


What's trauma got to do with it? Exploring how Misdiagnosis of Developmental Trauma Disorders in Minoritized Children Creates a Healthcare to Prison Pipeline

DENESE SHERVINGTON MD, MPH

1

Workshop Description

This keynote address will describe the complex and interrelated ways in which transgenerational, community, and historical traumas impact brain biology and the psychosocial developmental trajectories for minoritized children. Using developmental based case summaries, this presentation will demonstrate how the misdiagnosis of these children's trauma leads to neurobiological dysregulation (behavioral disorders such as oppositional defiant and conduct disorders, and ADHD) and the perpetuation of inappropriate "treatment" methodologies. Without having access to culturally appropriate healing modalities, this alteration leads to a pathway of incarceration for minoritized youth. Thoughtful and evidence-informed prevention community-level approaches for building resilience and wellness in minoritized children will be shared, with an emphasis on access to health interventions, / therapies, which are understood within a healing justice framework to include contemplative science and ancestral healing wisdom.



2

Workshop Objectives

► At the end of the presentation, attendees should be able to:

- Review the impact of childhood adversities (ACEs) and trauma on the brain and psychosocial development, and the resultant increased risk of physical and mental health disorders.
- Explain how the proposed diagnosis of Developmental Disorders addresses the full impact of trauma and toxic stress on the brain.
- List the core principles of trauma-based psychotherapy and trauma-informed clinical services.
- Apply healing justice approaches when working with minoritized children.

3

Developmental Arrest - Trauma

► *"Traumatic events of the earliest years of infancy and childhood are not lost, but like a child's footprint in wet cement, are often preserved life-long. Time does not heal the wounds that occur in those years; time conceals them. They are not lost, they are embedded." Vincent J. Felitti (2010)*



4

Patient L [Katrina Baby]

► *"It all started when I was 5 - We went to sleep, I wake up and I heard 'pow, pow'. My uncle had 2 guns, he started going crazy. On the ground we see him with the brains on the side of him with brainscup blood. My sister was lying on the sofa holding her head like she sucking out blood. My brother he wasn't moving, he was shot."*

► Born 5 days post-Katrina

5

Case Study: L

Age	Traumatic Exposures
Prenatal	Natural Disaster - mother evacuated to Texas Born 5 days post-Katrina; Returned to NOLA - poor housing
5	Homicide - suicide; Murder of older brother and sister Suicide of uncle who murdered his siblings "The world, it destroys you" (Art project in school)
5-6.5	Mother's worsening depression and substance use Father's substance use Mother's attempt to kill a remaining sibling
6.5	Mother's murder - "I saw my Momma's blood on the street the next day, I had a break down - I was hurt." Father GSW to head with resultant TBI
13	Sister in a near fatal car accident Aunt puts him out for disobedience - "I jumps the porch"

6

Patient K

- ▶ "I have always wanted to be someone good. I love my mother, I'm a momma's boy. I would sleep in the truck with her, but things got hard for her, and then for me and all my siblings. It was hard to see her using cocaine, heroin and crystal meth. She couldn't take care of us."
- ▶ "We never had one good day, she was a clubber and a crackhead - K's older sibling"

7

Case Study: K

Age	Traumatic Exposure
Prenatal	Mother's substance use Born with cleft palate
0-7	Mother with multiple hospitalizations and arrests Father absent from the household - either imprisoned or living with another partner - father frightening and physically abusive Children left to fend for themselves - food, clothing, shelter
8-9	Continued parental addiction and maltreatment Diagnosed with Conduct Disorder and ADHD - Adderal
9	Witnessed murder 30yr old man - gun obsession - nightmares of dying, extreme anxiety - "like jumping out of a plane with no parachute... I forever have to remember still." Mother placed in sibling and he in foster care
14	Father gets custody and is extremely physically and emotionally abusive - "He jumped the patch" - selling drugs and hanging out with other medicated peers Hospitalized - Diagnosed Bipolar and ADHD

8

Patient E

- ▶ "Everything changed after my mother died. It was another chapter. I began to go down slowly."

9

Case Study: E

Age	Traumatic Exposures
Prenatal	Mother's substance use and mental illness (Dx - bipolar)
1-5	Mother's addiction continues - inculcates E with paranoid narratives that people are not to be trusted (he would later sell traps for friends to see if they are trustworthy) Father also has substance use disorder - incarcerated
6-10	Continued maternal addiction and paternal incarceration Suicide - draws a picture of himself in a coffin Diagnosed with Conduct Disorder and ADHD - Adderal
11	Mother dies unexpectedly Lives with grandmother - father released from prison and joins them - father dies 9 months later - body found in a SUV in the Bayou
13+	Grandmother dies of cancer - considered fiant when he stayed home to care for her Upside housing with sides sibling - got into fight and tried to protect his brother - (15 yrs. old)

10



WE ARE BORN BIOLOGICALLY RESPONDING TO A PARENT'S LOVE
BECAUSE WE CAN ONLY SURVIVE BECAUSE OF IT. WE ARE BORN
TO BE PROTECTED BY OUR PARENTS.

11

Maternal Care System

"Who can resist the enchanting ballet of emotions between a mother and her infant? A hint of frown or an uncomfortable twist of the baby's body will evoke a mother's comforting ministrations, and her smile produces a burst of responsive joy from the baby."

- Jaak Panksepp, Neuroevolutionary Biologist


12

Biology of Maternal Care System

- ▶ Care system fueled by **Oxytocin** (derivative of vasopressin which generates sexual urges in reptiles and birds-lust system)
- ▶ High testosterone can lead to male aggressive behaviors in animal kingdom and promote infanticide behaviors within some species but not their own offspring. **Oxytocin** inhibits infanticide as does mating
- ▶ Produced in greater quantities in female brain than in male brain
 - ▶ Estrogen mediates production in the anterior hypothalamus
- ▶ Plays central role in labor by producing uterine contractions
- ▶ Following birth triggers the letdown of milk
- ▶ Promotes maternal moods along with dopamine
- ▶ Care circuitry connects to Seeking and Grief (separation distress) systems
 - ▶ Care inhibits grief
 - ▶ Grief reduces play

13

Winnicott – Primary Maternal Preoccupation



- ▶ It gradually develops and becomes a state of heightened sensitivity during, and especially late into, the rest of the pregnancy and lasts for a few weeks after the birth of the child (Winnicott)
- ▶ The mother who develops this state of **primary maternal preoccupation** provides a setting for enactment for the developmental tendencies to start to unfold.
- ▶ **If mother provides a good enough adaptation to the infant's needs**, the infant's own line of life is disturbed very little by reactions to misperceptions. An excess of maternal failures (absence of preoccupation) produces not just frustration but a **threat of annihilation**.

14


Winnicott – Development of the Capacity for Concern

- ▶ Infant projects loving, aggressive drives into mother
- ▶ Mother survives, despite all the demands by the helpless infant for their survival needs to be met
- ▶ **GOOD-ENOUGH MOTHER NEVER RETALIATES**
- ▶ Infant experiences – "Having Been Survived"
- ▶ Surviving object (mother) – key to the infant developing the capacity for concern
- ▶ "It was ruthless then" – infant accepts their own destructiveness and develops concern
- ▶ The capacity for concern is the foundation for healthy connection and empathy – morality is ego-syntonic and serves as the antidote for violence
- ▶ Antisocial Tendency
- ▶ Lack of concern and lack of hope – wasted and withered due to emotional deprivation and lack of environmental provision of opportunities for ego support

15

Attunement


- ▶ Two-way mental alignment in the domain of feeling: Infant attaches, mother cares
- ▶ Performance of behaviors with the child that expresses the sharing of their affective state - Internal Communication
 - ▶ I feel you
 - ▶ I am feeling with you - reflecting back child's emotions to give them meaning - hence ability for child to regulate feelings and mentalize



16

Attachment - Bowlby

- ▶ Human infant born born in an immature and dependent state (evolution of big head - brain)
- ▶ Infant biologically wired to seek closeness and connection to caretaker to secure their survival
- ▶ Complex and balanced individual responses make up attachment behaviors and evoke parental capacity - Following, Crying, Smiling



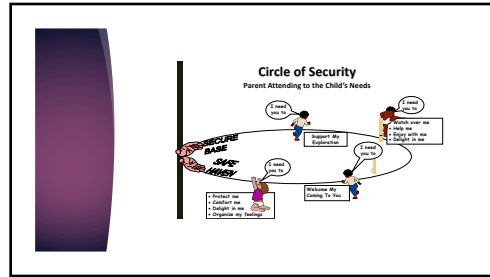
17

Positive Attachment

- ▶ Provide security and comfort in the face of distress
- ▶ Provide a safe haven that offers protection from harm
- ▶ Provide a secure base for exploration
- ▶ Create foundation for emotional regulation and social learning
- ▶ Create capacity to be alone



18



19

Strange Situation – Mary Ainsworth

- ▶ N.B. Nurturing attachment creates:
 - ▶ Desire for closeness - physical and psychological
 - ▶ Distress upon separation
 - ▶ Joy upon reunion
 - ▶ Grief upon loss
- ▶ **Brief separation in a playroom environment to assess infant's sense of security upon mother's departure and her return.**
- ▶ Upon mother's return
 - Secure attachment
 - Ambivalent – resistance attachment
 - Avoidant attachment

20

Ainsworth: Secure Attachment

- **Caregiver** - displays **sensitive responsiveness** – can focus on and interact with child, distinguishing their needs and being attuned to their state of mind. Care giver is predictable, positive and soothing – comforts child's distress:
- **Child:**
 - Plays with toys and mother in her presence
 - Some degree of distress with stranger when mother leaves – might seek **comfort** from stranger
 - Upon reunion with mother child seeks close proximity – mother is predictable and positive

21

**Ainsworth:
Insecure –
Ambivalent /
Anxious /
Resistant**

- **Caregiver – inconsistent** in their responses to the child's needs and in their emotional availability making it hard for the child to predict responses from their environment [to child's affective signals]
- **Child:**
 - Finds separation extremely distressing
 - Cries more and plays less – avoids the stranger - Attachment predominates over exploration
 - Upon reunion with mother infant demands care yet angrily **resists** comforting
 - More fearful – 'distress even in situations that should elicit joy'

22

**Ainsworth:
Insecure –
Avoidant**

- **Caregiver - subtly rejecting**, averse to bodily contact; and/or rigid and compulsive; and/or irritated by child but suppresses anger – predictably unpleasant and discomforting
- **Child:**
 - Stuck in exploration – engage in solitary play with stranger present
 - May appear precociously independent avoiding mother
 - Shows no distress upon mother's departure
 - No desire for contact when she returns
 - If picked up by mother, is unresponsive, preferring to be put down to play
 - Mother and stranger can comfort child
 - Prone to express anger and hostility

23

**Main and
Solomon –
Disorganized
Attachment**

- **Caregiver** - is unpredictably frightening usually due to – behavioral/mental health disorders; (unhealed trauma/loss)
- **Child** has often suffered neglect or trauma - is disoriented with no coherent strategy to deal with the separation – engages in **misdirected and contradictory behaviors**
- Child does not go to their caregiver when in need of comfort

24

The Beginning Mind

- Develops from the outside in – as children we develop a sense of self and comes to know our mind by virtue of others (caregivers mostly) relating to us with a mind – We come to learn what we feel and later, others




25

Psychosocial Developmental Needs – Erik Erickson

Age	Healthy Outcome	Maladaptation
0-1	Trust Attach and Affine	Mistrust, Anxiety, Fear, Paranoia
2-3	Autonomy Self-esteem 'me do it'–Explore, Manipulate	Shame, Doubt
4-6	Initiative, Responsibility Fantasy & Imagination	Guilt, Callousness, Inhibition
7-12	Work, Accomplish, Group Reality vs. Pleasure	Inferiority, Inertia, Disinterest
13-18	Identity consolidation / cohesion Positive Self-Concept	Role confusion "Who am I?"

26

TRAUMA / STRESS



Trauma 'wound'- exposure to / confrontation with an external event (threatened death or serious injury) that is unbearable and overwhelms our coping - activates neurobiological changes
We turn away from experience to prevent fragmentation of the self

Stress - threat to an individual's physiologic and psychological integrity - results in biologic and behavioral responses necessary for survival

27

TOXIC STRESS

Positive stress response – physiologic state that is brief and mild to moderate in magnitude.

Tolerable stress response – associated with exposure to nonnormative experiences that present a greater magnitude of adversity or threat.

***Key** – availability of caring and responsive adults who help the child cope with the stressor, providing a protective effect that facilitates the return of the stress response systems back to baseline state.

The Toxic Stress Response Defined

“prolonged activation of the stress response systems that can disrupt the development of brain architecture and other organ systems, and increase the risk for stress-related disease and cognitive impairment well into the adult years.”
 – National Academies of Sciences, Engineering, and Medicine

In addition to ACEs, **other risk factors for toxic stress** include poverty, exposure to discrimination, and exposure to the obstacles of war.

28

Attachment / Relational Trauma [Attachment Infanticide]

- ▶ Alteration/disruption of child's bond with primary caregiver
- ▶ Repeated interactions with unpredictable, inconsistent, unresponsive, unskilful and/or frightening primary caregiver(s) in the 1st 3 years of life
- ▶ Child **unable** to develop:
 - ▶ Coherent self-representation – no mirroring of self
 - ▶ Capacity to mentalize (understand how their mind and the mind of others' works) – key to social cognition and understanding how the world works
 - ▶ Capacity for concern
 - ▶ Effective emotional modulation

29

Adverse Childhood Experiences (ACEs)

- Abuse**
 - ▶ Physical
 - ▶ Sexual
 - ▶ Emotional
- Neglect**
 - ▶ Emotional
 - ▶ Physical
- Household Challenges**
 - ▶ Substance Use
 - ▶ Mental Illness
 - ▶ Suicide attempt
 - ▶ Intimate Partner Violence – Domestic violence
 - ▶ Parental imprisonment / incarceration

30

Expanded ACE screeners – Community /Structural Factors

- Philadelphia:
 - Witnessing violence
 - Experiencing racism / discrimination
 - Living in unsafe neighborhood
 - Experiencing bullying
 - Lived in foster care
- California:
 - PEARLS – Pediatric ACEs and Related Life Events (aces-la.org) - C
 - Food insecurity
 - Housing instability

31

Sources of Community Trauma

The impact of chronic adversity across a community from factors related to structural and community violence:

- Inequitable economic opportunities
 - Gilvnetment and unemployment
- Deteriorated Physical Environments - crumbling built environment, dangerous public spaces
- Inequitable Policing - under and over
- Inequitable access to quality:
 - Education
 - Health care
 - Transportation
 - Recreation

32

Trauma Gets Under the Skin – Intergenerational Transmission

- Intergenerational genetic trauma: ova and sperm can be changed by epigenetic mechanisms that is a product of these gametes can carry the effect of the previous generation's trauma
 - Epigenetic changes - modification of protein expression (not alteration of genetic code) due to environment and behavior
 - Holocaust, 9/11, Superstorm Sandy
 - Allostatic loading - difficulty reestablishing homeostasis in response to stress through chronic burden of stress hormones, neurotransmitters, cytokines, etc.
 - Telomere shortening - "telomere caps" located on the ends of chromosomes that protect DNA from damage and cellular stress; higher maternal AAS associated with shorter infant TL across infancy and higher infant externalizing behavioral problems at 18 months
 - Weathering - cumulative impact of socially constructed stress from repeated social, economic, and political exclusion (cumulative disadvantage) - to explain LBW in Black women

33

BEHAVIOR

- Lack of physical activity
- Smoking
- Alcoholism
- Drug use
- Blunt force

PHYSICAL & MENTAL HEALTH

- Severe obesity
- Diabetes
- Depression
- Stroke
- STIs
- Heart disease
- Cancer
- Stroke
- COVID
- Bleeding brain

ACEs Increase Health Risks – Graded Response

34

Trauma / ACES	Impact
1-3	Smoke cigarettes Engage in risky sexual behaviors Use illicit drugs
4+ ACES	2x ischemic heart disease 2x stroke 3x STD 5x depression 7x alcoholism 10x IV drug use 12x suicide attempt
6+ ACES	Die 20 years earlier than those with no ACES

Impact on Adult Health


35

Neurobiology of Toxic Stress

- ▶ If threat is not perceived to diminish – chronic – dysregulation of Hypothalamic Pituitary Axis – inappropriate release of cortisol:
 - ▶ Hippocampus shrinkage: increases memory deficits and learning disorders
 - ▶ Over-representation – intrusive memories, flashbacks
 - ▶ Suppression – selective amnesia, inability to recall
- ▶ Prefrontal Cortex: impaired emotional regulation and executive functioning (planning, flexibility, reasoning)
- ▶ Amygdala hyper-sensitized: increase fear response, hypervigilance
 - ▶ Hasty actions – impulsivity – react before thinking

36

Neurobiology of Toxic Stress



Decrease in serotonin (neurotransmitter)
Increased aggressive behaviors, depression and anxiety



Decrease in oxytocin (hormone) impairments:
Social memory
Empathy
Emotional recognition
Attachment

37

Manifestation of Neurological Impairment

- ▶ Trauma at young age can significantly hinder neurological development:
 - Negative impact on emotional and behavioral regulation, motivation and cognitive functioning
 - Compromised executive functioning (PFC)
 - Difficulty regulating arousal levels in response to sensory stimulation (sensitization) (Amygdala) **Hyperarousal**
 - **Difficulty with attention** and memory (Hippocampus)
 - Disruptions to sleep and other circadian rhythms
 - Compromised language development
 - **Impaired social information processing**

38

Trauma-based Mental Health Disorders



Depression
Feeling less than usual
Anhedonia - loss of pleasure
Changes in sleep, appetite, energy, thoughts



Post Traumatic Stress Disorder
Nightmares
Avoidance
Negative mood, thoughts, dissociation



Anxiety Disorder
Panic, Phobias, Generalized




Substance Use Disorder
Contribution to sleep and stress
Impairment of neuroprotective
regulation and neuroplasticity
Disruption of neuroplasticity
Disruption of neuroplasticity
Disruption of neuroplasticity

39

Developmental Trauma Disorder

- Brain impairment / dysregulation over time that interferes with normal biology, affect regulation, perception, behavioral responses, cognition and self-concept
- Features / Symptoms:
 - Unmodulated aggression and impulse control
 - Attentional
 - Poor concentration
- Relationships:
 - Difficulty negotiating relationships with caregivers, peers and subsequent intimate partners
- Dissociation:
 - Affects, cognitions and sensations not associated/integrated with trauma-disconnected self-state



40

Mis-Diagnosis of Patients L, M & E

Patient	ACEs	Mis-Diagnosis / Lazy	Developmentally Appropriate
L	>6	ADHD, Generalized Anxiety	PTSD, severe with dissociative features
K	>6	ADHD, Generalized Anxiety Disorder	PTSD, severe with dissociative features Generalized Anxiety Disorder
E	>6	Anxiety	PTSD, severe with dissociative features Persistent Complex Bereavement Disorder

41


HEALING JUSTICE - UTILIZES THE SOCIAL ECOLOGICAL MODEL

Framework that recognizes the impact of trauma and violence on individuals and communities and names collective processes that can help heal and transform these forces.



42

Building Individual Resilience/Healing Approach



▶ You are not what happened to you. You are what you choose to become – Carl Jung

43

Individual Clinical Care - Psychotherapy - "What happened to you"

- ▶ Establish Safety
- ▶ Psycho-education
 - ▶ About trauma and its impact on the body (especially sleep in children)
- ▶ Teach mind-body relaxation training
- ▶ Address attachment issues
 - ▶ Recreate attunement and nurturance
- ▶ Address trauma exposure
 - ▶ Graded awareness / acceptance of what happened
 - ▶ Connection of disconnected self-states
- ▶ Process conditioned stimuli – cues - reframe conditioned responses
- ▶ Disrupt fear schema and associated negative emotions
 - ▶ TBT/CBT, Emotional Regulation, Mentalization Strategies

44

Clinical Care - Medications


Use sparingly – when trauma-focused therapy is not available or if refused, or if significant degree of mood lability:

- ▶ SSRIs – increase serotonin
 - ▶ Sertraline
 - ▶ Paroxetine
 - ▶ Fluoxetine
- ▶ Adrenergic agents – down regulate stress systems
 - ▶ Clonidine
 - ▶ Propranolol
 - ▶ Guanfacine

45

Supports for Mental Hygiene


- ▶ Mindful Presence
- ▶ Creativity – Imaginal Journeys
- ▶ Play
- ▶ Centering in Nature
- ▶ Ancestral Reverence and Honoring
- ▶ Sleep / Rest



46

Residential Settings: Child-Care Workers

- ▶ Caring, trusted adults – provide protection / buffer from further adversities
- ▶ Assist in negotiation of the larger environment – school, work
- ▶ Serve as positive role models / leaders
- ▶ Encourage initiative, curiosity, reflection, exploration, and learning
- ▶ Manage disruptive behavior – Regulate, Relate, Reason / Reflect
- ▶ Encourage mentalization – awareness of mental states of self and others
 - ▶ What were you thinking
 - ▶ What were you feeling



47

Needed Civil Society Supports



- ▶ Why? Children live with Parents; Parents live in Communities
 - ▶ Living wages
 - ▶ Parental leave (12 – 18 months)
 - ▶ Enriching / Revitalizing neighborhoods
 - ▶ Compassionate schools that do not miseducate
 - ▶ Access to culturally affirming mental health and substance abuse care – end to “War on Drugs” in BIPOC communities – medicates, not criminalize – they do are disorders of “deppad”

48

Fairness and Justice in the Carceral system: #sadnotbad

49

Collective Cultural trauma of Supremacist Ideology

- Collective feeling of being subjected to horrendous event (s) that leaves indelible marks upon group consciousness, making memories forever and changing future identity in fundamental and irrevocable ways.
- For African Americans, shows itself as having a cultural/racial complex that has been formed and nurtured first by slavery, and down through decades by the racist aspects of American life.
- Disrupts fundamental social bonds needed to feel fully human.

Wahkiak, Hapawakos - "Chimambarani"
Disruptive social norms

50

Healing is the Revolution Framework: Community-level Arts-Based Resilience Building & Healing

<ul style="list-style-type: none"> Unspooling Collective Intergenerational Trauma utilizing SEM model Ancestral Honoring / Libations 	<ul style="list-style-type: none"> Naming and Moving Beyond Personal Feels Exploring Experiences Gives Feeling how generational traumas shape / scar bodies Mindfulness Meditation 	<ul style="list-style-type: none"> Dreaming a just, peaceful and verdant world Creative Ceremony - music, dance, or poetry photography
--	--	---

51

Cultural Arts Healing - Repair Cultural Dehumanization: Remembering



- ▶ Rituals that create the rhythm, melody, tempo to transport individuals into moods that allow for divine remembering - bringing dismembered individuals back into membership in the collective weave of human existence - **Allows for a sense of future and possibility of hope**
- ▶ Music, dance, poetry, storytelling experienced in community with each other


52

Civil Society

▶ *"Can we not, in our well-nigh hopeless and overwhelming struggle with the problems of delinquency and crime profit by medical experience with the problems of health and disease? Will we not, eventually, terminate the senseless policy of sitting idly by until misbehavior occurs, often with irreparable damage, then dumping the delinquent into the juvenile court or reformatory and dumping the criminal into prison."*

▶ Abel W. Westbrook, Judge of the Superior Court of Santa Barbara (1946)

53



QUESTIONS?

54
