GraceKennedy FOUNDATION

Lecture 2025

Breaking the Cycle of Childhood Trauma

WENDEL ABEL

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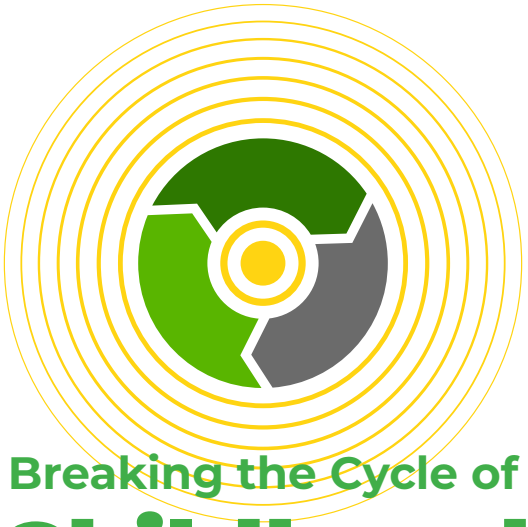
GraceKennedy Foundation Lecture



Breaking the Cycle of Childhood Trauma

WENDEL ABEL

GraceKennedy Foundation
2025

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The GraceKennedy Foundation

The GraceKennedy Foundation (GKF) was established in 1982 to celebrate the company's 60th anniversary. Its aim is to be a world-class corporate foundation driven by its mission to support its parent company, GraceKennedy, as a corporate citizen, by creating environmentally sustainable programmes, promoting healthy lifestyles, and increasing access to education. This is accomplished primarily through the provision of grants, tertiary scholarships, the operation of a food bank for university students, diaspora activities, the funding of two Professorial Chairs at The University of the West Indies, Mona, several environmental and sustainability projects, and the Annual Lecture Series.

Since 1989, the GraceKennedy Foundation has used its lecture series to engage the Jamaican public, both locally and in the diaspora, to promote discussion and debate on relevant topics affecting Jamaican society.

The GraceKennedy Foundation has chosen to host a lecture on "Breaking the Cycle of Childhood Trauma" by Professor Wendel Abel to address the pervasive and intense issue of childhood trauma in Jamaica. This is not an issue confined to any specific area; it affects individuals across all strata of society and often remains hidden and unresolved, passing from generation to generation if the cycle is not broken. Professor Abel will not only examine this topic in great detail but also provide practical solutions to break the cycle, making his insights crucial for understanding and addressing this public health crisis. By engaging the public in intellectual discourse, the Foundation aims to inspire action and advocate for necessary resources and

interventions to improve mental health care access for Jamaican youth.

The lecture will be presented to an in-person and virtual audience along with an e-publication to ensure as wide a reach as possible. The recording of the lecture will be available on GraceKennedy's YouTube channel, and the e-book will be available free of cost at www.gracekennedy.com, in the hope that the lecture can serve as a valuable resource on a very critical and relevant topic. The Foundation, as always, welcomes and looks forward to your comments.

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GraceKennedy Foundation Lecture 2025

FOREWORD
by Fred W. Kennedy

"Silent public health crisis" are the words that Professor Wendel Abel uses to characterise the pervasiveness of childhood trauma in Jamaican society. Research demonstrates that typically eight out of every ten children in Jamaica experience some form of childhood adversity, which later in life may manifest itself in myriad ways, including substance abuse, depression and other mental health disorders.

Hon. Wendel Abel, OJ, OD, JP, is a prominent scholar in the field of psychiatry. He is Professor of Mental Health Policy in the Department of Community Health and Psychiatry in the Faculty of Medical Sciences and Consultant Psychiatrist at the University Hospital of the West Indies, Mona. He obtained his Doctor of Medicine in Psychiatry in 1994 from The University of the West Indies. He is a prolific writer and researcher in several key areas including mental health policy, depression, suicide and stigma, mental illness, clinical psychiatry and psychotherapy. He has served as consultant to the Government of Jamaica, the Pan American Health Organization and CARICOM as an adviser in mental health. He is the recipient of numerous awards: RJR/Gleaner Communications Award for Health & Wellness, 2019; Vice Chancellor's Award (UWI) for Public Service, 2018; Order of Distinction, Officer Class, 2007 (Government of Jamaica), and many others.

Professor Abel enriches the narrative of "Breaking the Cycle of Childhood Trauma" by drawing on empirical evidence from his own professional practice. He tells of his personal experiences of childhood trauma, and of working firsthand in the field of child and adolescent mental health. He uses these anecdotes together with extensive medical research to form hypotheses about childhood trauma in Jamaica and their inter-connectedness to conditions of mental health in adulthood.

Professor Abel successfully communicates complex sets of ideas with clarity and precision. His writing style, informed by scientific research, avoids jargon and highly technical terms, adopting instead a conversational tone that resonates with a broad audience. Use of visuals, clearly marked headings and summaries deepen our understanding and interest in the subject matter. His voice is authentic, his style lucid, and his connectedness to the reader, strong.

Concise definitions of Adverse Childhood Experiences (ACEs), which are the root causes of trauma, include examples and concepts that many can relate to: childhood neglect, child abuse, domestic violence and household dysfunction. Risk factors he explains as those that increase the likelihood of exposure to ACEs: family-related, community, school, societal, and cultural. The reality of these conditions becomes even more daunting when we realise the systemic nature of risk factors: poverty, poor housing, lack of quality education. The most insidious of these is historical trauma: past experiences – slavery, colonialism, racism – which many have inherited across generations.

The statistics are staggering: surveys (UNICEF 2023) indicate that 75% of Jamaican youth, ages 13–24, experienced violence of one kind or another; one in four females (25%), ages 13–24, experienced sexual violence.

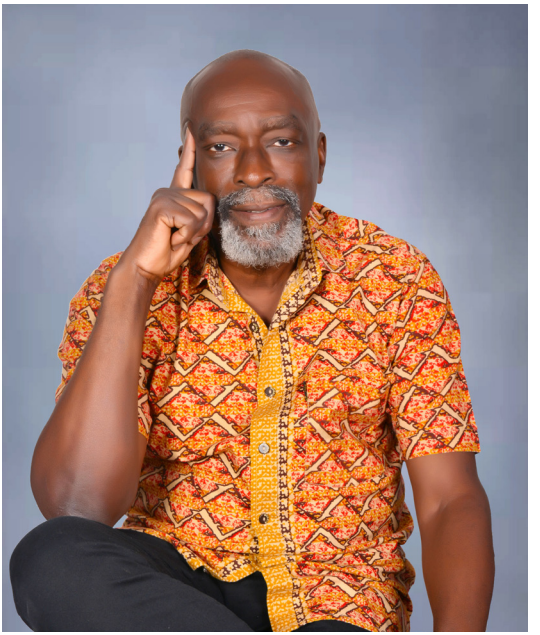
Alarming, too, is Professor Abel's claim that many who experience physical violence do not recognise it as physical abuse. His hypothesis begs the question whether we have become desensitised to conditions of violence in Jamaica. We face conditions of violence and abuse in Jamaica that have reached epidemic proportions. The toxic response resulting from experiences with early trauma affect the development of a child, resulting in negative adult outcomes in the areas of physical health, social wellbeing and educational development. Professor Abel proposes that adverse conditions are so pervasive that a culture of violence prevails in Jamaica.

The author makes an urgent call for action. He inspires us with hope, that with the right mindset and allocation of resources, we can treat this malady. Access to mental health care is critical: 50% of youth who reported an experience of violence (UNICEF, 2023) were incapable of accessing services. He advocates for more resources, programmes and interventions to save our children, to break the vicious cycle of childhood trauma.

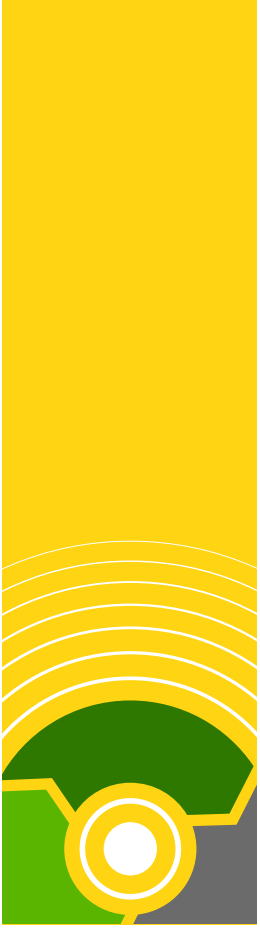
Professor Abel's work follows in the tradition of erudite scholars who, since 1989, have presented annual public lectures hosted by GraceKennedy Foundation. Our purpose is to engage the Jamaican public in intellectual discourse and promote discussion and debate on relevant national and regional issues. Professor Abel's work will engender this critical dialogue.

We thank Professor Wendel Abel for sharing his scholarship with us. His passion to serve the youth of Jamaica, to break the cycle of childhood trauma that besets our nation, infuses both his personal and professional life. He paints a picture for us of the enormity of the problem, of the root causes and effects of trauma and, most important, he leaves us with the conviction that there is hope for treatment. His presentation compels us to action – to become advocates for both private and public interventions to remedy Jamaica's mental health crisis.

Fred W. Kennedy
Chair, GraceKennedy Foundation
April 2025



Professor Wendel Abel, OJ, OD, JP



The Lecture

Preface

My decision to address this topic has been influenced by several factors. First, by my personal experience as a child. At the age of six, I lost my mother. I remember the night, a dark night, when all six of us as children were brought together to be told of our mother's death. The pain of the funeral. The last image I have of my mother is of her lying in her coffin. In those days, we didn't have access to therapists and counsellors; we just had to deal with our loss, grief and pain all by ourselves.

I reflect on my personal journey as a child who had to grieve the loss of my dear mother. Some days, I was angry with the world and even God for taking my mother. The moments of silent tears with no one to comfort me. I suffered a traumatic experience because I lost a mother at an early age.

What helped me through the pain and loneliness of my childhood were the love and stability of a dedicated father, the supportive role of extended family and my teachers – such caring and understanding teachers who passed on deep wisdom that helped me through that period of my life.

Today I am an adult, a well-established psychiatrist and academician. But I still suffer from unresolved grieving because of the loss of my mother. The experience of living with unresolved grieving has helped me to somewhat understand the pain experienced by children and youth, as well as the adjustments many of them have had to make in their lives. If I were a child or adolescent in 2025, I would be

among the estimated eight out of ten children in Jamaica who have experienced childhood adversity.

Another major influence has been my professional experience. I spent the early part of my career working in the area of child and adolescent mental health. At that time, we only had one child psychiatrist, Dr Pauline Milbourne, working in Jamaica. As a young psychiatrist, I expended a lot of energy working with children and adolescents, and established several child guidance clinics in rural Jamaica where I started my early career. I was amazed – and I still am – at the level of trauma and adversity that children experience in Jamaica. Within a few years of working with children and youth I was completely burnt out.

Over the course of my career, I continued to treat adolescents and young adults with issues such as substance abuse, depression and attempted suicide. In many of those instances, there was a history of childhood trauma. These personal and professional experiences have prompted me to focus my lecture on this silent public health crisis, childhood trauma.

Introduction

This book is intended to highlight childhood trauma, which has now become a public health crisis. Despite this reality, it is a crisis that is not well understood or widely and openly discussed. Many terms have been used in the literature to describe the traumatic experiences of children. We will introduce and discuss the construct of Adverse Childhood Experiences (ACEs), which is a term widely used to describe childhood trauma. The term has become the most popular and it has specific significance. Other terms used are childhood trauma, childhood adversity, childhood stressors and child maltreatment.

The major focus of this book will be on childhood trauma in general and the original ACEs to which children are exposed. In this book, the terms ACEs and childhood trauma may be used interchangeably.

The book seeks to bring to our attention the effect of trauma on the social, cognitive and emotional development of children and the relationship of these factors to long-term physical and behavioural health in adults. We examine several risk factors that can potentially increase children's experience with adversity, and we identify protective factors that decrease possible exposure and increase children's ability to cope and build resilience. We share the findings from research done in Jamaica to give a clear picture of the crisis being faced by our children. While sharing findings from research, we bear in mind the need for a comprehensive survey on childhood trauma in Jamaica.

The book highlights how high quality, targeted interventions can improve outcomes, and provides

guidance for people dealing with children such as parents, teachers, community members, professionals and policymakers to ensure that we all work assiduously to create a safe, secure and nurturing environment for children.

I would like to address the matter of confidentiality. In this book, I have used clinical scenarios, constructed from my own experience, to highlight concepts. These scenarios are not real. Additionally, the names used are all fictitious. The reader may find that scenarios, situations or names seem familiar; nevertheless, they are fictitious.

I hope this book will spark a national conversation and, eventually, action on the important public health issue of childhood trauma which can have long-term impact on our mental and physical health.

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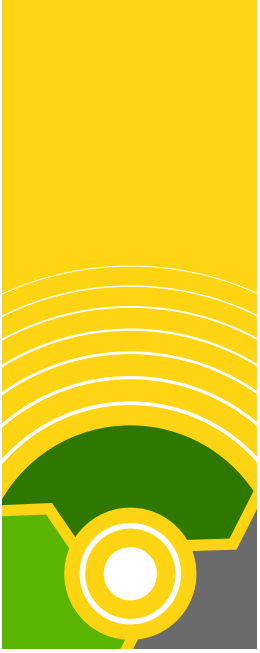


Chapter 1
Trauma and Adverse Childhood Experiences (ACEs)

Childhood trauma doesn't come in one single package.
– Dr. Asa Don Brown

Trauma occurs when individuals are exposed to distressing events that are potentially life threatening and that often overwhelm their ability to cope. These events may be witnessed and experienced directly but an individual can also experience trauma by simply being told about a disturbing event. Traumatic experiences include a wide range of adverse events and experiences that an individual may be exposed to over a lifetime.

In this chapter we define trauma and discuss the concept of Adverse Childhood Experiences (ACEs). We

expand our discussion to include risk and protective factors and introduce the 4 Realms of ACEs, which is an expanded framework.

Adverse Childhood Experiences

Adverse childhood experiences may be defined as ten potentially preventable traumatic events or circumstances experienced during childhood, before the age of 18 (Afifi, 2020; O'Neill et al., 2021). The term emerged out of research done by the Centers for Disease Control and the health provider Kaiser Permanente in the USA several years ago (Felitti et al., 1998). We have focused on the ACEs because a large body of literature has been produced on these original ACEs.

The original ACEs

The original ACEs include ten experiences grouped into three main categories:

1. Childhood neglect, which may be physical neglect or emotional neglect
2. Child abuse, which includes physical, sexual and emotional abuse
3. Problems within the household, referred to as household dysfunction, which includes witnessing domestic violence, having a close friend or family member who used alcohol and other drugs, having a close family member with a mental health problem, having a close family member who has been incarcerated, and parental separation or divorce

Figure 1.1 depicts experiences that may lead to trauma in children.

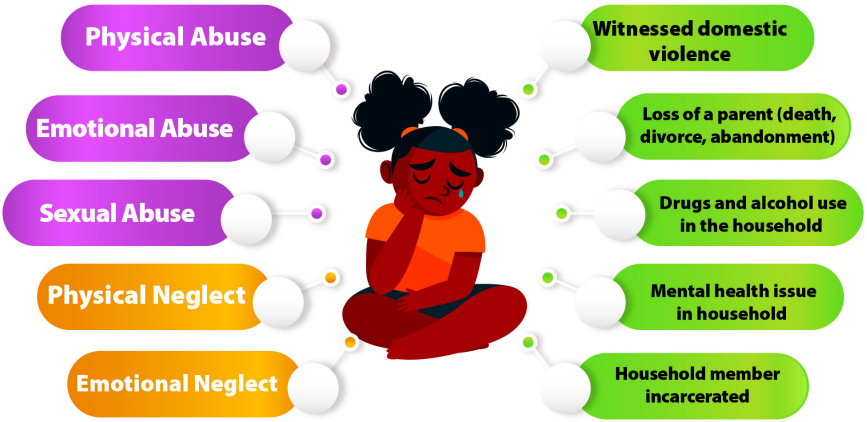


Figure 1.1:
Adverse Childhood Experiences

The significance of ACEs

An appreciation of the significance of ACEs is important for the following reasons:

- They are common traumatic experiences
- They occur at critical periods in the development of children
- They affect the brain, body and other biological systems
- They are one of the leading determinants of health, social wellbeing and early death
- They have associated risk and protective factors
- They are potentially preventable
- We can design intervention programmes to mitigate their impact

Case Scenario

Can you identify what ACEs to which the children in this case scenario were exposed?

Anna grew up in a community in which she was constantly exposed to violent events. She once saw a man get shot and fall to the ground, right in front of her.

Akeem grew up in a home in which his father and mother were constantly fighting. His father went to jail when Akeem was five years old. His mother migrated when he was six years old. He was left with a family member who beat him regularly. He decided to run away and eventually he was moved to a place of safety.

If you said that Anna and Akeem were exposed to adverse childhood experiences (ACEs) such as household and community violence, you would be correct.

Adverse childhood experiences are traumatic for children as they create profound distress. When the experiences are repeated and prolonged, as they were in the case of Anna and Akeem, this is referred to as chronic trauma. These adverse childhood experiences often lead to mental health issues, substance misuse and physical problems as children move through the developmental stages and into adulthood.

Risk and Protective Factors

Research has shown that not all children who experience ACEs develop problems in life. However, we know that there are several factors that determine the likelihood of exposure to adverse childhood experiences and the development of problems later in life.

Risk factors are those that may increase the likelihood of exposure to ACEs and long-term outcomes associated with them. Some of these risk factors are themselves adverse childhood experiences.

Protective factors are those that may decrease the likelihood of exposure to ACEs and can be linked to the opportunities that are geared towards enhancing the mental and emotional wellbeing of children and youth. An understanding of risk and protective factors is critical to preventing ACEs, and a large body of work has emerged around developing strategies to enhance protective factors, mitigate risk factors and promote resilience and coping. These risk and protective factors may be classified as being at the individual level, at the family, community or wider societal level.

Resilience

Resilience, the ability to bounce back, adapt and thrive in the face of adversity, is a dynamic process that is enhanced through fostering connection (Zimmerman, 2013). Many intervention programmes have been designed to promote resilience and healing from trauma based on an understanding of and the utilisation of protective factors that may buffer and inoculate young people against the negative effects of factors associated with adverse childhood experiences (Zimmerman, 2013).

Figure 1.2:
ACEs and Associated Risk Factors

Figure 1.2 provides a useful framework for classifying ACEs and associated risk factors. The figure shows that there are individual, family, community, environmental and social factors at work. We will discuss each factor.

Individual factors

Individual risk factors are linked to poor interpersonal connection as is evident in children and youth who have

poor relationships with parents and caregivers. Risk factors are also linked to having no friends or having friends who engage in risky sexual behaviour, aggressive and delinquent behaviours.

Family factors

For healthy development to take place, children need safe, stable and nurturing relationships and experiences within the family and community. The emotional bond between an infant and parents or primary caregiver is important and any experience that disrupts that emotional bond or attachment can have a negative impact. If the parent or primary caregiver is abusive, neglectful or emotionally unavailable the child may develop an unsecure or disorganised attachment pattern.

Unfortunately, in many homes, parents do not make themselves emotionally available to their children. This can cause children to feel unsupported and unloved. An emerging body of research has shown that children who have positive relationships with even one parent or a teacher tend to have more positive outcomes in life (Ranson & Urichuk, 2008).

Among the family-related factors that can increase exposure to ACEs are: young caregivers with inadequate parenting and child-rearing skills, single parents with limited support, low income status, low levels of education and high levels of stress. Furthermore, inconsistent discipline styles, low levels of parental monitoring and harsh discipline practices such as spanking or other forms of corporal punishment may put children at risk for adverse childhood experiences.

The original ACEs study also highlighted the association between household dysfunction and the development of ACEs. These dysfunctions include having a parent who is incarcerated, having a parent with a mental disorder, having a parent on drugs, or the experience of domestic violence within the home. These dysfunctions create instability and a lack of safety within the household. They may also result in one or both parents being emotionally unavailable.

Community factors

A safe, stable and cohesive community helps to create a healthy environment for children to grow and thrive. A harsh community environment, over-exposure to violence and the experience of being bullied may threaten the safety of, and create instability in, the life of a child.

There are also systemic factors such as poverty, poor housing, limited access to quality education and discrimination that can contribute to and sustain exposure to childhood adversity.

School factors

Schools provide an important opportunity for the socialisation and development of children. Note, however, that many of the risk factors in the school environment are also linked to community risk factors and they have the potential to cause long-term and repeated trauma. School risk factors include exposure to violence, high levels of aggression and bullying within the school (Isdoe, 2012; Flannery, 2004). Schools that do not address the risk factors not only increase the level of exposure to trauma but also, in the process, may become a “pipeline to prison”.

Societal factors

Factors connected to the ethos, culture and practices of the wider society are also linked to the ACEs. Community and societal attitudes that normalise physical discipline can increase the risk of exposure to trauma and physical abuse. Popular culture may also contribute to the normative acceptance of violence and other ACEs, and so does the failure by decision leaders to condemn these portrayals.

Collective and generational cycles of trauma

Collective trauma and historical trauma are adversities shared within a group of people. Collective trauma refers to large-scale events such as natural disasters that affect an entire community at a particular time. Historical trauma refers to long past experiences endured by a specific group across generations. This includes events such as slavery, colonialism, racism, discrimination and the Holocaust. Historical trauma is also referred to as generational trauma, intergenerational trauma and transgenerational trauma.

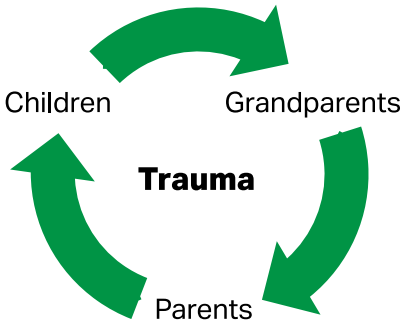


Figure 1.3:
Cycles of Trauma

Case Scenario
The Case of Mark

Mark's grandfather was an alcoholic. He would come home most nights drunk and often engaged in quarrels and fights with Mark's grandmother. His grandmother became very depressed and irritable. She showed very little love and attention to Mark's mother.

Mark's mother experienced emotional neglect and physical abuse. She, in turn, was very harsh in the way she disciplined her children. She reported that she was not capable of showing love and emotion towards her children as she did not receive this kind of attention in her childhood.

Mark suffered from both emotional neglect and abuse. This occurred because he grew up with a mother who was traumatised. So the effect of the trauma that started with Mark's grandparents has been passed on to two other generations – to Mark's mother and then to Mark. This is a case of intergenerational trauma (See figure 1.3).

Expanded List of ACEs

Many scholars have argued that the original set of ten ACEs is limited. They have expanded the framework of ACEs to include other risk factors for early childhood trauma. These risk factors include parental stress, loss of a parent, traumatic exposure within the community such as violence, natural disasters, bullying (including cyberbullying), and separation from parents through migration. Broader socioeconomic, political and cultural issues and systemic inequalities have also been considered. These include

poverty, poor access to services and historical injustices (Karatekin & Hill, 2018; Afifi, 2020; Guevara, 2024).

The 4 Realms of ACEs

Out of this understanding of the expanding list of ACEs, several frameworks have evolved such as the PAIR of ACEs framework, the 3 Realms of ACEs model and, most recently, the 4 Realms of ACEs. This latter model incorporates climatic factors which have an impact on many communities and also atrocious cultural experiences such as slavery, colonialism and discrimination.

This expanded framework of ACEs is graphically represented in the 4 Realms of ACEs diagram (Figure 1.4). The diagram depicts the community factors (Adverse Community Experiences) as the soil in which the tree is rooted; the family-related Adverse Childhood Experiences are the branches. Recent literature has included climate-related experiences (Adverse Climate Experiences) as contributing factors to the ACEs. Fire, floods and hurricanes and pandemics can lead to stressful situations for communities and, therefore, for children. These are represented as the clouds. Atrocious Cultural Experiences are the drainage water. These include experiences associated with historical trauma such as slavery, genocide, colonisation, segregation, forced family separation, harmful social norms, and low sense of political and social efficacy.

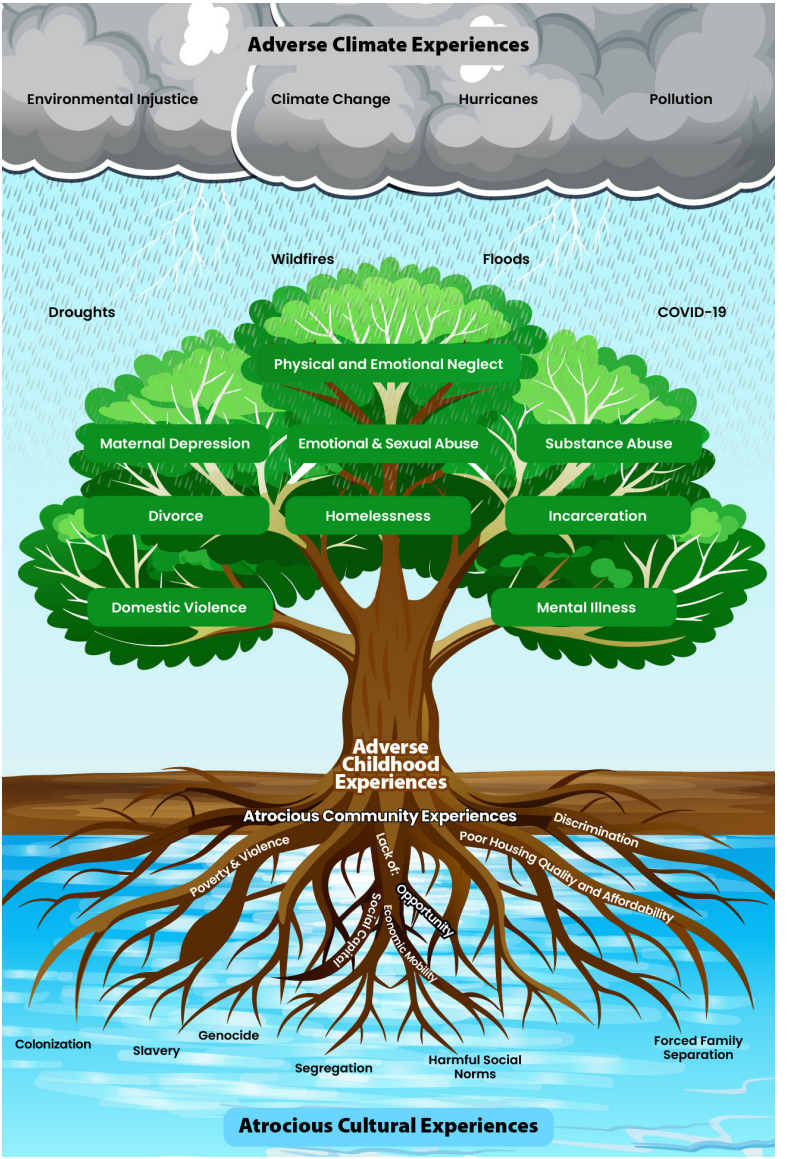


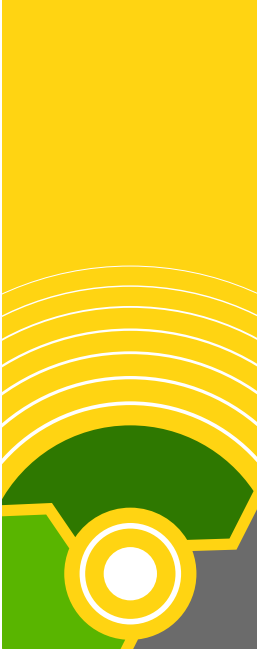
Figure 1.4:
The 4 Realms of ACEs

Adapted from: Building Healthy & Resilient Community Across North Carolina. One Community At A Time. (2021). https//indd.adobe.com/view/f9cca8b9-d326-4666-99d0-afe7ea06bd73

In Summary

In this chapter we introduced the concept of Adverse Childhood Experiences, a term used to describe life-altering experiences that may shape the lives of children. We explained the importance of understanding the significance of ACEs and explored the risk and protective factors that increase or decrease the likelihood of traumatic experiences for children. We outlined the original ten experiences considered as ACEs and introduced an expanded list of ACEs, the 4 Realms of ACEs, which incorporates significant risk factors such as poverty, migration and the repercussions of climate change. The chapter also addressed collective and historical traumatic experiences and their connection to intergenerational or generational trauma.

Chapter 2 will focus on the experiences of Jamaican children using literature on this experience.



Chapter 2
Childhood Trauma in Jamaica

Numerous studies indicate that ACEs are common globally. Jamaica, like many countries, has not conducted, to date, a comprehensive survey to expose the level of childhood adversity that prevails. However, there are ongoing, longitudinal research studies being conducted that will provide a more comprehensive view of the exposure to early childhood trauma, and which will better enable us to understand the short- and long-term impact on children in Jamaica. Despite the absence of a comprehensive survey on childhood trauma or ACEs in Jamaica, valuable insights may be gained from a review of the existing literature.

In this chapter we attempt to aggregate available research to present a picture of the level of exposure to childhood trauma and ACEs, the associated risk and

protective factors and the effects of the exposure to ACEs. We present data on the level of exposure in terms of abuse, neglect, household dysfunction, community violence, access to drugs in the community, and poverty level.

- **Overall Exposure to Childhood Trauma**
  Research suggests that 8 out of 10 (80%) children in Jamaica in the 10–17 age group experience at least one ACE (physical, emotional or sexual abuse or neglect) (UNICEF, 2018; Lee et al., 2022).

- **Physical, emotional and sexual violence**
  The first Jamaica Violence Against Children and Youth Survey (VACS) was conducted in 2023 (UNICEF, 2023). This survey investigated physical, emotional and sexual violence in children ages 13–24. The reports from this survey indicate that 3 out of 4 youth (75%) experience violence.

- **Exposure to violence in home and community**
  Jamaica has one of the highest homicide rates in the world, with correspondingly high levels of homicide among adolescents in the 14–19 age group, recording a rate of 14 deaths per 100,000 adolescents.

  The VACS survey showed that about 65% of Jamaican children reported being bullied at school and 79% of children witnessed household or community violence. One in three (1:3) children witnessed the murder of someone close to them. The survey also showed that as many as two in five (2:5) children in the 18–24 age range witnessed violence in the home and three in five (3-5) of them witnessed community violence (UNICEF, 2023). Samms-Vaughan et al. (2005)

also reported that 37% of children 11–12 years old reported the loss of a family member or close friend to murder.

- **Involvement in physical fights**
  One third of students in the age group 13–15 years reported being involved in at least one physical fight (UNICEF, 2023).

- **Physical abuse and violent discipline within the home**
  Samms-Vaughan and colleagues, based on reports by mothers, indicated that by the time they reached 4–5 years of age, 90% of the children had experienced physical and emotional violence. They also reported that 43% of children in the 9–12 months age group were shouted at and 30% slapped by 4–5 years (Samms-Vaughan et al., 2024). Thirty-one percent (31%) of males and 38% of females also reported experiencing emotional violence (UNICEF, 2023).

  A study conducted among university students in Jamaica by Longman-Mills et al. (2015) stated that most of the participants (62%) reported being physically abused. Interestingly, only 27% of the students recognised the experience as abuse.

- **Sexual trauma**
  According to the VACS study (UNICEF, 2023), one in four (1:4) females in the age group 13–24 experienced sexual violence and one in ten (1:10) males in that age group experienced sexual violence. Data from the Ministry of National Security's Jamaica Crime Observatory Integrated Crime and Violence Information System

(JCO-ICVIS) (2016) indicated that 83% of reported sexual assault was of girls up to 24 years of age and of this group, the majority were in the 10–17 age group.

- **Exposure to domestic violence**

  A study done on violence reported that about 42% of the children involved in the study had been exposed to at least one type of domestic violence. The study further reported that these children also reported a lower sense of safety (Fray-Aiken et al., 2022).

- **Access to mental health care**

  When asked about access to mental health service, 50% of children and youth who reported an experience of violence were not able to access service (UNICEF, 2023).

  Findings from a 2016 health survey among Jamaican women showed that exposure to one ACE was a predictor of increased depressive symptoms and an exposure to two or more ACEs was a predictor of anxiety (Watson Williams, 2018). Another study reported that sexual abuse, witnessing a mother being abused, and exposure to 3–4 ACEs were predictors of marijuana use (Lee et al., 2022). In one study, neglect was identified as the strongest correlate of depression among youth in Jamaica (Debowska et al., 2024).

- **Substance use in households**

  Among university students, approximately 39% of the students in the study who experienced physical abuse reported moderate to severe psychological distress and drug use (Longman-Mills et al., 2015).

- **Suicidal behaviour among Jamaican youth**

  Abel et al. (2012), in a study on suicide in Jamaica, revealed that one in ten (1:10) youth in the 10–15 age group reported that they seriously considered attempting suicide. Among youth who considered attempting suicide, having a good relationship with parents was a protective factor and risk factors included being teased or bullied. This study also showed that the second highest rate of suicide was in the 25–34 age group.

- **Migration**

  Jamaica has a high emigration rate and a high percentage of people who emigrate are working women in their reproductive years (Economic and Social Survey of Jamaica, 2019). Given the fact that many households are headed by a single female, the high level of migration among females puts children at increased risk for childhood trauma. It is not surprising that a study conducted in Jamaica revealed that migration is associated with psychological problems and poor school performance for children who are left behind (Pottinger, 2005).

- **Poverty**

  A UNICEF report (2018) indicated that one in 4 (1:4) Jamaican children live in poverty. This is a significant finding as poverty and associated adverse living conditions increase the likelihood of exposure to childhood hardships and trauma (Walsh et al., 2019; Lacey et al., 2022; Page et al., 2014).

- **Causes of high exposure to violence**

  The VACS survey (UNICEF, 2023) cited several causes of high exposure to violence including the normalisation and use of harsh disciplinary practices, high levels of violence in homes and communities, a lack of policy and supportive legislation and lack of coordinated strategies.

Historical Trauma in Jamaica

Jamaica's history has been characterised by centuries of trauma involving the physical, sexual and emotional abuse of our people. This has also resulted in exploitation, concentrated poverty, discrimination, limited educational opportunities and harsh economic realities. Out of these shared past traumatic experiences, numerous patterns of belief, behaviours and cultural practices have emerged which have passed from one generation to another, as they continue to be re-enacted and manifested in our communities.

Slavery was a traumatic experience under which families were torn apart and the brutal punishment of children and adults was normalised. This has influenced beliefs and practices such as harsh discipline, lack of display of emotions by parents, male irresponsibility and aggressive behaviours and a culture of violence. Additionally, other practices have evolved out of our painful history such as multiple shifting of children, identity swap ('jacket') and the tendency to blame and shame the victim survivor.

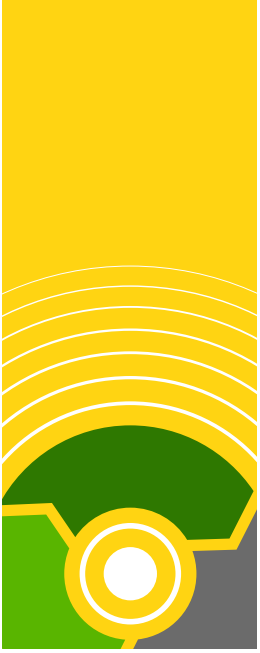
In Summary

This chapter summarised studies done on childhood trauma in Jamaica. Much of the relevant research done in

Jamaica has focused on violence and drug use. Childhood trauma and ACEs tend to occur in clusters and a more comprehensive study looking at a wider spectrum of adverse childhood experiences is warranted at this time. Notwithstanding the absence of such a study, it is clear that children in Jamaica are exposed to high levels of violence within the home and in the community. Surprisingly, many individuals who experience physical violence did not even recognise it as physical abuse and this possibly reflects the extent to which we have become desensitised to violence in Jamaica. Jamaica's history has been marked by high levels of trauma and violence resulting in historical trauma that has been passed across cycles of generations.

The data, although isolated, conforms with other studies in showing that exposure to trauma is linked to common mental health conditions such as depression. This level of exposure to trauma and violence is of great concern given the extensive body of research evidence that supports the fact that a safe, stable and nurturing home and community environment is critical to the development of children.

Chapter 3 will focus on how trauma results in the acute and toxic stress response. It discusses how the toxic stress response affects the development of children. We also focus on the buffering effect of protective factors such as healthy relationships. We introduce the concept of epigenetics, which explains how trauma affects gene expression.



Chapter 3
Childhood Trauma and the Toxic Stress Response

Exposure to trauma such as adverse childhood experiences may affect the brain and body of the developing child. These experiences can lead to long-term negative effects on health and wellbeing and also negative social, academic and economic outcomes. To better understand the effect of early adversity on the brain and body, it is important to understand the concept of stress, the stress response, and the toxic stress response.

In this chapter, we discuss the toxic stress response that arises from prolonged exposure to trauma and stress. We discuss how protective factors such as healthy relationships can have a buffering effect on the toxic stress response. We also show how trauma can be transmitted by epigenetics.

The diagrams included in the chapter will help readers to understand the connections.

How Trauma Affects the Brain

The acute stress response

The acute stress response is a normal, short-lived response to a single event such as an immediate threat or an unexpected, traumatic life experience (Figure 3.1).

Figure 3.1:
Acute Stress Response

When an individual has a stressful or traumatic experience it stimulates the stress centre of the brain which is the hypothalamic pituitary axis (Figure 3.2). The stress centre produces the stress hormone cortisol.

Cortisol prepares the body to take action for "fight or flight" in order to manage stress. After an initial exposure to stress, the body "calms down" and the individual can return to normal functioning. The levels of chemicals released also return to normal. The stress response allows us to adapt to triggers and stressful situations daily.

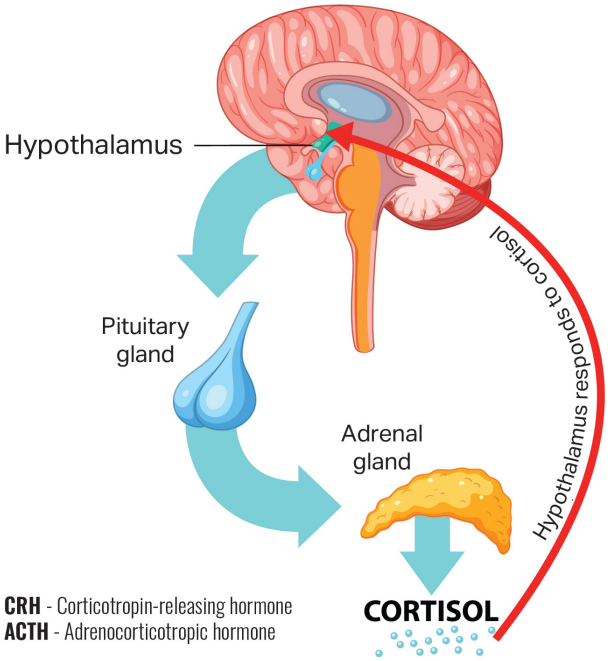


Figure 3.2:
The Stress Response System

The toxic stress response

When stress is prolonged, repeated and strong it may also trigger a prolonged and strong stress response. This prolonged stress response is referred to as the toxic stress response or toxic stress. This toxic stress response is due to the overactivation of the stress centre, the hypothalamic pituitary axis (HPA). This results in elevated levels of the glucocorticoid hormone, cortisol, in the body. The elevated level of cortisol and other chemicals is toxic to the body.

This toxic stress response is the critical pathway for understanding how childhood trauma affects the brain and body and results in long-term health outcomes (Figure 3.3).

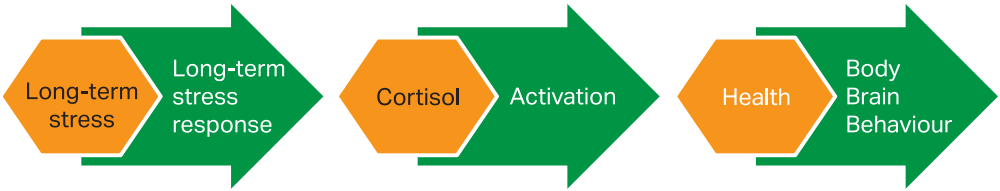


Figure 3.3:
Toxic Stress Response

The toxic stress response is associated with:

1. Increased levels of cortisol resulting in a hyper-aroused state to protect the body from danger
2. A negative effect on key areas of the brain such as the prefrontal cortex, the hippocampus, the amygdala and the ventral tegmental area
3. Impaired functioning of the brain and body
4. Social buffering
5. Epigenetics

Early trauma triggers a toxic stress response

In early childhood, the brain is developing rapidly and it is sensitive to shocks that may arise from trauma. Prolonged, repeated trauma will trigger a toxic stress response. The toxic stress response resulting from experiences with early trauma may affect the development of a child well into adulthood and affects physical and behavioural health, social wellbeing and educational outcomes (Larkin et al., 2012; Felliti et al., 1998).

The Buffering Effect

The buffering effect is a phenomenon in which protective factors reduce the effect of the toxic stress response. This occurs by reducing the activity of the hypothalamic pituitary axis with the resultant reduction in cortisol (Hostinar, 2014).

Social buffering

Social buffering is the process by which social connections reduce the toxic stress response and reduce the long-term harm to the body (Figure 3.4). Research has demonstrated how a positive relationship with caregivers reduces the activity of HPA and reduces the level of cortisol. The hormone oxytocin, which is also released during bonding of children with parents, also acts as a buffer to the stress response effect by reducing the activity of the hypothalamic pituitary axis. The implication of this buffering effect is that a stable relationship with parents in childhood can mitigate the negative effect of childhood trauma (Crockford, 2017).

Studies conducted in Jamaica among adolescents have examined the link between family relationships and protective factors within the home and mental health outcomes, and have revealed a decreased associated risk of suicidal ideation, depression and drug use among adolescents in Jamaica (Abel et al., 2012; Whitehorne-Smith et al., 2014; Oshi et al., 2017).

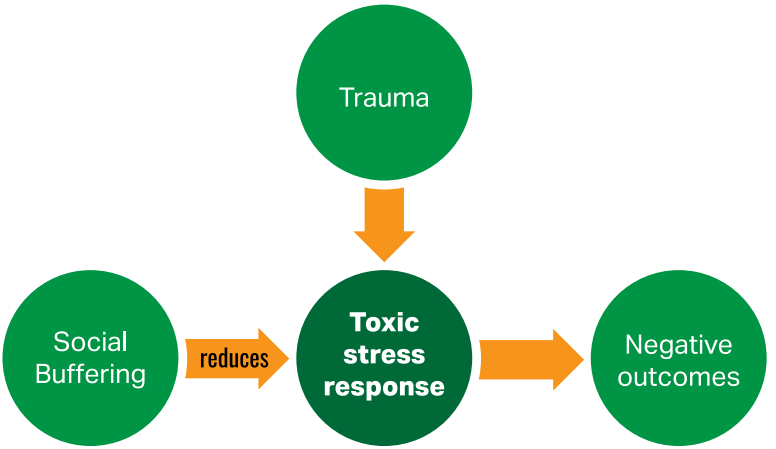


Figure 3.4:
Social Buffering

An understanding of the toxic stress response and the concept of social buffering now provides us with a framework to intervene and reduce the cycles of harm associated with trauma and ACEs.

Epigenetics and Childhood Trauma

Epigenetics explains how experiences like trauma can change how our DNA is "read" and expressed. It plays a major role in our understanding of how trauma affects the toxic stress response. It also explains how trauma and the toxic stress response affect an individual across the life cycle and across the generational cycle.

The toxic stress response associated with exposure to traumatic stress in early life causes the release of the stress hormone, cortisol, and other chemicals. These chemicals may cause changes in gene expression by turning off some genes and turning on others, causing a change in how the

body reads the genes. The process by which genes are turned on or turned off resulting in how they are read by the body is called epigenetics.

Epigenetics links the environment to our genes. The developing child is susceptible to environmental influences and experiences. In response to environmental influences, the brain is rewired to make it more adaptive. This process of rewiring of the brain is called neuroplasticity. Epigenetics influences the rewiring of the brain.

Figure 3.5:
Healthy, Stable, Nurturing Relationships

Source: Images generated in Canva's Dream Lab using AI

Trauma and ACEs associated with negative parenting and negative community experiences result in epigenetic changes and influence cognition, learning and personality development.

Epigenetics explains how protective factors such as healthy relationships can buffer the effect of childhood trauma.

Epigenetics and changes across the life cycle

We have explained how epigenetics controls many activities in the body such as changes in brain structure and brain function and changes in the biological systems of the body, leading to behavioural, mental health and physical health outcomes. These changes in gene expression can be passed onto future generations. Epigenetics therefore explains the unbreakable intergenerational cycles of trauma, abuse and poverty.

Epigenetics and transmission across generations

Trauma can be passed from one generation to another, as previously explained. The notion that a child's exposure to trauma can change how the body works and can affect the health and behaviour of their children and grandchildren has gained wider understanding.

These trauma-induced genetic changes may appear in future generations. This explains how trauma and acquired behavioural traits and physical and mental health problems can be passed across the generational cycle (Van de Weijer et al., 2014). Some behavioural traits and practices that are passed across generations include harsh child-rearing practices, abuse of children, multiple shifting of children,

violence towards women, and community violence (Merrick et al., 2019).

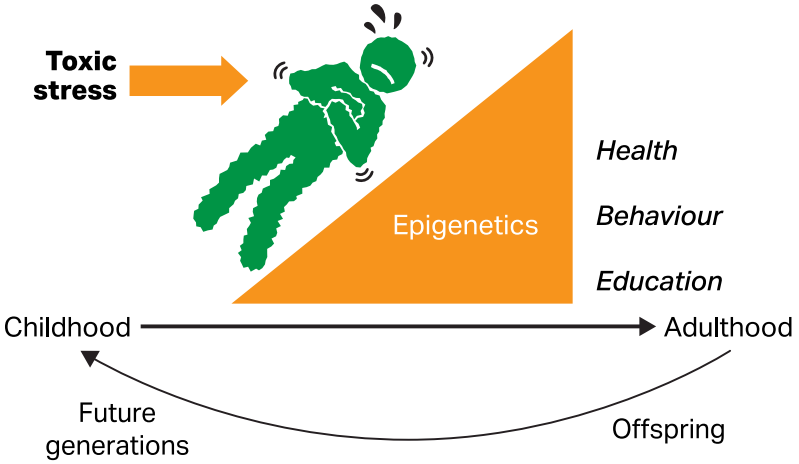


Figure 3.6:
Childhood trauma results in toxic stress. This causes epigenetic changes which affect the body over the life cycle and can also be passed onto future generations

Understanding your Experience with Long-term Stress

This scenario is presented to allow you to pause for a moment and understand your own exposure to stress.

One night you are walking; you see a shadow and you are startled. That means the alarm system of the brain, the amygdala, is signalling to you that you may be walking into danger. It is preparing you to stand up and fight or to take flight, meaning to run away from the danger.

When the alarm system goes off it triggers the stress response system, which releases chemicals like cortisol and adrenaline, resulting in an increase in blood flow, heart rate, and glucose in

the body. These chemicals are released to aid in the fight or flight response as we protect ourselves from danger.

The frontal cortex, the thinking part of the brain, then kicks in. It clarifies that the shadow you are seeing is cast from a big tree. Immediately you relax as you realise that there is no real danger.

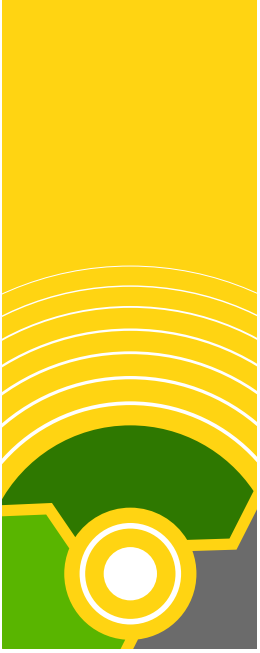
If you were exposed to long-term stress in life, this would result in overactivation of the alarm system in your brain. As you walked and bumped into the shadow, the alarm system in your brain would go off. The thinking part of the brain would be underperforming; it would not be able to clarify the situation. Because you were always hyper-aroused and always expecting danger, you would begin to think it was someone or something that was about to attack. You would run and scream or freeze.

In Summary

In this chapter, we discussed the toxic stress response which is the prolonged activation of the normal, short-term stress response. We highlighted that the developing brain of a child is susceptible to the toxic stress response and that the toxic stress response leads to changes in structure and function of the body and adverse health outcomes across the life cycle.

We discussed how epigenetics affects the toxic stress response and how it explains the transmission of trauma across generational cycles. The role of protective factors and various interventions was discussed, as well as how these affect epigenetic changes in the body leading to a buffering effect on the toxic stress response and long-term health consequences.

Chapter 4 will examine the impact of ACEs and trauma on mental and physical health, starting with how early trauma affects the brain.



Chapter 4
Effect of Childhood Trauma on the Brain and the Body

This chapter explores the short- and long-term effects of childhood trauma across the life cycle. It examines the effect of trauma on the brain, body and behaviour. We explore how trauma affects key brain areas and how this results in changes in brain function and negative social, psychological and educational outcomes.

We also discuss the findings arising from the original ACEs study which highlights the physical health outcomes associated with ACEs.

Childhood Trauma across the Life Cycle

The toxic stress resulting from experiences with early adversity may affect the developmental trajectory of a child

well into adulthood. It affects early development, resulting in developmental delays, and may have a negative impact on learning and education. It also affects physical and behavioural health. This link between childhood trauma and short- and long-term health outcome is attributable to the psychological and biological changes that are associated with the toxic stress response (Larkin et al., 2012; Felitti et al., 1998).

Figure 4.1:
Childhood Adversity May Run across the Life Cycle

Early Trauma and the Brain

Our brains are wired for connection. Trauma rewires the brain for protection. That's why healthy relationships are difficult for wounded people.
– Ryan North

Toxic stress resulting from early trauma affects key areas of the brain; the result is alteration in brain function and negative mental health outcomes.

The prefrontal cortex

The prefrontal cortex is that area at the front of the brain that develops fully in later life, around age 24 years. The

prefrontal cortex is most susceptible to long-term trauma. It is responsible for thinking, organising, attention, planning, solving problems, making decisions, regulating mood, and controlling behaviour and impulse. Children with an underdeveloped prefrontal cortex may develop challenges with problem solving, attention, impulse control and behaviour regulation. Many children exposed to long-term trauma may be prone to irritability and emotional outbursts due to problems with emotional regulation.

The hippocampus

The hippocampus is an area deep in the brain. It is responsible for memory, especially emotional memory and for linking triggers to emotions. It plays a role in shutting off the response to triggers.

Exposure to early adversity will result in a reduction in the size of the hippocampus. This leads to problems with the consolidation of memories and linking of triggers to emotions. Triggers allow the brain to be able to respond to new stressful events. A disruption in the function of the hippocampus results in exaggerated responses to triggers.

The amygdala

The third area is called the amygdala, and this is the body's alarm system. It acts as the "police" of the brain, always looking out for danger. It triggers an alarm in the face of danger. It is responsible for our survival and keeps the body ready for fight or flight in the event of danger. Prolonged stress causes overactivation of the amygdala. The amygdala is associated with difficulty controlling emotional response to triggers. Children and youth who are constantly exposed to stress and trauma are constantly in a hyper-aroused

state, with over-responsiveness to stress. Their brains and bodies are always alert and ready for danger.

The ventral tegmental area

This area is the "reward centre" of the brain. It controls pleasure seeking, motivation, reward and emotions. Exposure to chronic stress may disrupt the function of this area of the brain, leading to addiction and a lack of control of emotions.

Table 4.1 shows key brain structures affected by trauma and associated behaviour changes.

Table 4.1: Trauma and Behaviour Change

Brain structure affected	Behaviour changes
Prefrontal cortex	Difficulty with problem solving, impulse control, inhibition of behaviour and emotional regulation
Hippocampus	Affects memory and learning. Difficulty interpreting triggers
Amygdala	Hyper-aroused state. Over-response to stress
Ventral tegmental area	Increased high-risk and pleasure-seeking behaviour and addiction

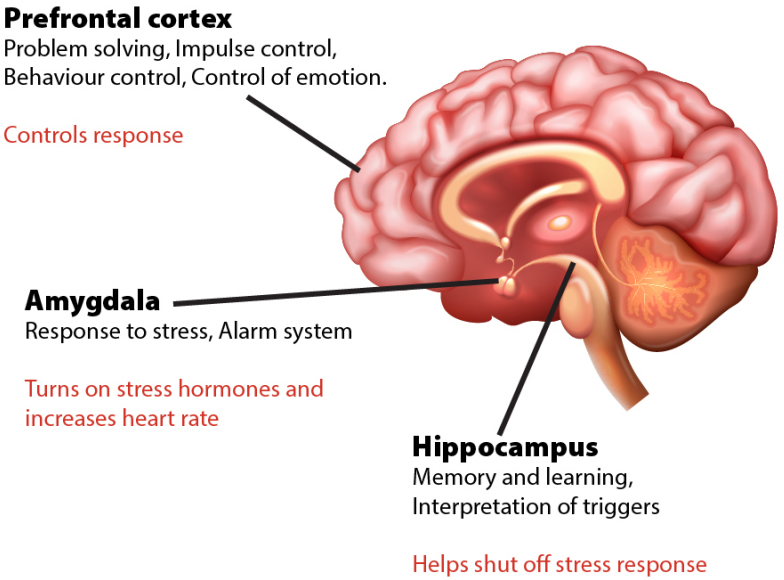


Figure 4.2:
Key Brain Areas in Trauma

Childhood Trauma and ACEs, Early Development, Education and Learning

The experience of early childhood trauma has been linked to disruption in sleep, delays in growth and cognitive development in infancy (Oh et al., 2018). Researchers have also shown that long-term changes in the brain due to exposure to childhood adversity is linked to problems with attention and learning (Bellis et al., 2014; Hughes et al., 2017; Shonkoff & Garner, 2012). Other studies report lower academic performance, more behavioural problems at the kindergarten level and increased likelihood of disengagement from school (Jimenez et al., 2016; Bethell et al., 2014). Another study reveals school dropout and the likelihood of failing a grade (Morrow et al., 2017).

In a study conducted among grade 5 students in Jamaica, Baker-Henningham et al. (2009) reported that 58% of students reported being exposed to violence in their homes, by peers, and in the community. This study showed that higher levels of exposure to violence were correlated to poor academic performance.

Childhood Trauma and Mental Health and Wellbeing

Psychological effects of trauma

> *Behavior is the language of trauma. Children will show you before they tell you they are in distress.*
> – Micere Keels

Many children growing up in abusive situations live in settings that are chaotic and unstable. We have discussed how important it is for children to have a stable, secure, and safe environment. Trauma, in every respect, destroys that sense of stability, security and safety. We also explored how childhood trauma and ACEs affect the brain and keep children in a hyper-aroused or "jumpy" state, and how this may lead to poor school performance and behavioural problems.

> *If you feel safe and loved, your brain becomes specialised in exploration, play and cooperation; if you are frightened and unwanted, it specialises in managing feelings of fear and abandonment.*
> – Bessel van der Kolk

Many children exposed to long-term trauma may develop a range of emotional and behavioural responses that are

designed to keep them in survival mode. When these children are exposed to anything that reminds them of the trauma, or when they experience stress, they are flooded with negative emotions such as fear, anxiety and anger which they sometimes cannot control, and this may lead to behaviours such as outbursts of anger or irritability, and self-harming behaviours such as cutting. Other children may become withdrawn and quiet as they suffer silently.

Another common but not well understood reaction is that of dissociation which is a coping mechanism children may use to survive trauma. Dissociation involves the separation of our thoughts, memories and feelings from our conscious awareness.

Dissociation may manifest itself in a wide range of behaviours such as day dreaming, 'spacing out', age regression, forgetfulness, lying or denying and recurrent self-injurious behaviour. It is important that we become aware of these behaviours because in many contexts, children are often punished or retraumatised when they occur.

The adults in children's lives are supposed to protect them from harm and danger. The child who is abused learns not to trust adults and the world around them. They may grow up unable to establish trusting relationships, having feelings of not being loved and intense feelings of rejection.

- **Mental disorders**

  Children exposed to adverse childhood experiences are also at increased risk of developing mental health disorders such as depression, anxiety, and post-traumatic stress disorder (PTSD). The long lasting effect of trauma may become deeply ingrained, resulting in borderline personality disorder in adulthood.

- **Alcohol and substance use problems**

  Trauma not only damages the brain; it also affects how we cope with stress and negative emotions. Individuals exposed to trauma may have difficulty regulating their emotions. They may use alcohol and other drugs to self-medicate and cope with the physical and psychological pain associated with trauma (Bassir Nia et al., 2023; Anda et al., 1999).

- **Adverse childhood experiences and suicidal behaviour**

  Children exposed to trauma are more likely to display suicidal behaviours such as various forms of self-harming activities or attempted suicide. Self-injurious behaviours such as cutting are a growing problem. In many instances, the intention is not to harm themselves but to manage emotions like sadness or anger. Cutting represents an impulsive behaviour and a dysfunctional coping mechanism in children who may have difficulty regulating their emotions.

- **High-risk sexual behaviour**

  Persons exposed to adverse childhood experiences are at greater risk for high-risk behaviours such as multiple sexual partners; they may also be at risk for intimate partner violence and sexual violence. In addition, studies have shown that these individuals have more negative pregnancy-related issues such as adolescent pregnancy and unintended pregnancies (Hillis, Anda et al., 2004; Miller, Fleming et al., 2021; Sulaiman et al., 2021; Ciciolla et al., 2021; Mersky & Lee, 2019; Reid et al., 2019; Diamond-Welch & Kosloski, 2020).

- **ACEs and criminality**

  There is a higher prevalence of ACEs among young people who are involved in the criminal justice system than among young people who are not (Graf et al., 2021). We have also already seen how prolonged toxic stress may result in increased impulsivity, poor emotional regulation and stress intolerance (Shonkoff et al., 2012), which may lead to increased likelihood of engaging in high-risk behaviours that may lead to involvement in criminal activity.

ACEs and Physical Health Outcomes: Findings from the Original ACE Study

The original ACEs study conducted by Kaiser Permanente in the USA showed that ACEs were associated with the leading causes of death in the USA. Additionally, it showed that ACEs were associated with earlier death (Dube et al., 2003). Other studies have shown an association between ACEs and more than forty chronic diseases. These health-related problems include lung, heart, and liver disease, and sexually-transmitted diseases (Larkin et al., 2012; Felitti et al., 1998). Figure 4.3 illustrates the connection between ACEs and health-related problems.

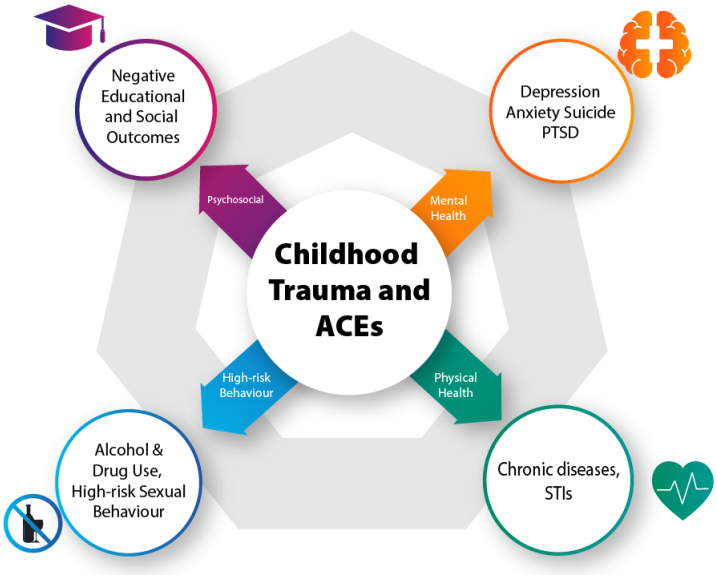


Figure 4.3:
Health-related Problems Associated with ACEs

Physical Health Problems and the Toxic Stress Response

Physical health problems are linked to the effect of the toxic stress response on the biological systems of the body such as the immune system, the stress regulation system, metabolic and genetic systems (deCelis et al., 2016).

The Dose Dependent Effect

In the original ACE study, when clients were asked about ACEs they were assigned a score. The scores were graded and the higher scores were associated with increased risk of developing certain conditions. The study concluded that the more ACEs an individual experienced, the greater the risk of developing chronic diseases in later life. Additionally, longer exposure to ACEs and repeated exposure to ACEs

will result in more negative health outcomes. This is referred to as the dose dependent effect. Figure 4.4 shows the increased risk associated with the number of ACEs.

In terms of the risks, adults who experienced four or more ACEs had increased risk of developing seven of the ten leading causes of death in the USA and a twelve times higher risk for developing alcoholism, drug use, depression and suicide attempts (Felitti et al., 2015; Hughes et al., 2017).

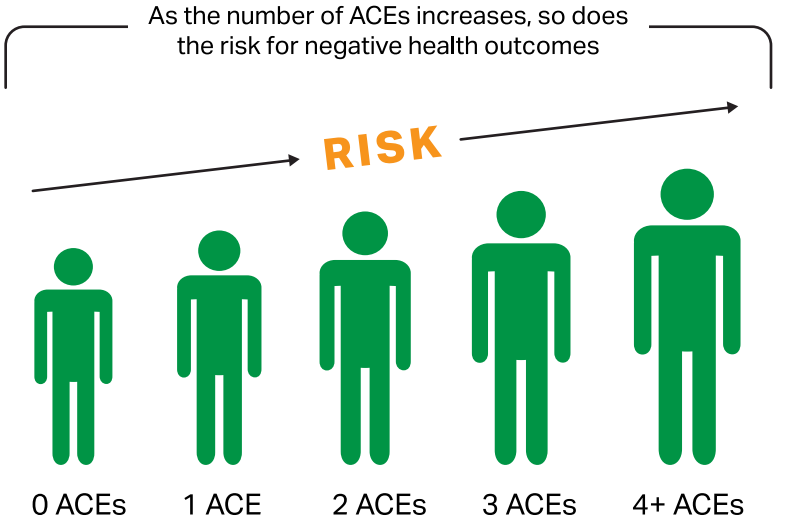


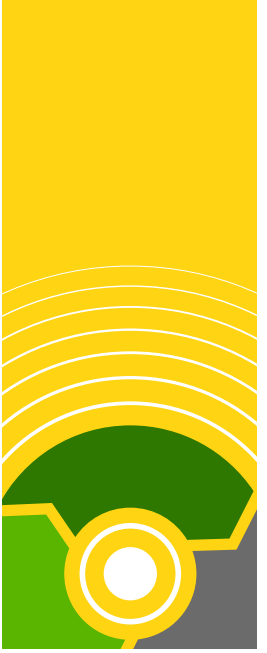
Figure 4.4:
Increased Risk Associated with Number of ACEs

In Summary

In this chapter we discussed the effects of trauma on the development of a child. We examined how early trauma can affect the cognitive development of a child and showed how exposure to early trauma can also lead to negative educational outcomes, mental health disorders and high-risk behaviours. The exposure to ACEs is associated with

common health-related problems and we have shown that the greater the number of ACEs an individual is exposed to, the greater the risk of negative health outcomes.

In chapter 5 we discuss how to break the cycle of trauma. We look at services and interventions in Jamaica and make recommendations for the development of interventions.



Chapter 5
Breaking the Cycle – Interventions Work

Trauma can be prevented more easily
than it can be healed.
– Peter A. Levine

In previous chapters we discussed how trauma creates negative mental, behavioural and physical outcomes during childhood and across the life cycle into adulthood. We discussed how trauma also creates cycles of harm that affect communities and can be transmitted across the generations.

In this chapter, we focus on breaking the vicious cycle of trauma. We discuss several interventions as part of a comprehensive public health strategy. We also address

the timing of interventions and the levels at which we can intervene.

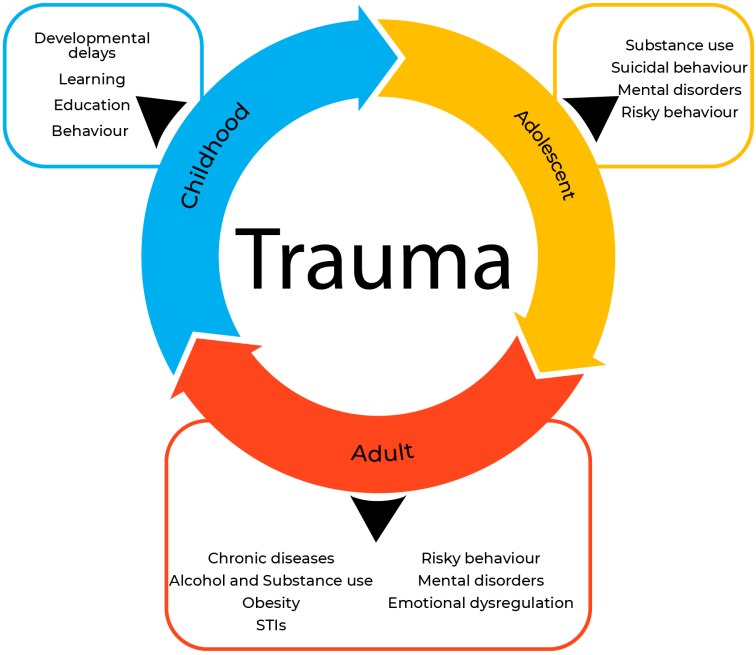


Figure 5.1:
Impact of ACEs across the Life Cycle

Breaking the Cycle – Public Health Interventions

Childhood trauma has become a major public health problem and to break this vicious cycle of harm we need to use a comprehensive public health approach using multi-pronged interventions.

In general, public health interventions target communities and populations and are multilevel in their scope. In Jamaica, public health efforts are focused primarily on injury, chronic diseases and, recently, specific

behavioural health issues such as alcohol and substance abuse, suicide and violence. A public health approach to the widespread problem of childhood trauma does not exist in Jamaica. There is an urgency for us to address the pervasive childhood trauma in a more comprehensive manner in Jamaica.

Public health interventions utilise strategies such as public education and awareness, prevention, early intervention strategies and treatment. The levels of intervention include those that are child and family based, and community and society based interventions. An understanding of the stages in a child's development at which we can act has allowed practitioners to better target these interventions. This approach is critical to enabling us to prevent trauma and promote healing and recovery from childhood adversity.

Intervention Programmes for Childhood Trauma

Types of intervention

An evolving body of research identifies many interventions to address childhood trauma and these range from those that can prevent or reduce childhood trauma to those that respond to trauma when it occurs, and those designed to enhance coping (Asmussen, 2019; Flynn et al., 2015).

- **Prevention – reducing risk factors and promoting protective factors**

  In chapter 1 we introduced the risk factors that increase the likelihood of exposure to ACEs and the protective factors that mitigate the impact of ACEs across the life cycle. We also pointed out that the presence of the ACEs does not necessarily mean a child will develop

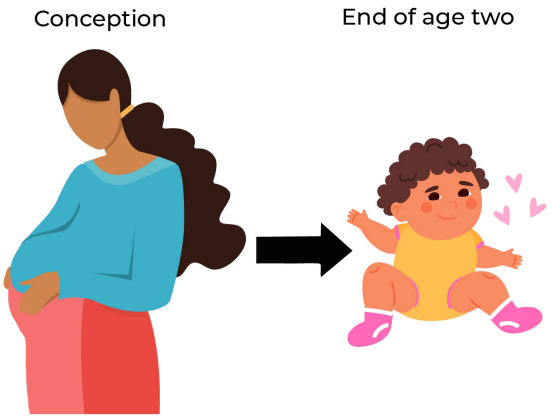
long-lasting problems and, in fact, many individuals do not. The likelihood of these long-term outcomes is increased by risk factors and decreased by protective factors, as previously discussed.

In chapter 3 we discussed the buffering effect and how protective factors such as having a healthy relationship with caregivers buffer the toxic stress response by reducing the activity of the HPA axis and the level of cortisol in the body.

- **Levels of intervention**

  Interventions may be directed at all levels across the socioecological spectrum: the child, family, community, and the wider societal level.

- **The critical periods to act – Three windows of opportunity to act**



In the development of interventions targeting childhood adversity, three critical periods or windows of vulnerability and intervention have been identified. The first window is the first thousand days, a period from conception to the end of age two.

This is a period of rapid brain growth when the child is extremely sensitive to stressors. The second occurs at about 9–14 years of age. This period corresponds with early adolescence, which is critical to the development of children. The third window occurs between 18 and 21 years, which marks the transition to adulthood. This is the period when young people are making that transition from adolescence to becoming young adults. These periods provide opportunities for action.

Interventions in Jamaica

As previously discussed Jamaica has not taken a comprehensive approach to addressing childhood trauma. Over the past decades, several interventions have been put in place to address individual adversities that children experience. Many of these programmes operate in silos and tend to address ACEs in isolation. As a result, there is not sufficient sharing of data and a lack of collaboration has resulted in a limited number of multi-component programmes which have been shown to be the most effective.

- **Prevention programmes**

  Prevention efforts are the most cost-effective measures for tackling any public health problem. We, therefore, as a society, need to focus on prevention as it costs less to fix things before they occur.

- **Early identification and screening**

  Early identification programmes are designed to address early developmental problems and reduce the long-term negative impact linked to the exposure to childhood trauma. Given the fact that so many children are exposed to trauma, it is important that we identify these individuals as early as possible through screening in a variety of settings.

  Several screening tools for the ACEs are available and are used by mental health professionals. We should promote screening programmes for the ACEs by health care professionals, counsellors, psychologists, social workers and other professionals who are able to identify families that have been exposed to high levels of childhood adversity.

- **Programmes addressing antenatal and postnatal care**

  Programmes that address antenatal and postnatal care have been shown to reduce the impact of ACEs (O'Connor et al., 2016; Wagas et al., 2022). Focus should be placed on programmes that screen for mental health and substance abuse problems and those that promote proper nutrition during the antenatal and postnatal period.

- **Access to high quality childcare and early years education**

  Although not considered public health strategies, access to high quality childcare and early years education have been shown to be protective and can reduce child abuse and neglect (Avery, 2020). The Early Childhood Commission has made significant progress

in advancing early care and education and the early development of children in Jamaica.

- **Parenting programmes**

The parent child–relationship is the most powerful mental health intervention known to mankind.
– Bessel van der Kolk

The importance of a healthy parent–child relationship has previously been discussed in this book. Unfortunately, many parents are not prepared to embark on the parenting role and have not been exposed to adequate, positive parenting skills.

Early intervention programmes such as those that focus on improving parenting skills, promoting mother–child interaction and providing information on child development have been shown to be effective (Asmussen et al., 2019). We need to implement more parenting programmes designed to improve parenting skills, communication within the family and more positive disciplinary practices.

It is commendable that Jamaica's Ministry of Education has established the National Parenting Commission and it has recently launched a programme under which over 100,000 individuals are to be trained in parenting.

- **The promotion of more positive disciplinary practice**

The style of discipline in many households in Jamaica is harsh and inconsistent and far too frequently corporal punishment is used as the method of discipline. In far too

many instances when corporal punishment is used, it is so harsh that it becomes physically abusive. Parenting programmes should emphasise age-appropriate techniques for disciplining children.

- **Home visitation for vulnerable families and the newborn (Good start – good finish)**

  Two well-known Jamaican studies, the first done by Sally McGregor and team and the second by Susan Walker and team (2005, 2011), have shown the value of home visitation by trained individuals who assist parents in vulnerable communities with early psychosocial support and stimulation for their children. The children exposed to home visitation support reported fewer involvement in fights and in serious violent behaviour. This cohort of children, when followed, also had higher adult IQ, higher educational attainment, and fewer symptoms of depression and social inhibition (Walker et al., 2005; Walker et al., 2011; Dube et al., 2023).

  Another early intervention programme is the cultural therapy programme, a multimodal cultural therapy intervention that was developed by Hickling and colleagues. This programme targeted a cohort of children living in the inner-city and reported improvement, for example, improvement of aggressive oppositional defiant behaviour, attention deficit behaviour, social problems and conduct problems (Guzder et al., 2013).

  We need to replicate and implement more of these early intervention programmes that have been shown to be effective.

- **Programmes targeting youth**

  There is an urgent need for more community-based programmes targeting youth, especially youth from high-risk families and communities. These programmes should be geared towards enhancing resilience and promoting the acquisition of life skills and social skills.

  As the often repeated saying goes, "It takes a village to raise a child". This highlights the fact that when families and communities provide safe, stable relationships and environments, children have more positive experiences, encounter less trauma and they thrive.

  Given the high level of crime and violence in Jamaica, continued efforts are needed to reduce community violence and the exposure of children to crime and violence. Community awareness campaigns involving mass media and social media, and building community networks to provide support and advocacy (for example, faith based, service clubs, NGOs) are strategies that can be introduced.

- **Multicomponent programmes**

  Given the fact that ACEs occur in clusters, more interventions are needed that target multiple ACEs (Allen et al., 2022; Barrett et al., 2024).

  An evolving body of research has shown that programmes with multiple components are more effective. Many programmes have been supported in Jamaica to address parenting practices, decrease violence and many of the adverse childhood experiences and related risk factors. Unfortunately, however, despite the millions of dollars spent, many of

these programmes have not been properly evaluated to establish what works and what does not work. There are, however, some programmes that have provided evidence of their effectiveness. Interestingly, the two programmes mentioned above, McGregor and colleagues and Hickling and colleagues, are both multicomponent programmes.

- **Changing values and attitudes**

Trauma decontextualized
in a person looks like personality.
Trauma decontextualized
in a family looks like family traits.
Trauma decontextualized
in people looks like culture.
– Resmaa Menakem

The high levels of exposure to trauma, especially violence, among children, and the transmission of practices across generations have created a culture of violence in Jamaica. Jamaica has one of the highest murder rates in the world. Far too many of our children are exposed to community violence. As a society, we must promote social norms that reduce and protect against violence and trauma. We must promote healthy parenting practices; address attitudes towards corporal punishment in the society; address community violence and deal with exposure to violence in the media and through popular culture such as music.

The society should embark on a values and attitudes campaign in order to make a shift towards

the promotion of prosocial values and behaviour and to shift social norms.

- **Addressing poverty**

  The Programme for Advancement of Health and Education (PATH), was established to address poverty among the most vulnerable in Jamaica. Poverty is considered one of the social determinants of health and it is associated with many drivers of childhood trauma. Research studies have shown that programmes designed to reduce poverty, especially among the most vulnerable, have led to reduced exposure to early trauma (Courtin et al., 2019; Marmot et al., 2020).

- **Policy and legislation**

  It is worth noting that significant policy advances have been made in Jamaica with the passing of legislation to protect children and safeguard their rights. These include the Maternity Leave Act (1979), the Child Care and Protection Act (2004), the Maintenance Act (2005), the Victim's Charter (2006), the Trafficking in Persons Act (2007), Child Pornography Act (2009), the establishment of the Office of the Children's Advocate and the reorganisation of the Child Protection and Family Services. The recent decision to broaden the remit of the National Council on Drug Abuse to not only address substance abuse related issues but other behavioural issues is a step in the right direction.

Notwithstanding the progress made in advancing legislation,

> *... there are still significant concerns about the protective environment that the Jamaican state has created to reduce children's vulnerability to violence. In a climate of high crime and violence, 68 of every 100,000 Jamaican children are victims of violent crimes. Even in spaces which should be safe — their homes, schools and communities — as many as 80 percent of them are abused physically, sexually and psychologically. The government's response, while commendable in its stated intention to implement preventative measures, is inadequate as it does not address longstanding issues such as corporal punishment in homes and schools and the culture of sexual violence. The state's policies, programmes and strategies are too fragmented across different ministries and agencies and there is no coordinating structure, policy or agency to achieve synergy and prevent duplication*
>
> (UNICEF, 2018, pp. 26–27).

- **Research and collaboration on childhood trauma**

  Numerous research studies have been conducted on childhood trauma but, very often, researchers operate in silos. There may be a need for a country ACEs study, which has been done in many countries, and there is also a need for a more structured sharing of research data to allow us to leverage the best available evidence to plan services and design interventions. Additionally, any effort to tackle trauma and ACEs will

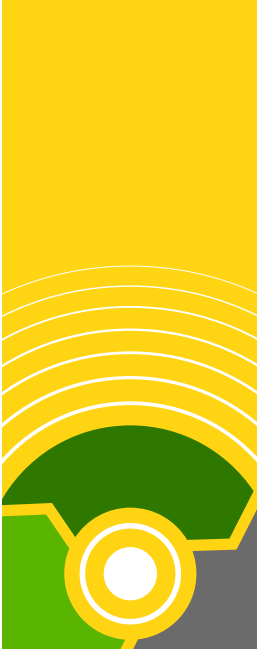
require collaboration among public sector agencies and non-governmental organisations to ensure a more sustainable and comprehensive approach.

In Summary

In this chapter, we reviewed a range of interventions that have been developed as part of a comprehensive public health strategy. We provided some of the current evidence to support these interventions. We explored the three critical windows of opportunity within which to intervene and the levels of intervention from the child, the family, the wider societal and the policy level.

We examined services and interventions in Jamaica and highlighted some of the most successful ones. Interventions geared towards giving children an early start and those that focus on early care and education have been shown to be effective. We also highlighted the need to change the enabling environment by addressing social norms and poverty and effecting appropriate policies and legislation.

The final chapter, chapter 6, introduces the concept of Trauma-Informed Care, which has become a popular framework in recent years for developing services and practice to more appropriately address trauma.



Chapter 6
Breaking the Cycle – A Trauma-Informed Approach

If you never heal from what hurt you
then you will bleed on people who did not cut you.
– Yehuda Berg

In this final chapter we introduce the concept of Trauma-Informed Care. We review the four components and the key principles involved in trauma-informed care.

Services in Jamaica

There are many services that provide care and protection for children in Jamaica. They include child and adolescent health services, child care, education including early childhood, child protection and family services, substance

abuse services, mental health services, the early stimulation programme, the juvenile justice system, PATH (Programme of Advancement through Health and Education), and services for the homeless population. Non-governmental organisations and faith-based organisations also provide services.

We pointed out that the agencies involved provide services to the individual and they often operate in isolation. However, the evidence suggests that in addressing trauma, a multi-sector approach using multi-pronged strategies is associated with better outcomes (Lorenc et al., 2020).

It is also to be noted that many donor agencies and development partners have played a pivotal role in assisting Jamaica to tackle many of the risk factors associated with trauma as they have an impact on long-term economic and social outcomes.

There have been efforts to facilitate greater collaboration across various sectors and services in order to tackle childhood trauma in Jamaica. However, there is also a need to reorient these services to make them more trauma-informed so that they operate with a better awareness of trauma, how trauma affects individuals and how they can better apply trauma principles to provide care.

Trauma-Informed Care

Trauma-informed care is a broad concept that was introduced by Harris and Fallot in 2001 and it has gained momentum worldwide. It is grounded in the understanding that trauma is common, it affects people's lives, and efforts should be made to better engage people and reduce re-traumatisation (Asmussen, 2020; Wall, 2016; SAMHSA, 2014). Despite its growing popularity, there is still a lack of

consensus on trauma-informed care and how to integrate it into different systems.

The four components of Trauma-Informed Care

SAMHSA (Substance Abuse and Mental Health Services Administration) identified four components, the "four Rs", that are critical to the development of trauma-informed care: the realisation of the impact of trauma, recognition of signs of trauma, responsiveness to trauma, and the capacity to reduce re-traumatisation of individuals.

Key principles

Fallot and Harris (2009) described some key principles that should guide the development of trauma-informed care. These principles are: ensuring safety, trustworthiness, choice, collaboration and empowerment.

Challenges involved in introducing trauma-informed care

A trauma-informed system of care involves the application of the components and principles of trauma care in all systems providing care to children such as clinical, social, human services and schools. This model has evolved out of high resource countries and numerous challenges have been identified that may retard its implementation globally. These challenges include a relative lack of resources, lack of political will, bureaucratic inertia, and cultural differences in some countries (Powell et al., 2023).

A Trauma-Informed Approach

Having considered the challenges cited above, and the competing priorities at this time, a gradual introduction of a culturally sensitive, trauma-informed approach is the

most feasible option. This approach would require that staff providing services to children have at the minimum an awareness of trauma and its effects and be aware of how re-traumatisation may occur.

One may argue that work has already begun in this area with ongoing training of professionals to engage with those affected by trauma. However, greater awareness and support is required for the adoption of policy and to effect changes across service systems.

Trauma-informed care for frontline services

At the same time, frontline services that provide care for children who have been exposed to trauma – such as the Child Protection and Family Services, the mental health services, the juvenile justice system and schools – should implement a more robust trauma-informed care approach.

Creating trauma-informed schools

Children spend a lot of their time in school and prolonged exposure to traumatic events affects learning and behaviour. Greater effort is needed to make our schools more trauma-informed spaces. Schools should create a safe, supportive, non-judgemental space for all children. Teachers, guidance counsellors, school psychologists and school administrators need to become more aware of the problems related to trauma in children. At the same time, schools must be able to identify children at risk and make appropriate referrals.

A Public Health–Trauma-Informed Approach

In the previous chapter, chapter 5, we discussed the merits of a comprehensive public health strategy that incorporates

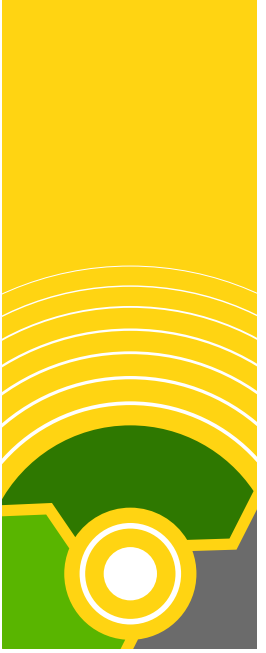
various interventions. The trauma-informed approach can be complementary to public health.

Over the past decades, Jamaica has developed a strong public health strategy; the adoption therefore of a Public Health–Trauma-Informed Approach is proposed. This is in alignment with the more integrative approach suggested by Public Health UK (Buckley, Shah, et al., 2021). In this model, public health will strengthen its capacity to be more trauma-informed, and clinical, social, human and other services will integrate more public health interventions into their work. This model will certainly place emphasis on recognition of trauma and its impact and the avoidance of re-traumatisation while, at the same time, focussing on efforts to prevent and reduce exposure to trauma.

In Summary

This final chapter focussed on trauma-informed care as an emerging framework for developing services and to guide practice. The challenges associated with the implementation of trauma-informed care were discussed.

The recommendation was made for a more practical approach in the implementation of trauma-informed care in Jamaica. We noted that some work has been done to implement trauma-informed care to enhance the level of care but there is a need to integrate this with public health efforts to develop a comprehensive Public Health–Trauma-Informed Approach.



Concluding Remarks

In the previous chapters we discussed how early adversity can affect a child across the life cycle and highlighted how trauma affects the cognitive, social and emotional development of children. We also discussed the long-term impact of early childhood trauma on adult physical and mental health.

We highlighted how these adversities pass from one generation to another and the extent of ACEs in Jamaica. The grim reality is that far too many of our children have had their lives shattered because of the damaging effects of trauma. As a society, we have a responsibility to tackle this epidemic of childhood adversity and break this vicious cycle of trauma.

We need to discuss the issues around childhood trauma openly and frankly, and put them squarely on the front burner. In the previous chapters we discussed how

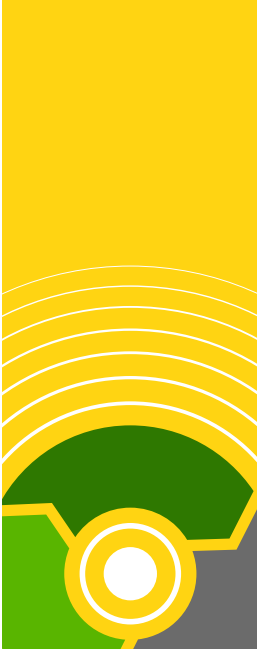
early adversity can affect a child across the life cycle and highlighted how trauma affects the cognitive, social and emotional development of children. We also discussed the long-term impact of early childhood trauma on adult physical and mental health.

Remember, it takes a village to raise a child. Every one of us should become more aware of the impact of childhood trauma. Let us all commit to creating a safer, more stable and nurturing world for our children and ourselves.

Wherever we live, wherever we work, wherever we worship and wherever we interact, through our words and actions, let us strive to make our world a safer and more secure place for our children and ourselves.

Join in highlighting this public health crisis by advocating for more resources, programmes and interventions to save our children and break this vicious cycle of childhood trauma.

When we heal our trauma, we break the pattern
for the next generation. That's our work.
That is our gift to the next generation.
– Anonymous



APPENDIX

Dealing with Children Affected by Trauma

There is no greater agony than bearing
an untold story inside of you
– Maya Angelou

Trauma represents a betrayal of trust and a failure on the part of the adults and community to live up to their expectation to provide a stable, secure and nurturing world. The exposure to early childhood adversity leaves the children in a deep-seated state of emotional vulnerability and dysregulation.

Dealing with children who have been traumatised requires a high level of understanding and special skills.

No individual survives trauma alone. The support and assistance of others are crucial in the process of healing from trauma. The irony is that trauma shatters one's sense of trust in others and the world. It also shatters one's sense of safety and sense of self.

The information presented below serves only as a reminder and is not intended to simplify how we deal with trauma. Working with children exposed to trauma demands a lot of time and rigorous training.

A reminder to people who have been traumatised

- Establish supportive and trusting relationships. Trauma destroys an individual's sense of trust. Remember, it takes time to re-establish trust.
- Establish a sense of safety. Your sense of safety in the environment may have been shattered. Learn to identify potential threats and triggers.
- Develop functional coping skills. Trauma would have destroyed your sense of coping. Some individuals develop problems with mood regulation and impulsivity

and use dysfunctional coping strategies such as alcohol and engage in other substance use and abuse.

- Focus on functional coping skills. Choose relaxation techniques that you find acceptable such as deep breathing exercises, mindfulness techniques such as yoga, gratitude journaling, playing, walking, meditation, praying and gardening.
- Change negative self-talk. Trauma leads to negative self-talk and may cause individuals to feel that they are not good enough, that they are broken, damaged, or at fault. Identify any negative self-talk you may have. Catch them. Challenge them. Change them.
- Show self-compassion. It is important that you learn to show yourself grace and compassion. Remind yourself that the trauma experience was not your fault, that the adults in your life failed to protect you or that your trust was violated.
- Identify resources. Lots of resources are available these days to help manage the effects of trauma. Check with your local health provider. The internet is a great source of resources and there are many support groups available online. Accessing these resources can make a great difference in your life.
- Seek professional help. Working through trauma by yourself may be difficult. Seek the help of someone who is adequately trained to provide care to individuals affected by trauma.

A reminder to parents

1. Parents and caregivers should create an environment that is safe, stable, and nurturing for children. It is important that parents listen to children who report trauma events without blaming or shaming them.

2. If a child is displaying behavioural problems, remember the child is not 'bad' or wayward. Be aware that damage done to the brain as a result of the trauma experience causes extreme behaviours such as irritability, poor impulse control and hyper-alert states.

3. It is important not to use physical punishment such as beating when dealing with children exposed to trauma events as this may further traumatise them.

4. It is recommended that parents seek help from a mental health professional. Taking care of a child who has suffered trauma and who is showing extreme behaviours can be challenging. Trying to deal with your child on your own will result in high levels of frustration and burn out.

General Principles for Working with Traumatised Children

Given the scope of the problem of adverse childhood experiences, we need more trained professionals to work with children and their families. As the toxic stress on the child's brain leads to many emotional problems, individuals who have experienced trauma need therapy to deal with the trauma and to reclaim a healthy future.

Professionals working in the area should ensure that they are properly trained to deal with children exposed

to adversity. Under the law, professionals have a duty to report acts of trauma to the relevant authorities.

Remember, also, that one of the most important things in therapy is to create a safe environment for the children. It is also important that we use a non-judgemental and safe approach when dealing with such children.

Professionals working with individuals exposed to trauma should be able to recognise the challenges being experienced by them and appropriately deal with these challenges. One of the things that we try to do when working with children is avoid re-traumatising them in the intervention process. Trained therapists are aware of measures to take to prevent re-traumatisation.

Here are some tips or reminders to assist survivors of trauma:

1. Establish a sense of safety. Reassure individuals who have been traumatised that you are creating a safe and stable environment.

2. Reassure children that:
   - The trauma was not their fault
   - Adults failed to protect them
   - They were violated
   - The abuser/perpetrator betrayed their trust.

3. Take time to listen. Really listen to the children as they speak.

4. Encourage children to express and deal with feelings. Help them to identify their feelings – for example, happy, sad, scared, angry, confused. Children can be encouraged to draw their feelings and to deal with their feelings in other healthy ways.

5. Teach children healthy ways to deal with emotions by using relaxation techniques such as deep breathing, engaging in physical activities, or using a psychological safety toolkit. This is a group of resources that you prepare beforehand and can reach for in an emotional emergency or when a child feels emotionally vulnerable. For example, the child who has a habit of cutting when they feel numb or have distressing feelings can be encouraged to use a safety toolkit and to play with a stress ball or rub the stress ball in their forearm instead of cutting.

6. Give children time to tell their story. Trauma may affect a child's memory, and they may have difficulty remembering aspects of the trauma. Don't pressure them to tell their story. Give them time to tell the story at their pace and in their own way. In fact, the slower you go, the faster you get there.

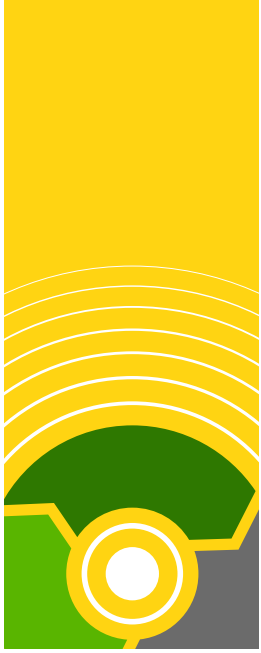
7. Don't blame or shame children. Be understanding and supportive. Don't be judgemental in dealing with children who have experienced trauma.

Useful Resources

Directory of Services for Children & Families. (2020). UNICEF. https://www.unicef.org/jamaica/media/3306/file/Directory%20of%20Services%20for%20Children%20&%20Families.pdf%20.pdf

The Burke Foundation. https://burkefoundation.org/what-drives-us/adverse-childhood-experiences-aces/

This is a foundation that supports children and caregivers in the USA. The website includes useful resources.



References

Abel, W. D., Sewell, C., Martin, J. S., & Bailey-Davidson, Y. (2012). Suicide ideation in Jamaican youth: Sociodemographic prevalence, protective and risk factors. *West Indian Medical Journal, 61*(5), 521–525. doi: 10.7727/wimj.2011.144

Afifi, T. (2020). Considerations for expanding the definition of ACEs. In G. J. G. Asmundson & T. O. Afifi (Eds.), *Adverse childhood experiences: Using evidence to advance research, practice, policy, and prevention* (pp. 35–44). Elsevier Academic Press. https://doi.org/10.1016/B978-0-12-816065-7.00003-3

Allen, K., Melendez-Torres, G. J., Ford, T., Bonell, C., Finning, K., Fredlund, M., Gainsbury, A., & Berry, V. (2022). Family focused interventions that address parental domestic violence and abuse, mental ill-health, and substance misuse in combination: A systematic review. *PLoS One*, *17*(7). doi: 10.1371/journal.pone.0270894

Anda, R. F., Croft, J. B., Felitti, V. J., Nordenberg, D., Giles, W. H., Williamson, D. F., & Giovino, G. A. (1999). Adverse childhood experiences and smoking during adolescence and adulthood. *JAMA: The Journal of the American Medical Association, 282*, 1652–1658. doi:10.1001/jama.282.17.1652

Asmussen, K., McBride, T., & Waddell, S. (2019). The potential of early intervention for preventing and reducing ACE-related trauma. *Social Policy and Society, 18*(3), 425–434. doi: 10.1017/S1474746419000071

Asmussen, K. P., Fischer, F., Drayton, E., & McBride, T. (2020). *Adverse childhood experiences: What we know, what we don't know, and what should happen next*. Early Intervention Foundation.

Avery, J. C., Morris, H., Galvin, E., Misso, M., Savaglio, M., & Skouteris, H. (2020). Systematic review of school-wide trauma-informed approaches. *Journal of Child & Adolescent Trauma, 14*(3), 381–397. doi: 10.1007/s40653-020-00321-1

Baker-Henningham, H., Meeks-Gardner, J., Chang, S., & Walker, S. (2009). Experiences of violence and deficits in academic achievement among urban primary school children in Jamaica. *Child Abuse & Neglect, 33*(5), 296–306. doi: 10.1016/j.chiabu.2008.05.011

Barrett, S., Muir, C., Burns, S., Adjei, N., Forman, J., Hackett, S., ... McGovern, R. (2024). Interventions to reduce parental substance use, domestic violence and mental health problems, and their impacts upon children's well-being: A systematic review of reviews and evidence mapping. *Trauma Violence Abuse, 25*(1), 393–412. 10.1177/15248380231153867

Bellis, M. A., Hughes, K., Leckenby, N., Jones, L., Baban, A., Kachaeva, M., ... Terzic, N. (2014). Adverse childhood experiences and associations with health-harming behaviours in young adults: Surveys in eight eastern European countries. *Bulletin of the World Health Organization, 92*, 641–655. doi: 10.2471/BLT.13.129247

Bethell, C. D., Newacheck, P., Hawes, E., & Halfon, N. (2014). Adverse childhood experiences: Assessing the impact on health and school engagement and the mitigating role of resilience. *Health Affairs, 33*(12), 2106–2115. doi: 10.1377/hlthaff.2014.0914

Buckley, K., Shah, N., Roberts, J., De Brún, C., Khangura, R., & Clark, R. (2021). The-effectiveness-of-trauma-informed-approaches-to-prevent-adverse-outcomes-in-mental-health-and-wellbeing-a-rapid-review. Public Health England. https://assets.publishing.service.gov.uk/media/65021079702634000d89b7f1/The-effectiveness-of-trauma-informed-approaches-to-prevent-adverse-outcomes-in-mental-health-and-wellbeing-a-rapid-review.pdf

Ciciolla, L., Shreffler, K. M., & Tiemeyer, S. (2021). Maternal childhood adversity as a risk for perinatal complications and NICU hospitalization. *Journal of Pediatric Psychology, 46*(7), 801–813. https://doi.org/10.1093/jpepsy/jsab027

Courtin, E., Allchin, E., Ding, A. J., & Layte, R. (2019). The role of socioeconomic interventions in reducing exposure to adverse childhood experiences: A systematic review. *Current Epidemiology Reports, 6*(4), 423–441. 10.1007/s40471-019-00216-2

Crockford, C., Deschner, T., & Wittig, R. M. (2018). The role of oxytocin in social buffering: What do primate studies add? *Current Topics in Behavioral Neurosciences, 35*, 155–173. doi: 10.1007/7854_2017_12

Debowska, A., Boduszek, D., Fray-Aiken, C., Ochen, E. A., Powell-Booth, K. T., Nanfuka Kalule, E., ... Mason, S. (2024). Child abuse and neglect and associated mental health outcomes: A large, population-based survey among children and adolescents from Jamaica and Uganda. *Mental Health and Social Inclusion, 28*(1), 42–65. https://doi.org/10.1108/MHSI-08-2023-0089

de Celis, M. F. R., Bornstein, S. R., Androutsellis-Theotokis, A., Andoniadou, C. L., Licinio, J., Wong, M-L., & Ehrhart-Bornstein, M. (2016). The effects of stress on brain and adrenal stem cells. *Molecular Psychiatry, 21*(5), 590–593. doi: 10.1038/mp.2015.230

Diamond-Welch, B., & Kosloski, A. E. (2020). Adverse childhood experiences and propensity to participate in the commercialized sex market. *Child Abuse & Neglect, 104*, 104468. doi: 10.1016/j.chiabu.2020.104468

Dube, S. R., Felitti, V. J., Dong, M., Giles, W. J., & Anda, R. F. (2003). The impact of adverse childhood experiences on health problems: Evidence from four birth cohorts dating back to 1900. *Preventive Medicine, 37*(3), 268–277. http://dx.doi.org/10.1016/S0091-7435(03)00123-3

Dube, S., Li, E., Fiorini, G., Lin, C., Singh, N., Khamisa, K., McGowan, J., & Fonagy, P. (2023). Childhood verbal abuse as a child maltreatment subtype: A systematic review of the current evidence. *Child Abuse & Neglect, 144*, 106394. doi: 10.1016/j.chiabu.2023.106394

Economic and Social Survey of Jamaica. (2019). https://www.pioj.gov.jm/product/economic-and-social-survey-jamaica-2019/

Fallot, R. D., & Harris, M. (2009). Creating cultures of trauma-informed care (CCTIC): A self-assessment and planning protocol. *Community Connections*. https://children.wi.gov/Documents/CCTICSelf-AssessmentandPlanningProtocol0709.pdf

Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., Koss, M. P., & Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults. The adverse childhood experiences (ACE) study. *American Journal of Preventive Medicine, 14*(4), 245–258. https://doi.org/10.1016/s0749-3797(98)00017-8

Flannery, D. J., Wester, K. L., & Singer, M. I. (2004). Impact of exposure to violence in school on child and adolescent mental health and behavior. *Journal of Community Psychology, 32*(5), 559–573. https://doi.org/10.1002/jcop.20019

Flynn, A. B., Fothergill, K. E., Wilcox, H. C., Coleclough, E., Horwitz, R., Ruble, A., Burkey, M. D., & Wissow, L. S. (2015). Primary care interventions to prevent or treat traumatic stress in childhood: A systematic review. *Academic Pediatrics, 15*(5), 480–492. doi: 10.1016/j.acap.2015.06.012

Fray-Aiken, C., Powell-Booth, K., Nelson, K., Harvey, R., Reid, P., ... Jones, A. (2022). The prevalence, contexts, and impact of children's exposure to domestic violence in Jamaica. *Caribbean Journal of Science, 15*(2), 132–162. doi: 10.37234/CJP.2022.1502.A005

Graf, G. H., Chihuri, S., Blow, M., & Li, G. (2021). Adverse childhood experiences and justice system contact: A systematic review. *Pediatrics, 147*(1), e2020021030. doi: 10.1542/peds.2020-021030

Guevara, A. M., Cottam, S., Wall, C., & Lindstrom Johnson, S. (2024). Expanding ACEs in child and family service systems: Incorporating context and resilience. *Child Protection and Practice, 3*, 100065. https://doi.org/10.1016/j.chipro.2024.100065

Guzder, J., Paisley, V., Robertson-Hickling, H., & Hickling, F. W. Promoting resilience in high-risk children in Jamaica: A pilot study of a multimodal intervention. (2013). *Journal of the Canadian Academy of Child and Adolescent Psychiatry, 22*(2), 125–130.

Hillis, S. D., Anda, R. F., Dube, S. R., Felitti, V. J., Marchbanks, P. A., & Marks, J. S. (2004). The association between adverse childhood experiences and adolescent pregnancy, long-term psychosocial consequences, and fetal death. *Pediatrics, 113*(2), 320–327.

Hostinar, C. E., Sullivan, R. M., & Gunnar, M. R. (2014). Psychobiological mechanisms underlying the social buffering of the hypothalamic-pituitary-adrenocortical axis: A review of animal models and human studies across development. *Psychological Bulletin, 140*(1), 256–282. doi: 10.1037/a0032671

Hughes, K., Bellis, M. A., Hardcastle, K. A., Sethi, D., Butchart, A., Mikton, C., Jones, L., & Dunne, M. P. (2017). The effect of multiple adverse childhood experiences on health: A systematic review and meta-analysis. *Lancet Public Health, 2*(8), e356–e366. https://doi.org/10.1016/S2468-2667(17)30118-4

Hughes, K., Bellis, M. A., Sethi, D., Andrew, R., Yon, Y., Wood, S., ... Zakhozha, V. (2019). Adverse childhood experiences, childhood relationships and associated substance use and mental health in young Europeans. *European Journal of Public Health, 29*, 741–747.

Idsoe, T., Dyregrov, A., & Idsoe, E. C. (2012). Bullying and PTSD symptoms. *Journal of Abnormal Child Psychology, 40*, 901–911. https://doi.org/10.1007/s10802-012-9620-0

Jimenez, M. E., Wade, R., Lin, Y., Morrow, L. M., & Reichman, N. E. (2016). Adverse experiences in early childhood and kindergarten outcomes. *Pediatrics, 137*(2), e20151839–e20151839. https://doi.org/10.1542/peds.2015-1839 50

Karatekin, C., & Hill, M. (2018). Expanding the original definition of adverse childhood experiences (ACEs). *Journal of Child and Adolescent Trauma, 12*(3), 289–306. doi: 10.1007/s40653-018-0237-5

Lacey, R. E., Howe, L. D., Kelly-Irving, M., Bartley, M., & Kelly, Y. (2022). The clustering of adverse childhood experiences in the Avon longitudinal study of parents and children: Are gender and poverty important? *Journal of Interpersonal Violence, 37*, 2218–2241. 10.1177/0886260520935096

Larkin, H., Shields, J. J., & Anda, R. F. (2012). The health and social consequences of adverse childhood experiences (ACE) across the lifespan: An introduction to prevention and intervention in the community. *Journal of Prevention & Intervention in the Community, 40*(4), 263–270. doi: 10.1080/10852352.2012.707439

Lee, K. A., Priestley, S. R., & Hylton, K. K. (2022). Mental health and behavioral outcomes among Jamaican women: The role of childhood abuse & witnessing parental violence. *Children and Youth Services Review, 140*, 106588. https://doi.org/10.1016/j.childyouth.2022.106588

Longman-Mills, S., Abel, W. D., & De La Haye, W. (2015). Substance abuse during adulthood subsequent to the experience of physical abuse and psychological distress during childhood. *WIMJ Open, 2* (1), 7–10. https://www.mona.uwi.edu/wimjopen/article/1626

Lorenc, T., Lester, S., Sutcliffe, K., Stansfield, C., & Thomas, J. (2020). Interventions to support people exposed to adverse childhood experiences: Systematic review of systematic reviews. *BMC Public Health, 20*(1), 657. https://doi.org/10.1186/s12889-020-087

Marmot, M., Allen, J., Boyce, T., Goldblatt, P., & Morrison, J. (2020). Health equity in England: The Marmot review 10 years on. Institute of Health Equity.

Merrick, M. T., Ford, D. C., Ports, K. A., Guinn, A. S., Chen, J., Klevens, J., ... Mercy, J. A. (2019). Vital signs: Estimated proportion of adult health problems attributable to adverse childhood experiences and implications for prevention – 25 states, 2015–2017. *Morbidity and Mortality Weekly Report* (MMWR), *68*, 999–1005. http://dx.doi.org/10.15585/mmwr.mm6844e1

Mersky, J. P., & Lee, C. P. (2019). Adverse childhood experiences and poor birth outcomes in a diverse, low-income sample. *BMC Pregnancy and Childbirth*, *19*(1). https://doi.org/10.1186/s12884-019-2560-8

Miller, E. S., Fleming, O., Ekpe, E. E., Grobman, W. A., & Heard-Garris, N. (2021). Association between adverse childhood experiences and adverse pregnancy outcomes. *Obstetrics & Gynecology, 138*(5), 770–776. https://doi.org/10.1097/AOG.0000000000004570

Ministry of National Security, Jamaica Crime Observatory Integrated Crime and Violence Information System (JCO-ICVIS). (2016). *2011–2015 report on children and violence*. Kingston, Jamaica: MNS JCO-ICVIS. https://www.unicef.org/jamaica/media/586/file/Report-on-Children-and-Violence-2015.pdf

Morrow, A. S., & Villodas, M. T. (2017). Direct and indirect pathways from adverse childhood experiences to high school dropout among high-risk adolescents. *Journal of Research on Adolescence, 28*(2), 327–341. doi:10.1111/jora.12332

Nia, A. B., Weleff, J., Fogelman, N., Nourbakhsh, S., & Sinha, R. (2023). Regular cannabis use is associated with history of childhood and lifetime trauma in a non-clinical community sample. *Journal of Psychiatric Research, 159*, 159–164. https://doi.org/10.1016/j.jpsychires.2023.01.036

O'Connor, E., Rossom, R. C., Henninger, M., Groom, H. C., & Burda, B. U. (2016). Primary care screening for and treatment of depression in pregnant and postpartum women: Evidence report and systematic review for the US preventive services task force. *JAMA, 315*(4), 388–406. 10.1001/jama.2015.18948

O'Neill, R. S., Boullier, M., & Blair, M. (2021). Adverse childhood experiences. *Clinics in Integrated Care, 7*, 100062. https://doi.org/10.1016/j.intcar.2021.100062

Oh, D. L., Jerman, P., Marques, S. S., Koita, K., Boparai, S. K., Harris, N. B., & Bucci, M. (2018). Systematic review of pediatric health outcomes associated with childhood adversity. *BMC Pediatrics, 18*(1), 83. doi:10.1186/s12887-018-1037-7

Oshi, D. C., Abel, W. D., Ricketts-Roomes, T., Agu, C., Oshi, S. N., Harrison, J., ... Ukwaja, K. N. (2017). Associations between family structure, parental monitoring and marijuana use among adolescents in Jamaica: Findings from nationally representative data. *West Indian Medical Journal, 66*(5), 536–545. doi: 10.7727/wimj.2017.212

Page, A., Lewis, G., Kidger, J., Heron, J., Chittleborough, C., Evans, J., & Gunnell, D. (2014). Parental socio-economic position during childhood as a determinant of self-harm in adolescence. *Social Psychiatry and Psychiatric Epidemiology, 49*(2), 193–203. doi: 10.1007/s00127-013-0722-y

Pottinger, A. (2005). Children's experience of loss by parental migration in inner-city Jamaica. *American Journal of Orthopsychiatry, 75*(4), 485–496. doi:10.1037/0002-9432.75.4.485

Pottinger, A. (2012). Children's exposure to violence in Jamaica: Over a decade of research and interventions. *West Indian Medical Journal, 61*(4), 369–371.

Powell, T., Muller, J., & Lough, B. (2023). *Trauma-informed approaches in global mental health*. Technical Report. doi: 10.13140/RG.2.2.23283.30249

Ranson, K. E., & Urichuk, L. J. (2008). The effect of parent-child attachment relationships on child biopsychosocial outcomes: A review. *Early Child Development and Care, 178*(2), 129–152. https://doi.org/10.1080/03004430600685282

Reid, J. A., Baglivio, M. T., Piquero, A. R., Greenwald, M. A., & Epps, N. (2019). No youth left behind to human trafficking: Exploring profiles of risk. *American Journal of Orthopsychiatry, 89*(6), 704–715. doi: 10.1037/ort0000362

Samms-Vaughan, M., Jackson, M. A., & Ashley, D. (2005). Urban Jamaican children's exposure to community violence. *West Indian Medical Journal, 54*, 14–21. doi: 10.1590/S0043-31442005000100004

Samms-Vaughan, M., Coore-Desai, C., Reece, J. A., & Pellington, S. (2024). Epidemiology of violence against young children in Jamaica. *Psychology, Health & Medicine, 29*(6), 1155–1164. https://doi.org/10.1080/13548506.2024.2342585

Shern, D. L., Blanch, A. K., & Steverman, S. M. (2016). Toxic stress, behavioral health, and the next major era in public health. *American Journal of Orthopsychiatry, 86*(2), 109–123. doi: 10.1037/ort0000120

Shonkoff, J. P., Garner, A. S., Committee on Psychosocial Aspects of Child and Family Health, Committee on Early Childhood, Adoption, and Dependent Care, & Section on Developmental and Behavioral Pediatrics. (2012). The lifelong effects of early childhood adversity and toxic stress. *Pediatrics, 129*(1), e232–e246. https://doi.org/10.1542/peds.2011-2663

Substance Abuse and Mental Health Administration (SAMSHA). (n.d.). https://library.samhsa.gov/product/samhsa's-concept-trauma-and-guidance-trauma-informed-approach/sma14-4884

Sulaiman, S., Premji, S. S., Tavangar, F., Yim, I. S., Lebold, M., & MiGHT. (2021). Total adverse childhood experiences and preterm birth: A systematic review. *Maternal and Child Health Journal, 25*(10), 1581–1594. https://doi.org/10.1007/s10995-021-03176-6

United Nations Children's Fund (UNICEF). (n.d.). *Situation analysis of Jamaican children – 2018*. UNICEF. https://www.unicef.org/jamaica/media/546/file/SituationAnalysisofJamaicanChildren2018.pdf

United Nations Children's Fund (UNICEF). (2024). *Jamaica violence against children and youth survey (VACS) 2023*.

UNICEF. www.unicef.org/jamaica/reports/jamaica-violence-against-children-and-youth-survey-2023.

Van de Weijer, S. G., Bijleveld, C. C., & Blokland, A. A. (2014). The intergenerational transmission of violent offending. *Journal of Family Violence, 29*, 109–118.

Walker, S. P., Chang, S. M., Powell, C. A., & Grantham-McGregor, S. M. (2005). Effects of early childhood psychosocial stimulation and nutritional supplementation on cognition and education in growth-stunted Jamaican children: Prospective cohort study. *Lancet, 366*(9499), 1804–1807. doi: 10.1016/S0140-6736(05)67574-5

Walker, S., Chang, S. M., Vera-Hernández, M., & Grantham-McGregor, S. (2011). Early childhood stimulation benefits adult competence and reduces violent behavior. *Clinical Trial Pediatrics, 127*(5), 849–857. doi: 10.1542/peds.2010-2231

Wall, L., Higgins, D., & Hunter, C. (2016). *Trauma-informed care in child/family welfare services*. Australian Institute of Family Studies.

Walsh, D., McCartney, G., Smith, M., & Armour, G. (2019). Relationship between childhood socioeconomic position and adverse childhood experiences (ACEs): A systematic review. *Journal of Epidemiology and Community Health, 73*(12), 1087–1093. doi: 10.1136/jech-2019-212738

Waqas, A., Koukab, A., Meraj, H., Dua, T., Chowdhary, N., Fatima, B., & Rahman, A. (2022). Screening programs for common maternal mental health disorders among perinatal women: Report of the systematic review of evidence. *BMC Psychiatry, 22*(1), 54. 10.1186/s12888-022-03694-9

Watson Williams, C. (2018). *Women's health survey 2016: Jamaica: Final report. STATIN, IDB, & UN Entity for Gender Equality and the Empowerment of Women*. https://publications.iadb.org/en/publications/english/viewer/Women-health-survey-2016-Jamaica-Final-Report.pdf

Whitehorne-Smith, P., Morgan, K., De La Haye, W., & Abel, W. D. (2015). Factors for adolescent alcohol use and misuse in Jamaica. *WIMJ Open, (2)*1, 19–22. doi: 10.7727/wimjopen.2014.264

Zimmerman, M. A. (2013). Resiliency theory: A strengths-based approach to research and practice for adolescent health. *Health Education & Behavior, 40*(4), 381–383. doi: 10.1177/1090198113493782