NRF R&R
NEURORELATIONAL FRAMEWORK INSTITUTE
RESEARCH TO RESILIENCE

PEAS Community of Practice
March 14, 2024
Carole Anne Hapchyn MD, FRCPC

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Objectives

- Consider using the NRF to hold complexity
- Identify three steps that organize a clinical approach for a fictitious case
- Discussion regarding therapeutic strategies and interdisciplinary practice

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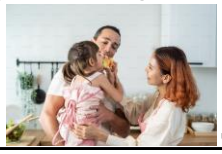
NRF Fictitious Feeding Case

Carole Anne Hapchyn MD, FRCPC

This is a fictitious case.
I created this story by combining the stories of many children I have had the privilege of knowing over the years.



Unsplash with Getty Images

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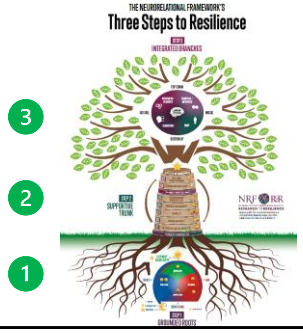

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Step 1: Adaptive vs Toxic Stress

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What do we observe at mealtimes?

Child:

- Looking around, darting eyes, vigilant
- Furrowed brow, lip compression
- Rigid posture in the chair

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What do we observe at mealtimes?

Mom:

- Frequent breaks in eye contact with child
- Furrowed brow
- Pleading, high pitched voice
- Jerky, fast movements

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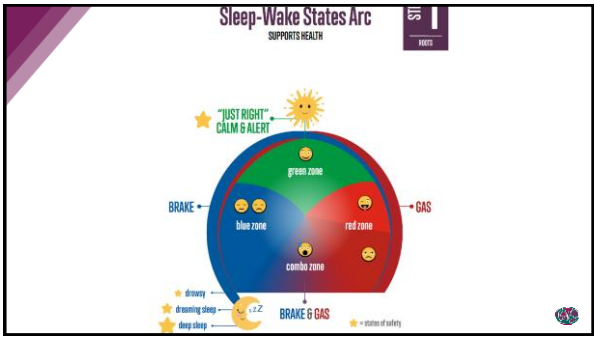

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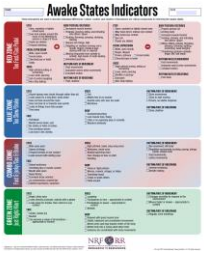
How can you document what stress looks like?

Biobehavioural Markers



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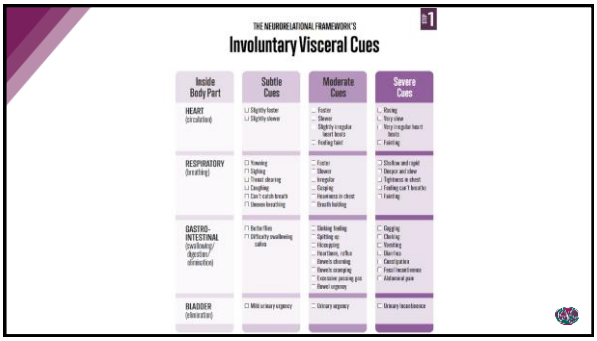

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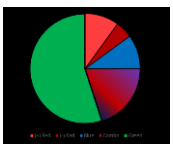
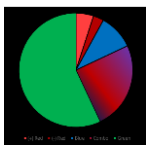
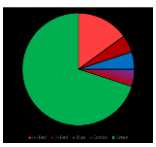
Step 1: Awake States



Amy



Mom



Dad

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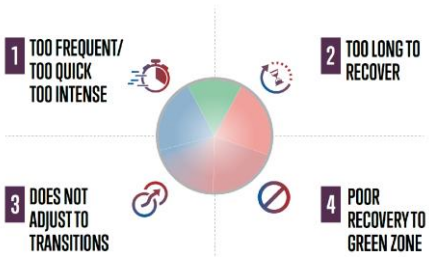
How Do We Identify Toxic Stress Patterns?



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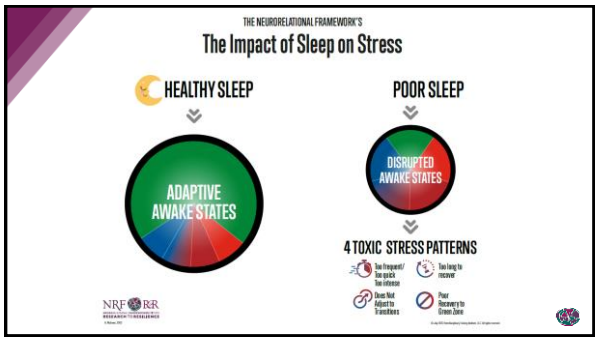

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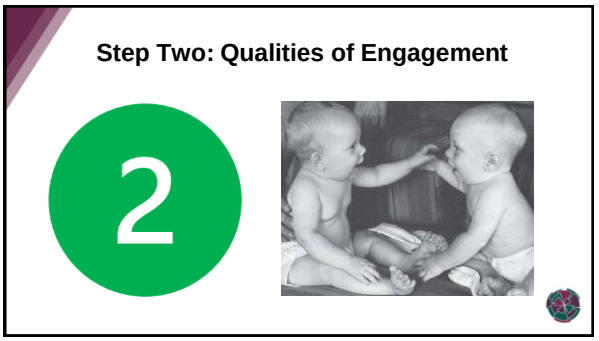

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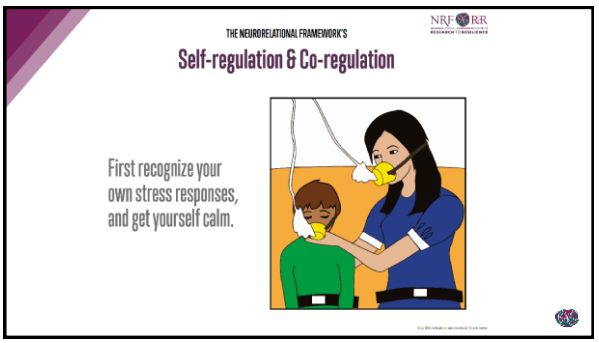

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Step 3: Mapping Individual Differences in Brain Function

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Skill Begets Skill

Brains are built from the bottom up

MOVEMENT/THOUGHTS

EMOTIONS/MEMORIES

SENSATIONS

BODY

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Can't Do One Without the Others

You can't focus on one area of a child's development without paying equal attention to the other capacities

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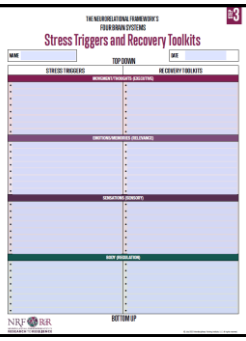

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A Framework versus A Model

NRF is a map:

- holds all clinical models, theories and EBTs

NRF allows you to:

- assess any EBT's neurodevelopmental properties

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THE NRF: A Container

- **Facilitates shifting:**
  - from Micro – individual ⬌ Macro – systems of care
  - across multiple variables, diagnoses and dimensions
- **Supports decision making about:**
  - which evidence-based treatments are needed
  - when to use them

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Step 3: Customized and Collaborative Care

STRESS TRIGGERS	RECOVERY TOOLKITS
BODY (REGULATION)	
• Sleep – onset delay, night awakenings, restless	• Sleep hygiene strategies, snack before bed,
• Avoidant/Restrictive Food Intake Disorder – poor weight gain/loss with illness, poor appetite/interest	• Monitor weight/height
• Iron Deficiency	• Supplement iron 3 – 6 mg /kg/day
• Constipation -hard, painful, q 2 -3 days	• Treat with PEG3350, hydration
• Combo zone and blue zone stress responses	• Education re: SR, toxic stress, sleep
• Toxic stress patterns 1, 2 and 3	• **Physician, dietician**

BOTTOM UP

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Step 3: Customized and Collaborative Care

STRESS TRIGGERS	RECOVERY TOOLKITS
SENSATIONS (SENSORY)	
• Severe speech delay	• **SLP** consultation/treatment
• Over-responsive to sound, clothing, taste, & texture of food	• Gradual desensitization: **OT** providing SOS intervention, avoiding food jags, try-again foods, "no thank you cup," etc.
• Sensory seeking of movement (running, jumping, climbing), vestibular & proprioception	• Provide opportunities for movement (in all directions), deep pressure, & heavy work
•	• Sound machine at night
•	• Massage legs in the evening, rhythmic movement (rocking, swinging)

BOTTOM UP

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Step 3: Customized and Collaborative Care

TOP DOWN

STRESS TRIGGERS	RECOVERY TOOLKITS
EMOTIONS/MEMORIES (RELEVANCE)	
• Separation Anxiety symptoms	• Nurturing two-parent home – play time, limits, routines
• Mom anxious at mealtimes: coaxes, pleads, offers distractions, dashes about the kitchen, offers many food options at some meals	• Peer modeling at snack time at preschool & mealtimes with peer models at home – friends, cousins
• Younger sibling, age 18 months, eating a variety of foods independently	• More consistent with eating strategies on weekends with both parents at home: fun family meal preparation activities/shopping, division of responsibility (Satter)
• Dad supportive, understands intervention plan, engages children in physical activities	• Co-regulation of emotions/SR at mealtimes and separation events
•	• Anxiety tolerance strategies for mom and child: goodbye ritual, breathing, muscle relaxation games, social stories, etc.
•	• **Mental Health Therapist**

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Step 3: Customized and Collaborative Care

TOP DOWN

STRESS TRIGGERS	RECOVERY TOOLKITS
MOVEMENT/THOUGHTS (EXECUTIVE)	
• Oral motor delay	• **SLP/OT** assessment and intervention • Fine and Gross Motor skills- age-appropriate
•	• Receptive and Expressive Language – age-app
•	• Pre-academic skills- age-app
•	• Preschool program - **Teacher**
•	• Routines and structure at mealtimes
•	• Describe properties of the food, avoid judgment statements

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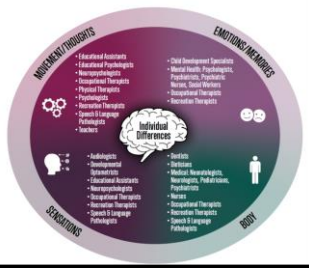
THE NEURORELATIONAL FRAMEWORK'S

Interdisciplinary Practice



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Break Out Rooms

Discuss the NRF approach to organize clinical data and treatment planning.

Would it be helpful to review a real case with a team?

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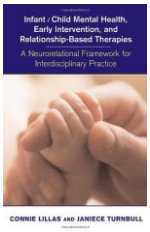
The Neurorelational Framework: NRF



www.NRFcare.org

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