

CARDIOLOGY  
2025 ❤️

## Trauma-Informed Cardiac Care:

**How Broken Hearts  
Break People, and the  
Intervention to Elevate  
Staff Wellbeing and  
Patient Outcomes**

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HOPE. HEAL. LEARN.



February 22, 2025

**What would you do if you weren't afraid?**

# 2014

- I became a nurse
  - Pediatric Cardiac Critical Care



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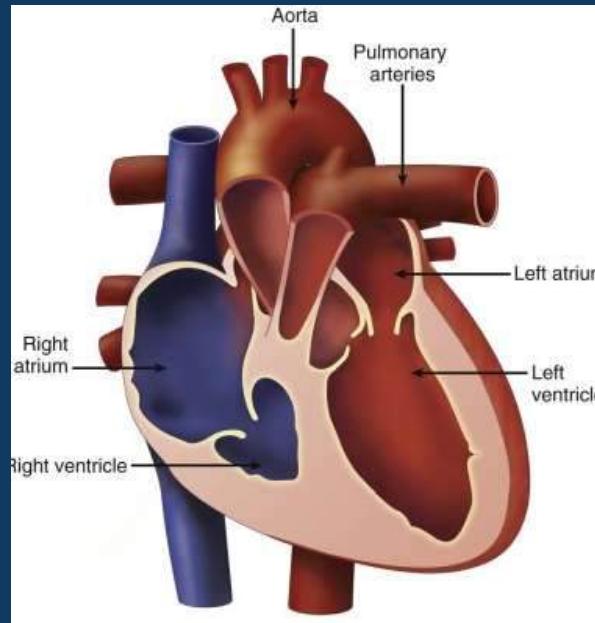
# 2018

- I became a mom
  - Dax Shreyas



# PULMONARY ATRESIA / INTACT VENTRICULAR SEPTUM

- ASD
- functional tricuspid atresia
- hypoplastic right ventricle
- RV dependent coronary circulation





OCTOBER 2018

Dax's 2nd OHS



OCTOBER 2018

Dax's 2nd OHS



# 2019

- India to US
- Surprise baby sister



2021

3rd OHS



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# 2022

- **Severe chest pain**
- **Symptoms of anxiety, PTSD, and OCD**

# What is Trauma?

# What is Trauma?

**“Traumatization occurs when both internal and external resources are inadequate to cope with an external threat.”**

Dr. Bessel van der Kolk

# What is Trauma?

**Some things are universally traumatic,  
but other things may be traumatic for some people and not others.**

**We all have different internal and external resources.  
That is why more than one person can go through the same  
experience and have different responses to it.**

# ACES

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[https://www.cdc.gov/violenceprevention/aces/about.html?CDC\\_AA\\_refVal=https%3A%2F%2Fwww.cdc.gov%2Fviolenceprevention%2Facesstudy%2Fabout.html](https://www.cdc.gov/violenceprevention/aces/about.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fviolenceprevention%2Facesstudy%2Fabout.html)

# ACES

## ACE score of 4 or more:

- Twice as likely to have cancer or heart disease
- Four times as likely to have COPD
- 4.5 times as likely to have depression
- Twelve times as likely to have struggled with suicidality

## ACE score of 6 or more:

- 20 year decrease in life expectancy

## ACE score of 7 or more:

- 3.5 times more likely to have ischemic heart disease
- 3 times more likely to have lung cancer
- 46 times more likely to use IV drugs

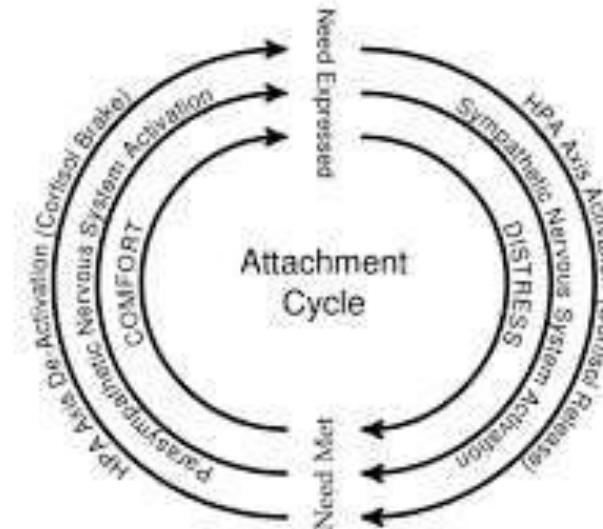
**Youth with CHD of all severities have significantly higher odds of anxiety and/or depression and ADHD compared to those without CHD. Screening for these conditions should be considered in all patients with CHD.**

## THE ATTACHMENT CYCLE - BABY'S BELIEF SYSTEM

**“When a baby is snuggled close to his mother, looks up into his mother’s eyes, and sees his own expression mirrored in his mother’s face, his brain wraps these sensory images in a network of positive neurochemical links.**

**But if these warm and comforting experiences are lacking, or if a child’s interactions with a primary caregiver are frightening or traumatic, the growth of the brain follows a very different path. When life is lived in a state of heightened fear and constant emergency, the brain reorganizes itself around the need for self-protection.”**

**- Dr. Karyn Purvis**



# FELT-SAFETY

Felt-safety deactivates the sympathetic nervous system and activates the parasympathetic nervous system.

Knowing that I'm safe is different than feeling that I'm safe.

Often, action(s) must be taken to help me gain felt safety.



# Attunement



Attunement is the nurturing part of a caregiver's response. We respond according to a child's communication.

**"It starts at the most subtle physical levels of interaction between babies and their caregivers, and it gives babies the feeling of being met and understood." - van der Kolk**

## Amanda Purvis - Two Vital Questions

An infant is learning the answer to two vital questions that help shape the brain.

They are the filter through which the child sees the world for the rest of their life.

1. Am I safe?
2. Do I have a voice? (am I valuable?)

**In a healthy environment, if a child  
is in a safe home with consistent,  
nurturing caregivers, the answer  
to those two questions is yes.**





**To the preverbal brain, hospitalizations and associated medical interventions have immense potential to be experienced by the child in the same way as abuse or neglect.**

**We can't explain that it's "for their own good."**

**"All I know is that when I cried, you didn't stop."**

# THE PHYSIOLOGY OF TRAUMATIC STRESS MITIGATION

**“Study after study shows that having a good support network constitutes the single most powerful protection against becoming traumatized. When we are terrified, nothing calms us down like the reassuring voice or the firm embrace of someone we trust.”**

**- Bessel van der Kolk**

**“EVERY BEHAVIOR IS AN EXPRESSION OF A NEED.”**  
**- DR. KARYN PURVIS**



# THE WESTERN JOURNAL OF EMERGENCY MEDICINE

## APRIL 2024

### TRAUMA-INFORMED CARE TRAINING IN TRAUMA AND EMERGENCY MEDICINE: A REVIEW OF THE EXISTING CURRICULA

METHOD: SCREENED 2,280 UNIQUE ARTICLES PUBLISHED ON TRAUMA-INFORMED CARE

CONCLUSION: "TARGETED TIC TRAINING INCREASES CLINICIAN USE OF TIC PRACTICES AND IMPROVES PATIENT OUTCOMES AND SATISFACTION."

# THE PERMANENTE JOURNAL

## MARCH 2024

### EFFECTIVENESS OF TRAUMA-INFORMED CARE IMPLEMENTATION IN HEALTH CARE SETTINGS: SYSTEMATIC REVIEW OF REVIEWS AND REALIST SYNTHESIS

METHOD: IDENTIFIED REVIEWS ADDRESSING TIC IN HEALTH CARE PUBLISHED IN THE LAST 10 YEARS IN PEER-REVIEWED JOURNALS.

"FINDINGS DEMONSTRATED CONCRETE EXAMPLES OF TIC IMPLEMENTATION STRATEGIES THAT RESULTED IN IMPROVED OUTCOMES FOR PATIENTS AND SYSTEMS. HOWEVER, TIC IS AN EMERGING FIELD THAT WILL REQUIRE SUBSTANTIALLY MORE STUDIES TO CREATE AN EVIDENCE BASE FOR TIC IMPLEMENTATION IN HEALTH CARE. SUCCESSFUL INTEGRATION OF TIC WILL REQUIRE THE SUPPORT AND COMMITMENT OF SENIOR LEADERSHIP AND THE INFUSION OF TIC PRINCIPLES THROUGHOUT ORGANIZATIONAL POLICIES AND PROCEDURES... IT IS IMPERATIVE TO PROACTIVELY DEVELOP A RESEARCH AGENDA THAT IS INCLUSIVE OF SHORT- AND LONG-TERM GOALS AND EVALUATES THE EFFECTIVENESS OF TIC APPROACHES IN HEALTH CARE TO FURTHER THE EVIDENCE NEEDED TO GARNER THE MOMENTUM FOR TIC IMPLEMENTATION."

# What would you do if you weren't afraid?

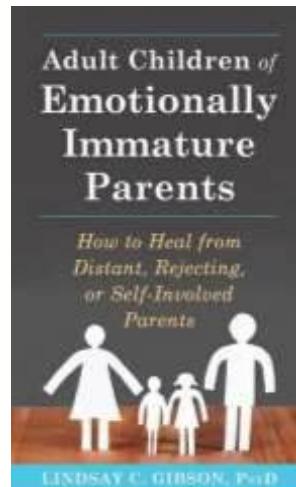
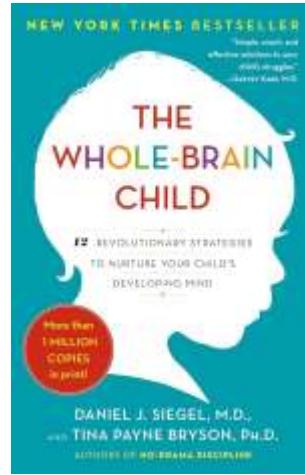
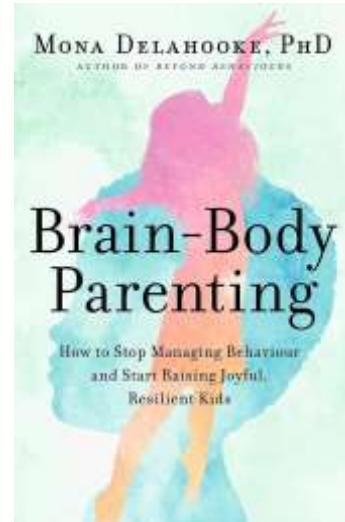
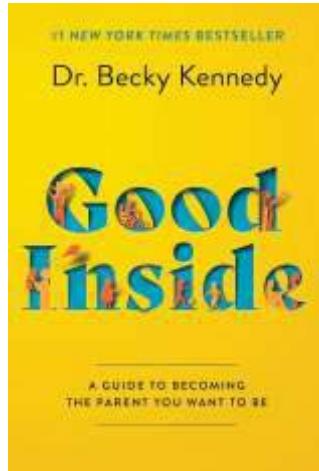




**Imagine a world  
where the cry of  
every child  
was met  
by a loving,  
compassionate  
adult.**

**- Dr. Karyn Purvis**





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