

Helping Children Through a Medical Trauma Experience: The Critical First Few Hours



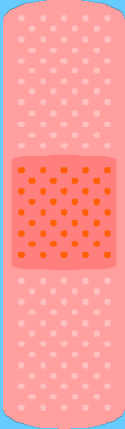
Michael D. Miller, Ph.D
Pediatric Psychologist
Marshfield Clinic/
St Joseph Children's Hospital
May 5, 2017

Today's Focus

This talk focuses on the first couple hours; from the EMT's first arrival on the scene, to the ambulance ride to the first ED, to the next ambulance ride to the next ED on its way to the PICU or hospital room ("peri-trauma" period)

Visits to an ED 2013

- <15 y/o
- 23,726,000 (38.9/1000)
- Level 1 (immediate): 0.8%
- Level 2 (emergent): 3.6%
- Level 3 (urgent): 22.3%
- Level 4 (semi-urgent): 39.7%
- Level 5 (non-urgent): 8.5%



Risks of Psychological Sequelae

- Acute Stress Disorder
- Sx develop 3 days to 1 month after trauma exposure
- Post-Traumatic Stress Disorder
- Sx develop 1 month after the trauma



Traumatic Stress Reactions

- A. Re-experiencing the trauma (intrusive thoughts, flashbacks, nightmares, distress at reminders)

- B. Avoidance: (social detachment, any experience or reminder of the injury or medical treatment, anhedonia)



Traumatic Stress Reactions

- C. Hyper-arousal: (irritability, decreased concentration/sleep, exaggerated startle response, hypervigilance, risk taking)

- D. Other: (fears, somatic complaints, depression, anxiety, in a daze, the world is not trustworthy)



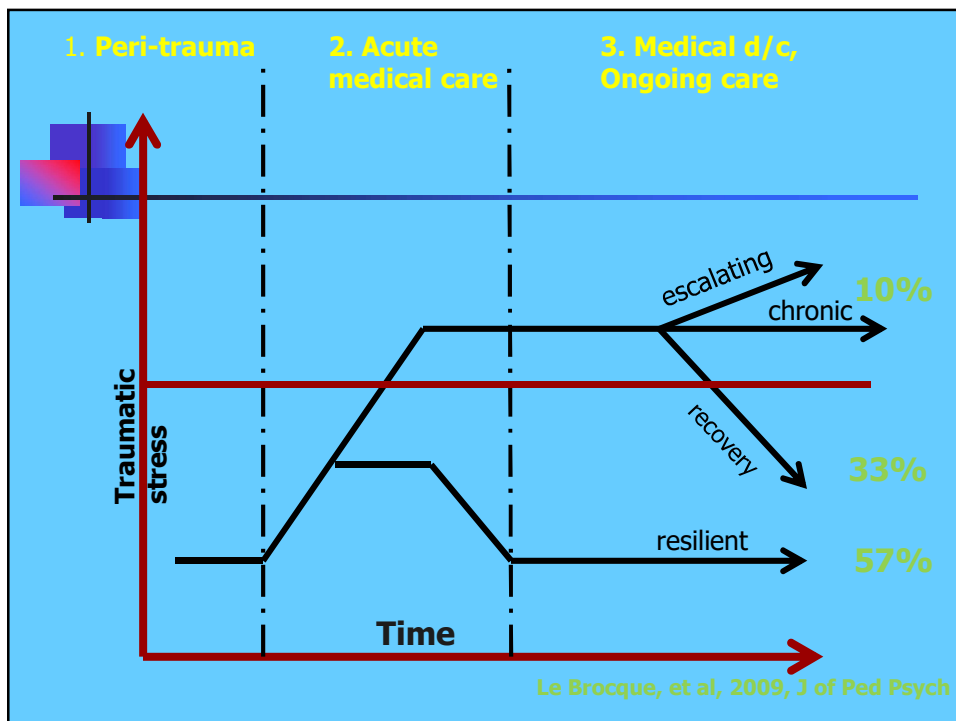
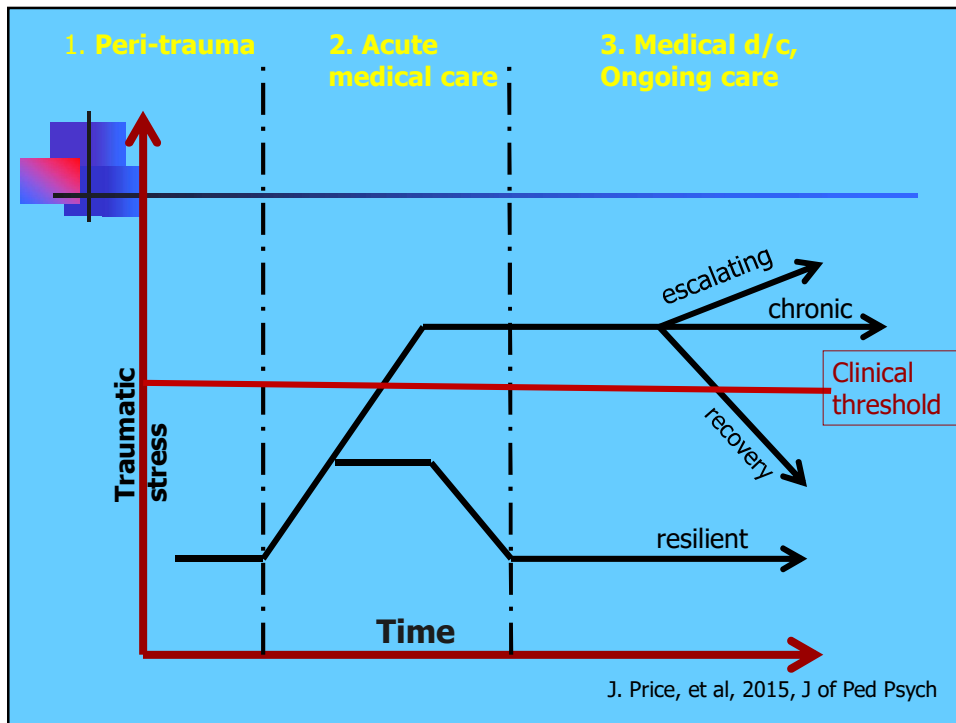
Outcomes

- Most do fine
- A few more temporarily struggle
- Small amount do badly and continue to do so



Integrative Trajectory Mode


Pediatric Medical
Traumatic Stress
(PMTS)

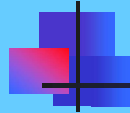




Predictors of PMTS

- *Perceived* severity of the trauma (LTE)*
- *Perceived* risk of death and alteration / loss of appearance or normal functioning*
- Child's HR immediately following event
- Parental support peri- and post-event
- Prior child/family psych hx and functioning
- Prior trauma experience (depending on resolution)
- Child's perception of being isolated and misunderstood*

- 
-
- (11 y/o Aidan) You said I could go home if there was no blood in my poop, and the nurse said she didn't see any!
 - (MD) Well, that was just a gross measure
 - (Aidan) Well, OF COURSE IT IS!



-
- (RN) I'm sorry but we found frank blood in your urine.
 - (8 y/o Keisha) I don't know nobody named Frank!



How did you get sick?

- "I ate too much sugar" (IDDM)
- "I played too hard" (CHF)
- "The doctor said there was a demon in my belly"
- "I was bad"
- "I watched too much TV"



What Happens with a Blood Test?

- "You bleed to death if they take too much"
- "It's donated to other very sick patients"
- "It's bad blood to be thrown out"
- "It's mixed with medicine and put back in other people"
- "The doctors look at it to see what you're thinking"



Infants to Toddlers

- Learning object permanence
- Trusting to be well cared for regardless
- Child only trusts mom/dad—not YOU!
- No one to comfort when distressed
- Dislike, distrust being restrained
- Separation anxiety



Toddler/Preschooler

- Newly gained independence
- Cherishes new self by "NO!"
- Egocentrism: "**I** Understand **me**."
- Thinking is magical, not bound by logic (so blame self and YOU) (guilt, anger)
- Why won't you fix it/ Let me go home?!
- Overly eager to please or overly demanding
- No regard for cause/effect logic



Toddler/Preschooler

- May lie to please, or overly eager to please
- If it hurts, then it can't possibly help
- Views self as omnipotent and powerful, so body integrity a major concern
- Difficulty with temporal relationships
- Poor understanding of cause/effect (i.e. confusing illness->treatment->recovery)



Toddler/Preschooler

- Cannot grasp multiple meanings
- Needs external, observable explanations
- Illness is easier to conceive than healing
- Most willing to trust *trustful* others
- Reassure with simple language



Early Elementary

- *Illness* is caused solely by an external agent (ok with trauma) or broken rules
- “Reversibility of operations” so...
- Illness and recovery now understood
- Health “maintenance” is not
- More logical, less magical thinking



Early Elementary

- Better able to understand:
 - *multiple meanings
 - *purpose of painful procedures
 - *multiple symptoms can result
- Understands causality and sequences
- Rules are absolute: concrete, legalistic.
(so problems with grey areas, uncertainty)



Early Elementary

- Increased focus on skills acquisition, and competence (so risk of absence from school/sports)
- More verbal so more argumentative
- Greater need to exert control over treatment
- Require careful explanations for "how" more than "why."




Middle School

- Beginning of abstract reasoning
- Illness as malfunctioning internal processes, need not be visible damage
- Illness and pain can have multiple causes and treatments
- Intensified body image concerns, so risk to self image
- Increased desire to be with peers




High School

- Rapid body maturity (so fear loss to appearance)
- Drive for independence (so rebellion against fears of dependency)
- Facing multiple developmental tasks
- Extreme self-consciousness



Therefore....

- Preschool child:
Reassure with simple language
- Early Elementary child:
Explain how it happened, what you're doing, and what's the value
- Pre- and Young teen:
Discuss subtleties, uncertainties



Biggest worry for any age child in a medical setting

"Learned Helplessness"

.....nothing I do matters, so why bother?



Children's Pain Responses

- Decreased tolerance over time
- May decrease trust
- Often *increases* general activity
- Usually prefer parents to be present



Parental Presence for Procedures?

- #1 preferred child coping technique
- But intensifies pain behaviors
- Recommend present for minor, absent for major procedures
- Increase comfort or increase stress?



Techniques

- Inform prior to, and during
- Recommend look away
- "1-2-3-poke"
- No delays
- Praise coping beh's
- Debrief later




Instead

- I believe your pain
- I accept your unhappiness
- I will help wherever, whenever I can
- I am on your side
- We will get through this together



Importance of Words

- Fixed, not cut off
- Remove, not cut out
- Drain, not bleed
- Open, not cut open
- Delicate instrument, not knife/scalpel
- Anesthetize, not put to sleep

- 
-
- **Sickle cell anemia>>** ■ **Sick as hell anemia**
 - **Cystic fibrosis.....>>** ■ **65 Roses**
 - **Diabetes.....>>** ■ **Die – a -beebees**
 - **Who is Anna Stesia and why will she be at my operation?**



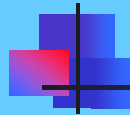
Don't Even *Think* of Saying

- Don't cry/worry/whine/pout/complain
- Don't you want to get better?
- Ready for your shot?
- Don't you think your mom deserves a break?
- Don't be a baby



...Or These Either

- Can't you be good for your Mommy?
- You have really lousy veins
- Well maybe you shouldn't have climbed on the roof
- You're just crying because you're hungry/scared/tired
- So are you the baby in the family?



Practicing “Trauma Informed Care”



Talking to your patient

- Children ***do*** need information
 - *truth, nothing but the truth
 - *at an appropriate developmental level
- Children attend more to non-verbals
- Discover what the child already knows
 - or at least use that as your foundation
- In explaining, use familiar images



Talking to your patient

- Provide only true choices
- Offer ways of coping
- Forewarning dependent on age/individual
- Include all sensory information
- Explain the positive benefits (but not your ability to convince)
- Make no promises out of your control
- Accept complaints/unhappiness



Explain

- Calmly explain what they are or will be seeing, hearing, or smelling.
 - Their own blood, blood or old bandages from other people
 - Scary instruments, people crying, running around
 - Gasoline from the car wreck (firemen are here to hose it down)



Explain

...[jaws of life] sound of my partners helping to get the other people out of the car,
...[Sirens] other ambulances coming to help other people.
...[Yelling] people shouting to give orders to other helpers
...[People upset in the ED] people worried about other people



Explain

- Ambulance sound alone can be frightening. "We turn on the siren so other drivers know we need to drive faster to get a person to the hospital faster."
- If a child sees or hears ugly things, acknowledge it, lightly empathize, and move on.



Tell the child

- Tell them what will happen immediately, and why and what you are going to do
- “Ben, I’m going to close the ambulance door so you don’t have to look at/hear the other stuff going on...
- ...that way we can focus on getting you safe and ready to drive to the hospital”



Tell the child

- Tell the child what’s going on if he can’t see it (on his body), and that there are people working together to help him.
- Tell him you already talked to Dr X at the ER, and she knows you’re on your way here, and she’s calling the doctor that’s really good with kids who have broken legs, and he’ll be there waiting for you.



“Eschew an obfuscating lexicon”

- Leg, not lower extremity
- Pretty bad bonk to the head, not an insult to the cranium
- Going on for a long time, not chronic
- The test found an infection in your blood, not your test was positive for bacteremia



Involve parents

- We find that it helps kids if...
- Many parents feel better if they can...
- Help the parents help the child: “please hold her hand and talk to her while we do xxx...Please hold this gauze pad, here. Nope, little lower.... Great! Thanks.”
- This helps the child that mom is involved in his care, makes mom feel useful, and is a practical help to you.



Getting dad to boil water and get newspaper before a home birth

- Ask parents what helps their child with upsetting or scary things
- Ask parents who they or their child can usually turn to for help or support. Are they aware of what's happened?
- Help parents understand the injury and treatment plan so they can best explain it to their child



The Important Psychological Aspects of your Job

- My name is _____. I am a _____.
- Take charge quietly but assuredly (increases child *and* parent's confidence, decreases anxiety).
- Be kindly, respectful, and gentle, without false promises



The Important Psychological Aspects of your Job

- EMT: My job is to get you to the hospital as quickly and safely as possible, and to keep you as comfortable as possible so the doctors and nurses can _____
- ED: my job is to help get your body settled down a little bit and figure out what the other doctors need to know to best take care of you, to get you back home.



The Important Psychological Aspects of your Job

- You be sure to tell us if something hurts you and we'll try to help you through it.
- Tell them it's ok to be scared or worried, but it's our job to get you better, and help you feel less scared
- I promise I'll let you know if/when it's time to worry. OK?



Handling difficult questions in the originating ED or ambulance

- Am I gonna die?
- Where is my family?
- Is my sister and my dad ok?
- Don't ever lie. "I don't know, but right now my job is to take care of you, and as soon as I can, I'll try to find out about...and I'll make sure you know what we find out."
- Reassure with trust in your confidence now, and your reliability later →



Handling difficult questions in the originating ED or ambulance

- Dad airlifted out because of head trauma and possible UE amputation ("dad hurt his arm and his head, and they're taking him to a different hospital where they help grownups with that")
- Bad news best (soon) delivered by family, after settled in the hospital (peds, ICU)—
Depends on age and foreknowledge



National Child Traumatic Stress Network (NCTSN)

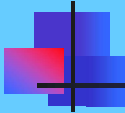
- <http://www.nctsn.org/>
- At the top left, click on Trauma Types
- Drop down menu, click Medical Trauma
- Lot to explore

US Dept of HHS, UCLA, & Duke Univ




D REDUCE DISTRESS

- Assess for and manage pain
- Provide info about what's happening, and choices if possible
- Use words the child can understand
- Listen carefully for child's understanding
- Ask about fears and worries
- Provide realistic reassurance and hope
- Consider grief and anticipated loss



E EMOTIONAL SUPPORT

- As much as possible, encourage parents to be with their child, talk with her about her fears and worries
- Empower parents to help and comfort their child
- Try not to ever leave the child alone
- Encourage their involvement where possible



F FAMILY

- Gauge the family's distress and existent life stressors
- Identify the family's coping and strengths
- Address family needs beyond medical
- Encourage them to seek out other supports (family, friends, external resources)