub for improving health outcomes at the regional and provincial levels in Canada. Through problem-solving and discussion, they harness information, convene stakeholders, and prepare action-oriented leaders to meet pressing health issues creatively.

profound public health implications of ACEs, systems-level strategies are required to reduce future disease burden and healthcare demands.

SOCIAL SYSTEM RESPONSES

Social interventions play an important role in preventing and minimizing the impact of ACEs. Early childhood adversity is cyclical in nature; parents with ACEs often have children who experience ACEs as well.⁸ High-quality childcare, characterized by well-educated, emotionally-sensitive caregivers in wellresourced environments with higher staff-child ratios, can mitigate the intergenerational nature of ACEs.⁹ For instance, the Triple P-Positive Parenting Program, a parenting support system that prevents and treats behavioural problems in children, has been shown to reduce child abuse and foster care placements.¹⁰

Integrating trauma-informed and resiliencebuilding practices into social services and school settings may address the detrimental behavioural outcomes of ACEs, which are often trauma-related coping mechanisms.¹¹ By utilizing trauma-sensitive language to maintain an empowering environment and promote cognitive reframing (e.g. using the term "survivor" instead of "victim"), these programs build resilience and improve emotional regulation skills to help those with ACEs successfully manage stressors.^{12,13}

Long-term results will require interventions



that address the social determinants of health. Social and economic disadvantage is heavily correlated with early life adversity.¹⁴ Compared to their more affluent peers, children below or near the poverty line are over twice as likely to experience three or more ACEs.¹⁴ By addressing poverty, structural social policies can promote safe and healthy home environments for children, and reduce ACEs related to homeless and community violence.^{11,15-16} This serves to reduce the intergenerational propagation of ACEs.^{17,18}

LEGAL SECTOR RESPONSES

Individuals within the criminal justice system tend to have experienced more ACEs. A study of over 64,000 Florida juvenile offenders revealed that they typically experienced three times more ACEs than youth not in contact with the justice system.¹⁹ Another study indicated that approximately 90% of juvenile detainees have experienced at least one ACE.²⁰ Also, a strong correlation exists between certain ACEs and criminal offenses. For example, youth who have experienced physical abuse are more likely to be violent and to damage property.¹⁹ Additionally, involvement in the justice system can itself serve as an ACE, contributing to cycles of unemployment, poverty, homelessness, and repeated convictions.²⁰ Despite the strong association between ACEs and criminal offense, programs recognising and addressing ACEs remain absent in juvenile and criminal justice systems.

Acknowledging the role of ACEs within the context of the justice system may mitigate their social consequences and their role in future criminal behaviour. Evidence suggests that it is important for justice system employees to understand that survivors of ACEs often use maladaptive or antisocial behaviours to cope with stress.¹⁹ These tendencies are unlikely to dissipate without targeted intervention.¹⁹ Screening for ACEs may therefore help identify

those who need trauma-informed treatments and case-appropriate considerations.²⁰

MULTI-SECTOR RESPONSES INVOLVING THE HEALTH SYSTEM

Systems-level interdisciplinary interventions may also be effective in addressing ACEs. These include reducing prenatal and early childhood adversities through effective public health campaigns and school curricula that target sources of family stress.²¹ Additionally, preventative measures, such as increasing screening through trauma-informed primary care and improving timely access to mental health specialists, may decrease the costs of ACE-related illnesses in adulthood by addressing unmet developmental needs.²² The Washington State Family Policy Council's community development strategy has been particularly effective at integrating these practices. In this initiative, families' medical, social service, and educational needs are provided by 42 community public health networks.²³ Leaders within local government, business, faith-based, and neighborhood organizations have improved juvenile adjudication by formally recognizing ACE status during legal proceedings, advocating for changes in school disciplinary and suspension procedures, and arranging crisis nursing facilities to stop the intergenerational propagation of ACEs.^{23,24} With these networks, Washington State has saved over \$50 million in the span of two years.^{23,24}

CONCLUSION

ACEs represent a pressing health and social systems challenge that is further complicated by the stigma surrounding childhood adversities. Moving forward, decision-makers must coordinate strategies across social, legal, and health sectors to lessen the extensive individual and public harms associated with ACEs.

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