Never mind baby, Mother is near, Wee little fingers Eyes are shut tight Now sound asleep
Until morning light”

“ When the wind blows, the cradle will rock
When the bough breaks, the cradle will fall And down will come baby, cradle and all”

TRAUMA IN CHILDHOOD

A VERY BRIEF OVERVIEW OF ASSESSMENTS AND INTERVENTIONS

Chidambaram Prakash Principal Hospital Psychiatrist RCH
What I will try to address in this talk

• Trauma is a part of daily life for some
• Trauma is under recognised
• It is individualised
• It is initially manageable by all health care professionals and Paediatricians have a big role in this
• Psychological break down is not inevitable
• Never forget Post Trauma Growth
Definitions

Psychological trauma is the unique individual experience of an event or enduring conditions, in which:

- The individual’s ability to integrate his/her emotional experience is overwhelmed, or
- The individual experiences (subjectively) a threat to life, bodily integrity, or sanity. (Pearlman & Saakvitne)

The term complex trauma: children's exposure to multiple or prolonged traumatic events, the impact of this exposure on their development. It involves the simultaneous or sequential occurrence of child maltreatment—including psychological maltreatment, neglect, physical and sexual abuse, and domestic violence—that is chronic, begins in early childhood, and occurs within the primary caregiving system.

Paediatric Medical Trauma Stress refers to those traumatic experiences in children and their primary care givers resulting out of exposure to medical events including hospitalisation, procedures etc.
Range of Traumatic Events

- Humanitarian crises
  - Natural and man-made disasters
    - Earthquakes
    - Floods, mudslides
    - Hurricanes
    - Tornadoes
    - Volcanic eruptions
    - Major transportation accidents
    - Industrial accidents
    - Technological disasters
  - Catastrophies of human origin
    - Armed conflicts/wars
    - Genocide
    - Terrorist attacks
Range of Traumatic Events (nctsn.org)

- Trauma embedded in the fabric of daily life
  - Child abuse and maltreatment
  - Domestic violence
  - Community violence and criminal victimization
  - Traumatic loss
  - Accidents, Fires
  - Medical trauma*

* denotes medical trauma
Percentage of Children in the NCTSN Core Data Set Experiencing Cumulative Traumas

- 1 trauma type: 23.2%
- 2 trauma types: 18%
- 3 trauma types: 14.6%
- 4 or more trauma types: 44.2%
Impact

• Emotional development and feelings of safety
• Cognitive development (intrusive impact of trauma images and memories)
• Social development (attachment rupture and social over inhibition or disinhibition)
• Moral development
• Mental health symptoms such as depression, anxiety, trauma related problems (PTSS).
• Physical growth and development problems
The first steps

**CORE ACTIONS**

- Contact & Engagement
  - Safety & Comfort

**REMEMBER:**

- Work within a team.
- Protect survivors from harm.
- Be calm and compassionate.
- Listen and be flexible.
- Respect culture and diversity.
- Give clear and reliable information.
- Know local available resources.
- Help survivors help themselves.
- Know your limits.
- Take care of yourself.

**PSYCHOLOGICAL FIRST AID**

Are you ready to respond?

GET **P**REPARED

GET **F**OCUSED

GET **I**NTERA**C**TIVE

PFA Mobile™ can be downloaded on mobile Apple and Android devices

www.NCTSN.org

learn.nctsn.org

This project was also funded by SAMHSA, US Dept. of Heath and Human Services

Illustrations by Dr. Bob Seaver
First steps

• Inform and educate
• Normalise responses to the situation
• Empathic engagement but promoting resilience through empowerment
• Address treatable symptoms: sleep, physical pain.
• Explore only when they are ready and wanting/willing.
Assessment

• Play techniques are invaluable to establish trust, rapport, a secure base, allow for free expression and when the time is right, to explore the experiences.

• Use structured tools so that assessment is consistent, thorough and the treatment outcomes are verifiable.
Tools and measures

**Dimensions of Stressful Events Rating Scale (DOSE)** The DOSE is a 50-item clinician-administered scale that identifies characteristics specific to the child's stressful/traumatic events. There are 26 items assessing aspects of the stressful event and 24 items specific to sexual abuse. Items are in either a "yes/no," frequency, or a checklist format.

**Traumatic Events Screening Inventory for Children (TESI-C & TESI PRR)** The TESI-C assesses a child's experience of a variety of potential traumatic events including current and previous injuries, hospitalizations, domestic violence, community violence, disasters, accidents, physical abuse, and sexual abuse. TESI PRR is a 24 items parent rating of traumatic events.

**Clinician-Administered PTSD Scale for DSM-5 - Child/Adolescent Version (CAPS-CA-5)** The CAPS-CA-5 is a 30-item clinician-administered PTSD scale based upon DSM-5 criteria for children and adolescents ages 7 and above. It is a modified version of the CAPS-5 that includes age appropriate items and picture response options.
Tools and measures

UCLA Child/Adolescent PTSD Reaction Index for DSM-5
The new DSM-5 version is a semi-structured interview that assesses a child's trauma history and the full range of DSM-5 PTSD diagnostic criteria among school-age children and adolescents.

PTSD and General Symptom Measures

Child Post Traumatic stress index

Child PTSD symptom scale

Trauma symptom checklist for children and young children
### Assessment domains

#### Attachment and Relationships:
- Relationship problems with family members, adults, and peers
- Problems with attachment and separation from caregivers
- Problems with boundaries
- Distrust and suspiciousness
- Social isolation
- Difficulty attuning to others and relating to other people’s perspectives

#### Thinking & Learning:
- Difficulties with executive functioning and attention
- Lack of sustained curiosity
- Problems with information processing
- Problems focusing on and completing tasks
- Difficulties with planning and problem-solving
- Learning difficulties
- Problems with language development

#### Physical Health: Body & Brain:
- Sensorimotor developmental problems
- Analgesia
- Problems with coordination, balance, body tone
- Somatization
- Increased medical problems across a wide span
- Developmental delays/regressive behaviors

#### Behavior:
- Difficulties with impulse control
- Risk-taking behaviors (self-destructive behavior, aggression toward others, etc.)
- Problems with externalizing behaviors
- Sleep disturbances
- Eating disturbances
- Substance abuse
- Oppositional behavior/difficulties complying with rules or respecting authority
- Reenactment of trauma in behavior or play (e.g., sexual, aggressive)

#### Emotional Responses:
- Difficulty with emotional self-regulation
- Difficulty labeling and expressing feelings
- Problems knowing and describing internal states
- Difficulty communicating wishes and needs
- Internalizing symptoms such as anxiety, depression, etc.

#### Dissociation:
- Disconnection between thoughts, emotions and/or perceptions
- Amnesia/loss of memory for traumatic experiences
- Memory lapses/loss of orientation to place or time
- Depersonalization (sense of being detached from or “not in” one’s body) and derealization (sense of world or experiences not being real)
- Experiencing alterations or shifts in consciousness

#### Self-Concept & Future Orientation:
- Lack of a continuous, predictable sense of self
- Poor sense of separateness
- Disturbances of body image
- Low self-esteem
- Shame and guilt
- Negative expectations for the future or foreshortened sense of future
Assessment domains

- **Trauma Exposure**
  - Ask about the child’s exposure to a wide range of potentially traumatic events (e.g., abuse, neglect, human-made and natural disasters, war, community and school violence, etc.)
  - Ask about the timing and duration of events.
  - Be sure to assess if any of the events are ongoing.
  - Phrase questions in a manner that is clear, concrete, and objectively descriptive. For example, “has anyone ever hit you so that it left a mark?” or “have you ever seen someone attacked with a weapon?”. Questions such as “have you ever been abused?” or “have you ever witnessed a traumatic event” may be subject to interpretation and may result in inadequate or inaccurate information.

- **Post-Traumatic Stress Symptoms**
  - Assess classic PTSD symptoms such as avoidance, re-experiencing, and hyper-arousal. Recognize that many children will experience some symptoms of PTSD without meeting full diagnostic criteria and others may exhibit a range of other symptoms as noted above.

- **Trauma Reminders and Triggers**
  - Identify reactions to trauma reminders that are triggered by a child’s interaction with specific people, objects, places, or situations.
  - Identify reactions to reminders that are triggered by specific sounds, sights, smells, tastes, touches, or internal physical states.
  - Many children, especially younger children, may not be able to name their own personal trauma reminders. They may not make the connection between exposure to these reminders and their subsequent feelings or thoughts. Asking children, caregivers, and other adults in the child’s life if they notice certain changes in the child’s attitude, awareness, or emotional or behavioral responses in specific types of situations may help the clinician to identify trauma triggers.

- **Caregiver/Family Functioning and Response to Trauma**
  - Ask about caregiver/family
    - General mental health
    - Post-traumatic reactions
    - Coping strategies
    - Areas in which they would like assistance
  - Keep in mind that the mental health of caregivers can affect a child’s functioning. Caregivers’ mental health also sometimes affects the way they answer questions about their children.

- **Resilience, and Strengths of the Child, Family, and Community**
  - Assess child and family strengths and resources, including:
    - Talents, skills, interests, areas of creativity
    - Spirituality and religious beliefs
    - Academic/educational strengths
    - Personality traits (e.g., optimism, perseverance)
    - Interpersonal strengths
    - Community and social supports
### Symptoms and behaviour in young children

#### Children aged 0-2

- Act withdrawn
- Demand attention through both positive and negative behaviors
- Demonstrate poor verbal skills
- Display excessive temper tantrums
- Exhibit aggressive behaviors
- Exhibit memory problems
- Exhibit regressive behaviors
- Experience nightmares or sleep difficulties
- Fear adults who remind them of the traumatic event
- Have a poor appetite, low weight and/or digestive problems
- Have poor sleep habits
- Scream or cry excessively
- Show irritability, sadness and anxiety
- Startle easily

#### Children aged 3-6

- Act out in social situations
- Act withdrawn
- Demand attention through both positive and negative behaviors
- Display excessive temper
- Be anxious and fearful and avoidant
- Be unable to trust others or make friends
- Be verbally abusive
- Believe they are to blame for the traumatic experience
- Develop learning disabilities
- Exhibit aggressive behaviors
- Experience nightmares or sleep difficulties
- Experience stomachaches and headaches
- Fear adults who remind them of the traumatic event
- Fear being separated from parent/caregiver
- Have difficulties focusing or learning in school
- Have poor sleep habits
- Imitate the abusive/traumatic event
- Lack self-confidence
- Show irritability, sadness and anxiety
- Show poor skill development
- Startle easily
- Wet the bed or self after being toilet trained or exhibit other regressive behaviors
Some Basic Assumptions About Psychological Traumatization

Overwhelm an individual’s capacity to integrate experience in the normal way. (e.g., Putnam, 1985)

If integration does not occur, traumatic experience(s) are split off and an individual alternates between functioning as if the trauma is still occurring and functioning as if the trauma never occurred. (e.g., Nijenhuis et al., 2004)

Although traumatic memories and associations remain inaccessible to consciousness much of the time, they have the power to shape an individual’s daily functioning and behavior. (e.g., Allen, 1993)
Key Developmental Capacities Shaped by Attachment and the Experience of Safety/Danger

**Ability to modulate, tolerate, or recover** from extreme affect states

**Regulation of bodily functions**

**Capacity to know and describe emotions or bodily states**

**Capacity to perceive threat**, including reading of safety and danger cues, **for self-protection, for self-soothing**

**Ability to initiate or sustain goal-directed behavior**

**Coherent self, Identity**

**Capacity to regulate empathic arousal**
Chronic Effects of Stress in Early Development

- early adverse experiences result in an increased sensitivity to the effects of stress later in life and render an individual vulnerable to stress-related psychiatric disorders (Graham, Heim, Goodman, Miller, & Nemeroff)
Chronic stress-impact contd

Loss of ability to regulate intense feelings is the most far-reaching effect of early trauma and

Neglect affects overall brain growth and growth of the connecting fibers that link the right and left sides (Debellis, et al)

Impairment of the counter-regulatory mechanisms producing hyperactivity of the hypothalamic –pituitary – adrenal and sympathetic nervous systems
Post-Traumatic Stress Disorder, Memory and the Brain

• It's Not Just “Psychological”
• While PTSS are commonly understood to be psychological, some or all of them may well be related to the physical effects of extreme stress on the brain
(Traumatic) Stress & Coping Perspective

- Continuum of key symptoms of PTSD (e.g., Arousal, reexperiencing, avoidance)
- Examining PTSS may be a more useful approach to understanding adjustment in children and families than traditional “psychiatric diagnoses” – matches family’s understanding
Positron Emission tomography (PET) Scan Study (Rauch et al)

- People with PTSD exposed to stimuli reminiscent of their trauma, show increase in perfusion of the areas in right hemisphere associated with emotional states and autonomic arousal.
- Simultaneous decrease in oxygen utilization in Broca's area-(the region in the left inferior frontal cortex responsible for generating words to attach to internal experience).
Amygdala responds to affective stimuli; Even if presented outside of conscious awareness

Amygdala well-situated to coordinate rapid affective responses and direct attention to emotionally salient events

Gunnar et al 2006
Glucocorticoids & Neuropeptide Y

• **G**: Erupt in the body after a traumatic event it may “attack” the hippocampus. Studies have shown the hippocampus of adults with PTSD being unusually small.

**NPY**: Lower NPY levels in PTSD and depressive disorder; correspondingly, antidepressant drugs increase NPY levels.
Some evidence based interventions

- Trauma Focused CBT: all ages
- Attachment self regulation and competence (ARC): 2-21 years
- Bounce back: 4-17 years
- Trauma and grief component therapy for adolescents
TRAUMA IN DEVELOPMENTALLY DELAYED CHILDREN
Core concepts

- 1 in 6 children have DDs (Boyle 2011)
- 10 times more likely to be maltreated
- 3.79 times more likely to be physically abused
- 3.14 times more likely to be sexually abused
- 3.76 times more likely to be neglected.

(Goldson 2002)
Trauma in children with DD

- Have more difficulty processing and expressing feelings
- Have more problems regulating emotions and impulses
- But may have strengths and coping mechanisms that may be under recognised and under valued
- Good evidence for behavioural interventions
MEDICAL TRAUMA AND STRESS
Prevalence of Medical Traumatic Stress Reactions (nctsn.org)

• Many ill or injured children, and their families (up to 80%) experience some traumatic stress reactions following a life threatening illness, injury, or painful medical procedure
  • May help the individual to process the experience

• Between 20 - 30 % of parents and 15 - 25% of children and siblings experience persistent traumatic stress reactions that impair daily functioning and affect treatment adherence and recovery

• New area – HIV???
Prior trauma exposure was correlated with level of trauma symptoms experienced by children following burns.

<table>
<thead>
<tr>
<th></th>
<th>Non-clinical levels of PTSS</th>
<th>Clinical levels of PTSS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burn Only</td>
<td>N = 7</td>
<td>N = 7</td>
</tr>
<tr>
<td>Prior Trauma</td>
<td>N = 5</td>
<td>N = 21</td>
</tr>
</tbody>
</table>

86% (18/21) of children with histories of 2 or more prior traumas experience clinical levels of PTSS.

Results suggest that prior trauma exposure increase the risk for PTSD and that all pediatric medical trauma patients should be screened for history of other trauma.
Potentially Traumatic Events (PTE’s)

- The same objective event doesn’t produce same traumatogenic process across individuals or families
- PTEs are nonlinear and may be recurrent and/or cyclical, with the possibility of subsequent episodes of trauma (Kazak, et al 2006)
Why Do Medical Events Potentially Lead To Traumatic Stress?

✖ These events challenge beliefs about the world as a safe place, harsh reminders of one’s own (and child’s) vulnerability.

✖ In young children, the body is the centre of their sense of self.

✖ High-tech, intense medical treatment may be frightening, and the child or parent may feel helpless. The family is often required to make important decisions in times of great distress.
Why Do Medical Events Potentially Lead To Traumatic Stress?

• There may be uncertainty about course and outcome
• Pain or observed pain is often involved
• Exposure to injury or death of others can occur
Awareness of Traumatic Stress

• Minimize potentially traumatic aspects of medical care

• Identify children and families with (or at higher risk for) persistent distress and provide appropriate intervention

• Provide anticipatory guidance to help prevent long-lasting traumatic stress

(National Child Traumatic Stress Network)
Key Messages for Trauma Recovery

1. It is not happening now.
   The trauma is over. It is in the past. You are here in the present.

2. You are safe.
   The adults here are responsible for your safety and you are worthy of care and protection.

3. You are not inherently dangerous/toxic.
   What is inside you (thoughts, feelings, dreams, impulses, etc.) cannot hurt you or others.

4. You are good.
   Whatever you have experienced and whatever you have had to do to survive, you are a good, strong person who can contribute to your community.

5. You have a future.
Interventions

- Stage 1: Trauma informed practice & early intervention
- Stage 2: Assessing & preventing trauma
- Stage 3: Reducing PMTS sx
Prevention Model:
Addressing traumatic stress in the pediatric healthcare setting

Clinical / Treatment
- Persistently distressed or at risk.
  - Arrange psychosocial and mental health support.

Targeted
- Acute distress or a few risk factors present.
  - Provide extra support and anticipatory guidance.
  - Monitor ongoing distress and refer if needed.

Universal
- Most children and families are understandably distressed but coping well.
  - Provide general support — help family help themselves.
  - Provide information regarding common reactions. Screen for indicators of higher risk.

Preventing and Treating Traumatic Stress
Post trauma growth
Interest began in 1990s

• Tedeschi et al,

• Linley et al-Positive change following trauma

• Berger et al-Study of PTG in Latino migrants to USA, Expansion to the family system

• Spirituality, Social supports (modulates response to stress in HPA axis)
Characteristics assoc with PTG

- Greater appreciation of life
- Changed sense of priorities
- Warmer, more intimate relationships
- Greater sense of personal strength, and Recognition of new possibilities or paths for one's life and spiritual development.
- Extraversion and Openness to experience


Resources and references

National Child Trauma Network
http://www.nctsn.org/content/psychological-first-aid-schoolspfa

Trauma focused CBT Cohen et al Guildford press 2012
