Trauma-Informed Care: Implementing the Approach

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Disclosures

I have no personal financial relationships in any commercial interest related to this presentation.

I do not plan to reference off label/unapproved uses of drugs or devices.

Objectives

- Review what is known – and what is not known – about ACEs, the effects on child health, and the provider's clinical approach
- Discuss one pediatric practice's approach to integrating ACEs into clinical care

- Stimulate some thinking on next steps… and how primary care / mental health partnerships may be able to repair patients and families

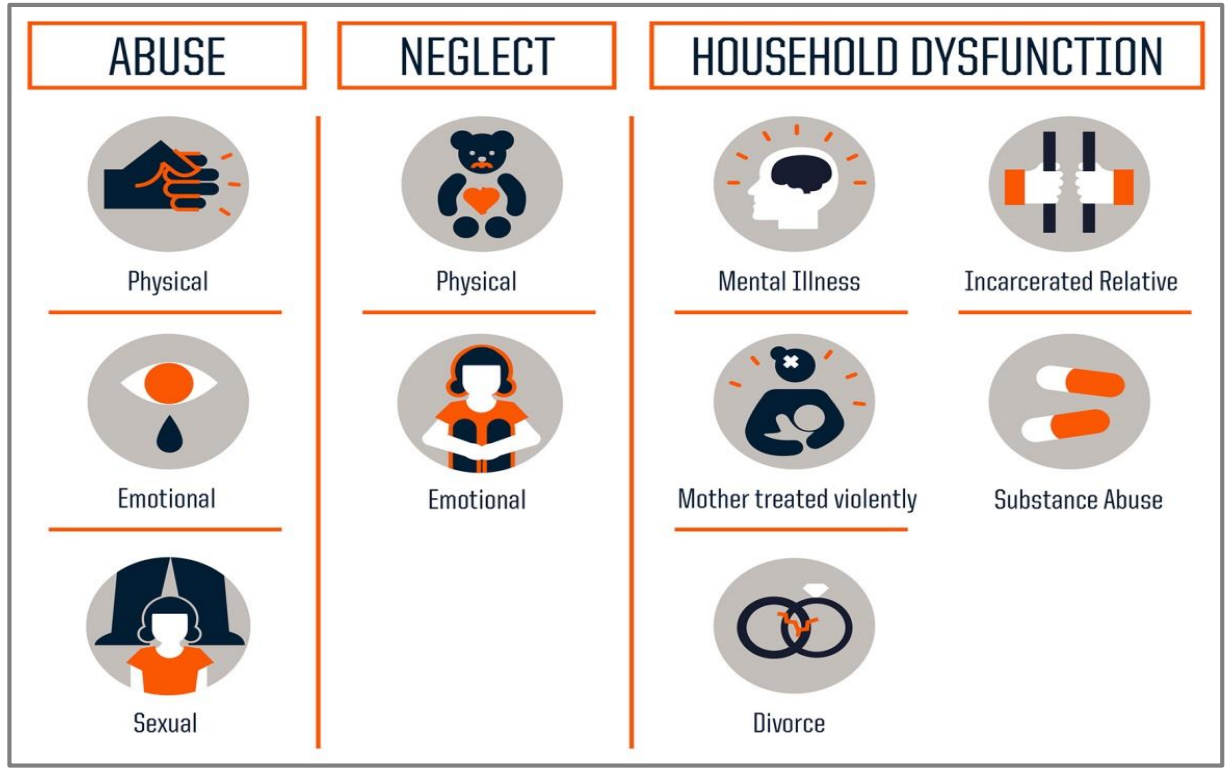
What is known

Putting ACEs in context for early childhood health

Adverse Childhood Experiences

"We found a strong graded relationship between the breadth of exposure to abuse or household dysfunction during childhood and multiple risk factors for several of the leading causes of death in adults."

Felitti, et al. Am J Prev Med 1998;14:245–258



Source: Centers for Disease Control and Prevention
Credit: Robert Wood Johnson Foundation

ACEs are Common

- About 2/3 report at least one ACE
- 40% reported 2 or more ACEs
- 12.5% reported 4 or more ACEs

- If a patient has disclosed one ACE, there is approximately an 87% chance that they have experienced another.

- ACE Study

Premature Morbidity & Mortality with ACEs

- Alcoholism and alcohol abuse
- Chronic obstructive pulmonary disease (COPD)
- Depression
- Fetal death
- Health-related quality of life
- Illicit drug use
- Ischemic heart disease
- Liver disease
- Risk for intimate partner vi[illegible]
- Multiple sexual partners
- Sexually transmitted diseases
- Smoking
- Suicide attempts

SYMPTOMS

- Uninte[illegible]nancies
- [illegible]moking
- [illegible]xual activity
- [illegible]egnancy
- [illegible]mune diseases
- ER Visits
- Medical Office Visits
- Fractures
- Psychotropic Medications Prescribed
- Early Death from MI

Cumulative Burden of Recurrent or Persistent Exposure to Trauma

- Alterations in brain architecture
- Changes in gene expression
- Endocrine and immune imbalance
- Decreased executive function and affect regulation
- Interference with relational health
- Behavioral allostasis
- Chronic illness, health disparities, decreased quality and length of life

“We are the only living species that regularly and predictably maims and destroys its own young.”

Sandra L. Bloom

Creating Sanctuary

National Survey of Children's Health 2016

- **ACEs are a factor in a lot of the common problems that we see on a daily basis.**
  - 69% of kids with behavioral problems have ACEs
  - 45.7% of kids at risk for development have ACEs
  - About two-thirds of children ages 6-17 who bully, pick on, or exclude other children—or are themselves bullied, picked on, or excluded—have ACEs.

More NSCH Facts…

- **ACEs impact a child's social emotional development and chances of school success.**
  - Children ages 3-5 who have had two or more ACEs are over four times more likely to have three out of six social and emotional challenges, for example, have trouble calming themselves down, be easily distracted, and have a hard time making and keeping friends.
  - More than three out of four children ages 3-5 who have been expelled from preschool also had ACEs.
  - Children ages 6-17 who have had two or more ACEs are twice as likely to be disengaged from school than are peers who have had no ACEs.

A Word from the American Academy of Pediatrics…

- Pediatric medical homes should:
    1. strengthen their provision of anticipatory guidance to support children's emerging social-emotional-linguistic skills and to encourage the adoption of positive parenting techniques;
    2. actively screen for precipitants of toxic stress that are common in their particular practices;
    3. develop, help secure funding, and participate in innovative service-delivery adaptations that expand the ability of the medical home to support children at risk; and
    4. identify (or advocate for the development of) local resources that address those risks for toxic stress that are prevalent in their communities.

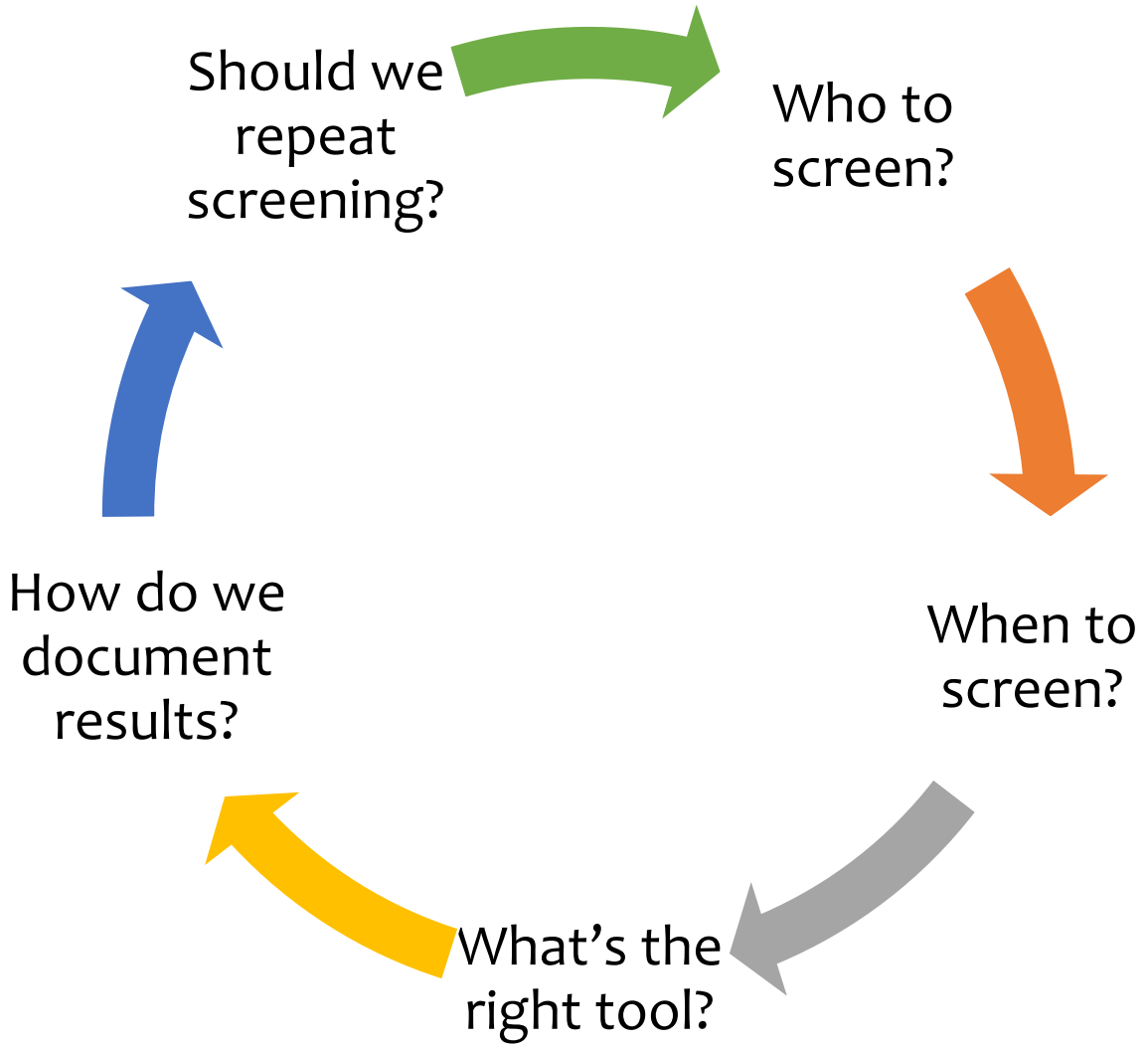
Stories from the literature – why parent trauma matters….

1. Correlations exist between parent ACE scores and child's ACE score… the more ACEs a parent experiences, the more ACEs the child is likely to experience.
2. Parenting styles are at least in part inherited: if a parent experienced harsh parenting, they are more likely to engage in harsh parenting styles themselves.
3. Parents have new brain growth in the first six months after their child's birth – in both the amygdala (emotional center) and frontal cortex (logical center) UNLESS they are experiencing stress, which impairs frontal cortex development.
4. Children who have experienced three or more ACEs before entering Kindergarten have lower readiness scores: literacy, language and math skills are lower – and rates of behavioral problems are higher.

Kindergarten Readiness

What is not known…

Things that still need to be figured out


Should we repeat screening?
Who to screen?
When to screen?
What's the right tool?
How do we document results?

Lessons from the Field…What Pioneering Practices Have Taught Us

- Screening in practice is feasible.
  - Doesn't take as long as you would think.
  - Usually doesn't change the immediate plan when a patient discloses trauma.
- Patients and parents appreciate being asked.
  - They see the importance to their health.
  - They appreciate the conversation…and don't mind the results being recorded in their records.
- Parents look to pediatricians for guidance.
  - Parents see pediatricians as trusted change agents.
  - We are viewed as a bridge to needed resources.

What's the right intervention?

What we did…

Our process, and the changes we made along the way.

Case Study: The Children's Clinic

- 30 providers in three practice sites
- Strong interest in early childhood development / developmental promotion
- Since 2008 have implemented multiple standardized universal screening protocols
  - Developmental delay
  - Autism
  - Maternal Depression
  - Adolescent Depression
  - Adolescent Substance Abuse
- Adolescent questionnaire has always included questions about dating violence; many providers ask about bullying in their history for school aged children.

The Children's Clinic
welcoming families since 1911

The assumption

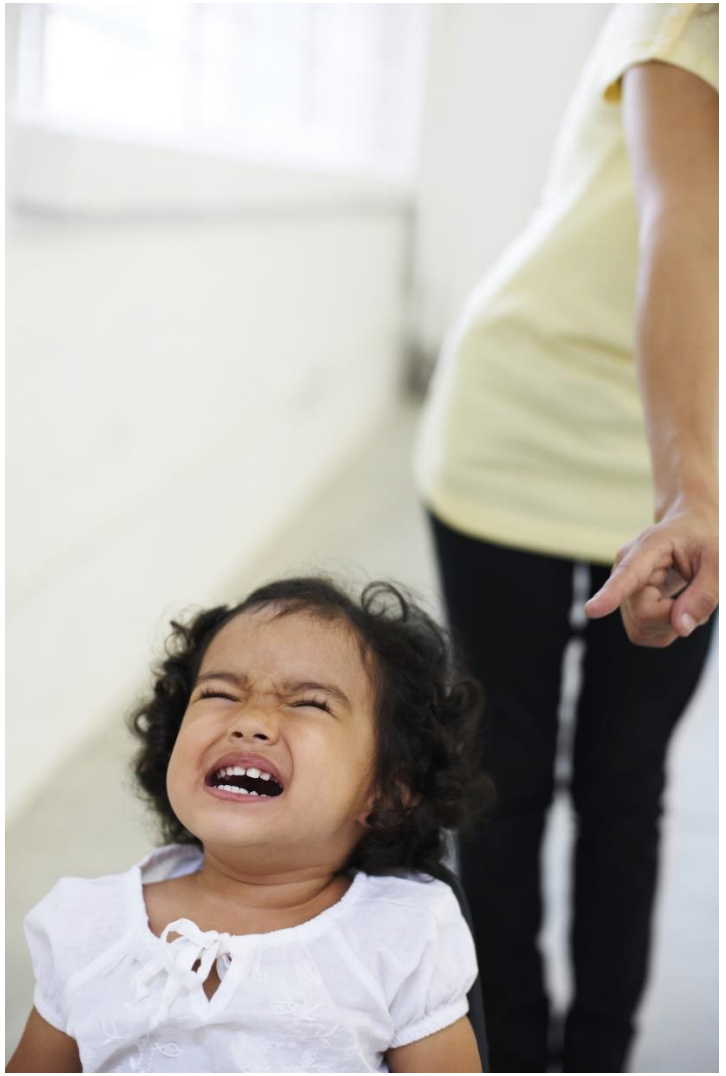
If…

- we can identify parents who are at greatest risk
- bring their trauma histories out of the closet
- agree to support them when they feel most challenged in a non-judgmental way

…we will be able to create a new cycle of healthier parenting.

The Theory…

- Certain moments in the life of an infant or toddler will be stressful
  - Tantrums, colic, toilet training, hitting / biting, sleep problems are examples
- What happens to a parent who has experienced trauma? Will their response be:
  - Fight?
  - Flight?
  - Freeze?
  - Can it be something else?
- How can we better prepare at-risk parents for these inevitable moments?



And thinking further…

- If a parent experienced trauma, do they have appropriate skills / ideas for:
  - Taking care of themselves?
  - Identifying when they need help?
  - Modeling appropriate conflict resolution?
  - Discipline that is developmentally appropriate?
  - Playing with their child?
- In other words, can we teach parents and children to be more resilient?

Our Starting Questions: What am I looking for?

- Who should we screen?
  - Are we targeting the incidence of ACEs within our patients themselves? If so, when do we screen?
    - Everyone during the toddler years?
    - Children who present with apparent somatic complaints?
    - Children experiencing school problems / failure?
    - Teens with mental health concerns?
  - Do we look at parents' experiences?
- What do we screen them with?
- When should we screen them?

How do I Find it? Our First Step

- Eight providers piloted screening
- At the four month visit, parents are given the ACE screener, along with a questionnaire about resilience and a list of potential resources.
  - Cover letter explaining the rationale for the screening tool, and what we plan to do with the information
- Created a confidential field in the EMR that does not print into notes, but perpetuates into visits to document results while minimizing risk to families.

The Yelling Infant

- 4 month old infant in for a well visit. Primary concern is colic. Infant spends 3-4 hours crying every evening.
- Two parent household, 7 year old sister at home.
  - Mom works full time, dad is in training to be a firefighter.
  - Generally mom leaves work, immediately drives through traffic to get home to relieve the nanny.
- Otherwise, he’s a healthy guy.

Fight, flight or freeze?

- ACE score for mom: 5
- Parents went through an acrimonious divorce. Verbal abuse, domestic violence, substance abuse were common in her household.
- Her reaction to a “yelling” infant? The infant’s reaction to her reaction?

Tapping into Resilience

- Mom used to do yoga before the new baby.
- How can mom return to this mindfulness activity?
  - If no time for yoga class, can she carve out 15 minutes out of her day to breathe, relax, recharge?
- Two months later…much more relaxed! Colic wasn't entirely gone, but stress was less, crying was less, and perceptions were improved.

Punchlines

- Parents often need “permission” for self-care.
- Parents may not be entirely aware of how their own experiences affect how they handle parenting, stressful situations, or work-life balance.

Comparing Assessment Tools

Measures		Item-Level Response Group	Aggregate Response Group	p value
All [a]		(n=1308)	(n=975)	
≥ 4 items endorsed	n (%)	109 (8.1)	109 (11.2)	0.013*
Mothers [b]		(n=880)	(n=693)	
≥ 4 items endorsed	n (%)	78 (8.9)	85 (12.3)	0.028*
Fathers [b]		(n=340)	(n=250)	
≥ 4 items endorsed	n (%)	21 (6.2)	23 (9.2)	0.167
Private Insurance [c]		(n=796)	(n=732)	
≥ 4 items endorsed	n (%)	47 (5.9)	65 (8.9)	0.026*
Public Insurance [c]		(n=467)	(n=223)	
≥ 4 items endorsed	n (%)	57 (12.2)	44 (19.7)	0.009*

What Parents Want

- Parenting classes ✓✓✓
- Parenting support groups ✓✓
- Information on the website ✓✓
- Twitter feeds (helpful hints on parenting) ✓
- Visiting Home Nurse Programs ×
- Relief Nursery Services ×

Adjusted risk for suspected developmental delay

	Relative Risk (95% CI)	
	[a]Maternal (n=311)	[b]Paternal (n=122)
[c]ACE		
≥ 1	1.25 (0.77, 2.00)	2.47 (1.09, 5.57)**
< 1 (Ref)	-	-
≥ 2	1.78 (1.11, 2.91)**	3.96 (1.45, 10.83)***
< 2 (Ref)	-	-
≥ 3	2.23 (1.37, 3.63)***	0.82 (0.12, 5.72)
< 3 (Ref)	-	-
Payer source		
Public	1.67 (1.05, 2.67)**	0.87 (0.37, 2.03)
Private (Ref)	-	-
Gestational age at birth		
< 37 weeks	1.70 (0.89, 3.24)	7.76 (3.12, 19.33)***
≥ 37 weeks (Ref)	-	-

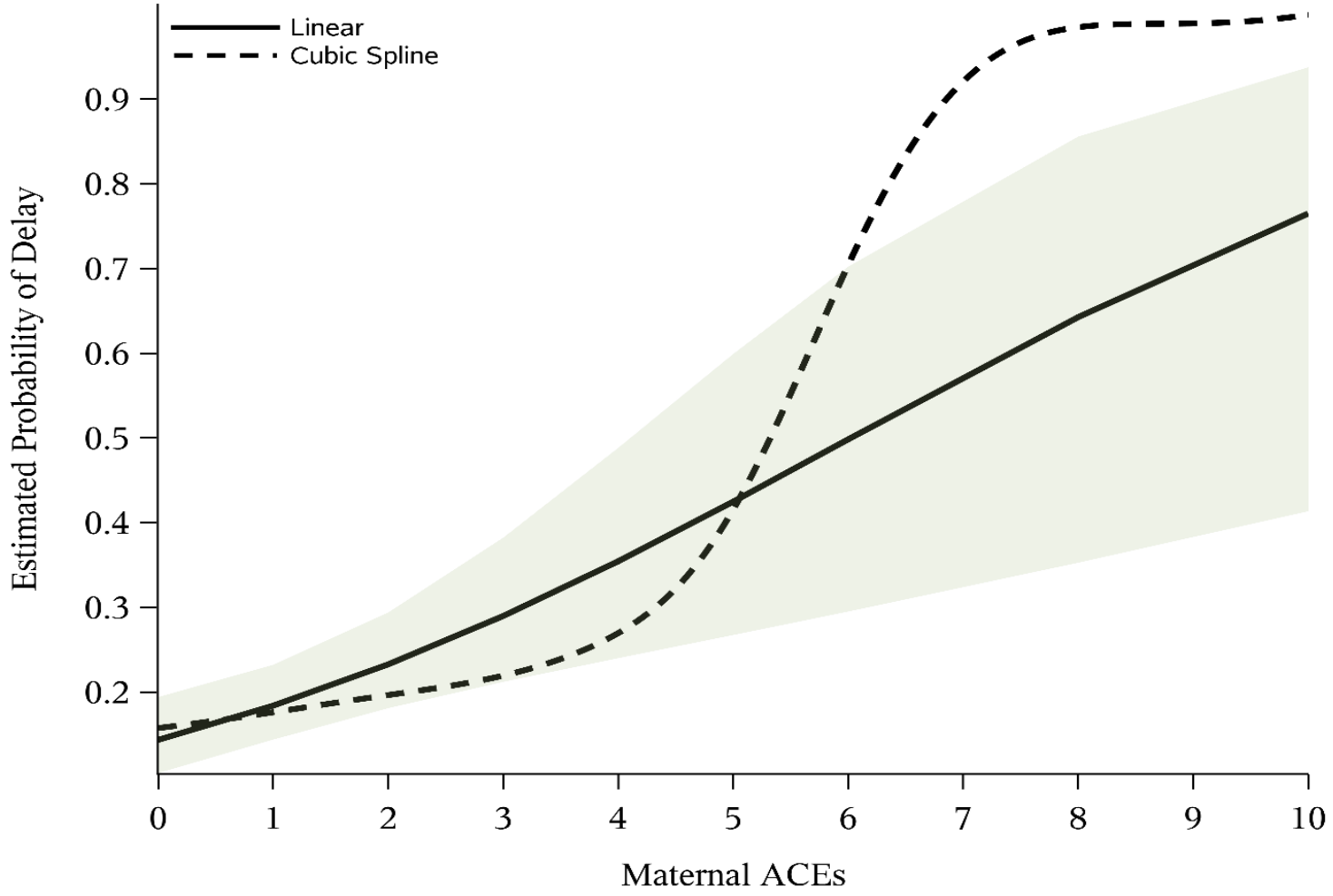
* = p <0.1, ** = p <0.05, *** = p <0.01

Domain-specific developmental risk by Maternal ACE exposure

	Maternal ACEs		Relative Risk (95% CI)
	≥ 1 (*n*=149)	<1 (*n*=162)	
Communication, *n* (%)	24 (16.3)	18 (11.1)	1.47 (0.83, 2.60)
Gross Motor, *n* (%)	20 (13.5)	17 (10.6)	1.28 (0.70, 2.35)
Fine Motor, *n* (%)	18 (12.1)	16 (9.9)	1.22 (0.65, 2.31)
Problem Solving, *n* (%)	17 (11.6)	8 (5.0)	2.31 (1.03, 5.20)**
Personal-Social, *n* (%)	19 (12.9)	17 (10.6)	1.22 (0.66, 2.26)
	≥ 2 (*n*=60)	<2 (*n*=251)	
Communication, *n* (%)	12 (20.3)	30 (12.0)	1.69 (0.92, 3.11)*
Gross Motor, *n* (%)	12 (20.0)	25 (10.0)	1.99 (1.06, 3.73)**
Fine Motor, *n* (%)	9 (15.0)	25 (10.0)	1.51 (0.74, 3.06)
Problem Solving, *n* (%)	11 (18.3)	14 (5.7)	3.23 (1.55, 6.76)***
Personal-Social, *n* (%)	9 (15.0)	27 (10.9)	1.38 (0.68, 2.77)
	≥ 3 (*n*=39)	<3 (*n*=272)	
Communication, *n* (%)	10 (26.3)	32 (11.8)	2.23 (1.19, 4.16)**
Gross Motor, *n* (%)	9 (23.1)	28 (10.4)	2.23 (1.14, 4.36)**
Fine Motor, *n* (%)	8 (20.5)	26 (9.6)	2.15 (1.05, 4.40)**
Problem Solving, *n* (%)	6 (15.4)	19 (7.1)	2.17 (0.92, 5.10)*
Personal-Social, *n* (%)	8 (20.5)	28 (10.4)	1.97 (0.97, 4.01)*

* = p <0.1, ** = p <0.05, *** = p <0.01

Dose response relationship between Maternal ACE and risk for suspected developmental delay



Corroborating Evidence

- Mothers of children being seen in the ED were given ACE questions and PEDS.

Maternal ACEs	Risk of single concern on PEDS	Risk of 2+ concerns on PEDS
1-3 ACEs	**1.86** (CI 1.16-3.00)	**1.7** (CI 1.26-3.87)
4+ ACEs	**2.21** (CI 1.07-2.72)	**1.76** (CI 1.02-3.05)

- Highest correlations found for specific maternal ACEs of household substance abuse, mental health, and parental incarceration.
- "Mothers' ACEs are significantly associated with their children's developmental risk. If replicated, findings suggest that addressing intergenerational trauma through focus on childhood adversity among young children's caregivers may promote child development."

Sun et al. Am J Prev Med 2017;53(6):882–891.

Corroborating Evidence

- Retrospective cohort study of 1172 maternal-child dyads in early childhood home visiting program – examining relationship of maternal interpersonal trauma and ASQ:SE results.
- Interpersonal trauma associated with a 3.6 point higher ASQ:SE score, indicating higher developmental risk.
- Conclusion: maternal interpersonal trauma can negatively impact child social emotional development (but we still need to study why).

Folger, et al. Paediatric and Perinatal Epidemiology. 2017.

Stories from the literature – why parent trauma matters…

5

There is a correlation between parental ACEs and their child's developmental risk.

And more correlations

- Recent studies have been published that correlate parent ACEs with:
  - Higher rates of behavior problems
  - Poor overall health – including rates of asthma
  - “Poor parenting practices” such as excessive TV / media use
- And we’ve just submitted:
  - Higher rates of missed well visits

Why I think this works…

And what you need to make this a part of your day-to-day practice

NOT ROCKET SCIENCE

What I think you need to make this work…

- A provider champion
- A clear idea of what you're looking for and why
- A trauma-informed office / support staff
- A willingness to get your hands dirty
- A lot of self-care
- An understanding of community resources and partnerships available to you

Redefining Our Role & Goal: Understanding the "Righting Reflex"

- "Success" in our conversations about ACEs and trauma is relational.
  - Goal is not about "forcing" a disclosure.
  - Is the door open to further conversation?
- Conversation should be validating, safe and non-threatening.
- If we're leaning on our training to "fix everything" we may not be present to hear the stories.
- Parents' behaviors make more sense if you understand their story.
  - Instead of "what's wrong with this person?", think "what happened to this person?"

Listening is Therapeutic… But Who the Listener is Matters

- For a person who has experienced trauma, authority figures (including parents / caregivers, schools, health care systems, mental health institutions, etc.) were often those inflicting the trauma.

- When an authority figure becomes the listener, that authority becomes a positive, strategic force for healing.
  - Can the adults around us tolerate the conversation?
  - The message of silence or ignoring: history is not important or speaker is not safe.

The Angry Mom

- Mom of a four year old boy… her main concerns are about behavior.
- Whenever mom disciplines her son, he laughs at her.
- As mom describes how frustrating she thinks this behavior is, you can see the veins popping out of her neck…

Understanding Developmental Stages

- I asked mom why she thought he was laughing.
  - Mom has a history of verbal abuse… she interpreted her son's laughing as humiliation.
  - After a minute or two, the boy would always apologize and say "sorry, mommy."
- I asked if maybe she thought he laughed because he was embarrassed… her shoulders immediately dropped.
- We then talked about ways to center herself when needing to correct his behavior… take a deep breath, remind yourself why you're doing the correction, and focus on your goal.

Punchlines

- Understanding your kid's development keeps people from misinterpreting their reactions.
  - Toddlers aren't mean, stubborn, selfish, etc.

- Help parents understand that "kids do well when they can."

Validating the Experiences

- When survivors said that they had been listened to with compassion they were 2.9 times more likely to report being mostly or completely healed.
- When survivors believed that people understood the impact of trauma on their lives they were 2.2 times more likely to report being mostly or completely healed.
- When survivors believed that people knew how to help them heal they were 2.3 times more likely to report being mostly or completely healed

From: Survivor Voices Study, 2009 & 2011, Trauma Healing Project, Eugene, OR

Simply asking makes a difference

Asking the follow up question, "How did that affect you later in life?"

- **Decreased primary care visits** (35%)
- **Decreased ER** visits (11%)
- Decreased hospitalizations (3%)

- Fellitti/Anda ; Lanius Vermetten Book Chapter

Modifiable Resilience Factors in Pediatrics

- Positive appraisal style and executive function skills
- Responsive / positive parenting skill building
- Treating maternal mental health problems
- Self-care skills and routines
- Enhancing trauma understanding

Traub & Boynton-Jarrett, Pediatrics 2017

Common Factors Approach: HELLPPP

- **Hope:** Increase the family's hopefulness by describing your realistic expectations for improvement and reinforcing the strengths and assets you see in the child and family.
- **Empathy:** Communicate empathy by listening attentively.
- **Language:** Use the child or family's own language to reflect your understanding of the problem.
- **Loyalty:** Communicate loyalty to the family by expressing your support and your commitment to help.
- **Permission:** Ask the family's permission for you to ask more in-depth questions or make suggestions for further evaluation or management.
- **Partnership:** Partner with the child and family to find agreement on achievable steps that are aligned with the family's motivation.
- **Plan:** Establish a plan (or incremental first step).

The worst clinical visit I've ever had…

- 15 year old who is doing "everything wrong" comes in for a well visit
  - Truancy – being kicked out of the "last ditch" high school
  - Violent fights with mom
  - Unprotected sex with her "boyfriend" who is 26
  - Meth, marijuana, cocaine
- After figuring out this history, I ask her if she has any goals
- Her response: "you think I'm having unprotected sex because I don't have any goals? You're an a$$@*&!"

After the shock wore off…

- My initial instinct?

- She reported her ACE score as 5.
  - Father is out of the picture after going to j[illegible].
  - Verbal abuse, emotional neglect were part of her perception.
- My instinct now?
- Discussion about coping strategies, and boosting her sense of competence.

"It's hard to get enough of something that *almost* works."

- V. Fellitti

And the next visit?

- She had transferred to a Gateway program at our community college.
- She had stopped all drugs except marijuana.
- She ditched her much-older boyfriend.

- When I asked her what had changed…

"The kids at that last school were losers… they didn't have any goals."

So What's the Best Tool?

It doesn't really matter much…

The Quietly Failing Teen

- 12 year old male in for a well visit… first time with this office.
- Mom concerned that his grades are slipping: he used to be a B student, now C-D student.
- In a new school this year, patient cries when talking about how he has made no friends.
- Not disruptive in the classroom.
- Past history of anxiety.
- No thoughts of self-harm.

What if…

- Father is in jail?
- Both parents have a history of substance abuse?
- Parents are divorced?
- Mother has a history of anxiety and depression and "can't get on the right medications"?
- Used to live with his grandmother, but now that mom "has her act together" he has moved across town and not only is in a new school but also is no longer allowed to talk with his grandmother?
- **ACE score: at least 4…**

Factors in Resiliency: The 7 C's

- Connection
- Confidence
- Competence
- Character
- Coping
- Control
- Contribution

Addressing Some of the 7 C's

- **Connection**: Big Brother, school counselor, other mentoring programs.
- Asking about his strengths, interests and passions assesses **Competence** and **Confidence**:
  - Really likes skateboarding… Boys & Girls Club has competitions…
- **Coping**: exercise, meditation, Youth Contact for counseling.

Punchlines

- Screening for ACEs in ANY context in our practice has made us aware of ACEs in ALL contexts.
- This fundamental culture shift towards Trauma-Informed Care changes how we view patients and their problems.

- Our needs as health care providers are extending beyond what our clinic can provide on its own…

Questions to Ponder

Next steps, frameshifts, clinical dilemmas, and deep thoughts

Stories that still need to be told… our next research questions:

1. What role does parental resilience play in buffering their child's developmental risk?
2. Does the conversation about trauma (and the process of assessing parental ACEs) mediate developmental risk?
3. Can a primary care provider intervene? Specifically, can a PCP teach attachment / attunement interventions in the course of a well visit to reduce developmental risk and improve parental resilience?
4. How does the conversation about toxic stress change the relationship between parents and their pediatrician?

Implications for primary care: The thoughts that keep me up at night…

- How does our approach to developmental surveillance, promotion and screening change?
  - Screening alone is insufficient…
  - How do we best bolster our developmental promotion efforts? Can this be tailored based on family risk?
  - How do we perceive, treat, follow up with families who miss well visits, early intervention intakes, etc.?
- How do we best assess, promote, and repair (when necessary) attachment in practice?
- At what points do we formally assess / screen for social emotional delays… and what do we do with those results, given the paucity of resources?

How else can we apply these learnings to prevention?

- Given what we know about risks to development and mental / behavioral health:
  - How does primary care, with the support of our mental health colleagues, approach mental health prevention?
  - What is the role of mental health in promoting and supporting social emotional development?
  - Can we transform primary care enough to be able to promote Kindergarten readiness as a cross-sector, multidisciplinary effort?

The Ultimate (short term) Outcome

- How do we use our knowledge of ACEs in children and in parents to support and promote Kindergarten Readiness?

The future…

From Nadine Burke-Harris: Where do you want to be in 30 years?

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