

Screening for Adverse Childhood Experiences in the Pediatric Primary Care Setting: *Practical Considerations and Lessons Learned*

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Illinois ACEs Response Collaborative Webinar

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Outline



ACEs Screening in Pediatric Primary Care

Rationale

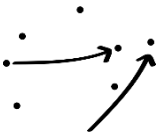
Controversy



Our Experience

Addressing Social Key (ASK) Questions for Health Study

Lessons Learned



Practical Considerations



Future of Screening & Opportunities for Collaboration

Kavitha Selvaraj, MD, MPH, MAEd, FAAP



- Attending Physician, Ann & Robert H. Lurie Children's Hospital of Chicago
- Chief Fellow, Academic General Pediatrics and Primary Care
- Instructor, Northwestern University Feinberg School of Medicine
- Core Faculty, NUFSM Pediatric Clerkship

My Path to Discovering ACEs

2006 – BA with Honors, *Biological Sciences*

State-certified sexual assault & domestic violence crisis counselor for Chicago's South and West Sides



2008 – MAEd, *Secondary Science Education*

7th grade biology & health teacher through Teach for America in South Los Angeles



2012 – MD



2015 – Residency, *Pediatrics*



2017 – MPH



2018 – Fellowship, *Academic General Pediatrics*





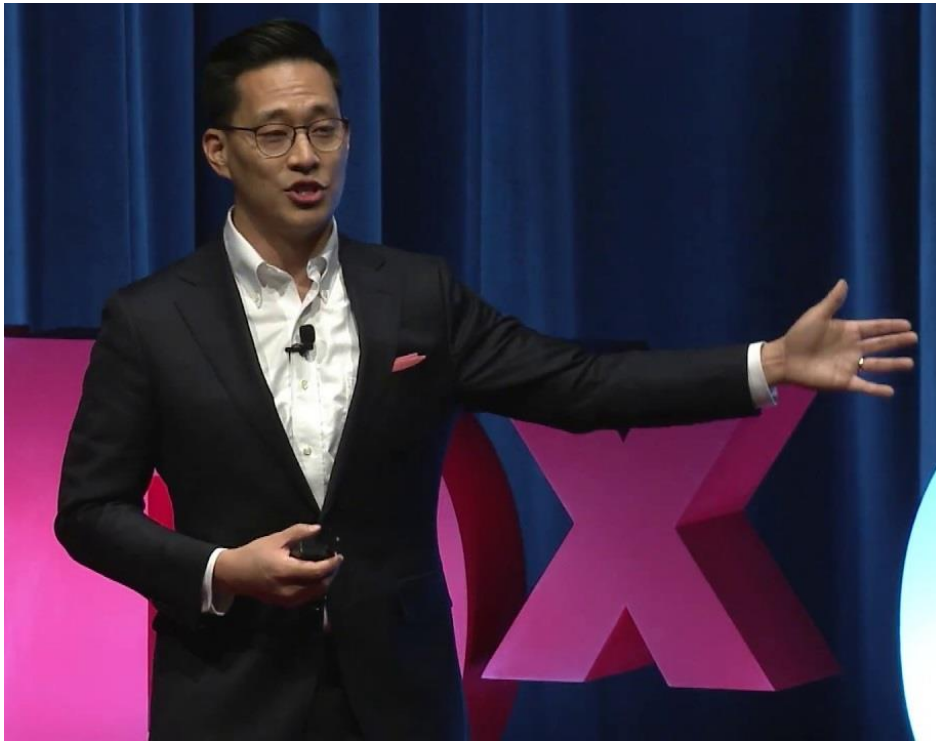
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- Attending Physician, Family Medicine & Integrative Medicine
- Clinical Assistant Professor, UIC
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- Attending Physician, Internal Medicine & Pediatrics
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- MPH Candidate, Northwestern

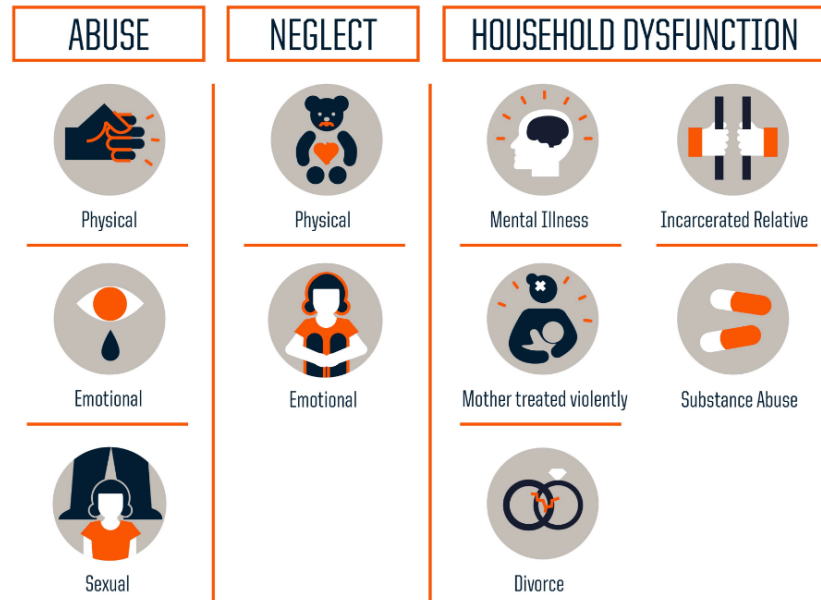
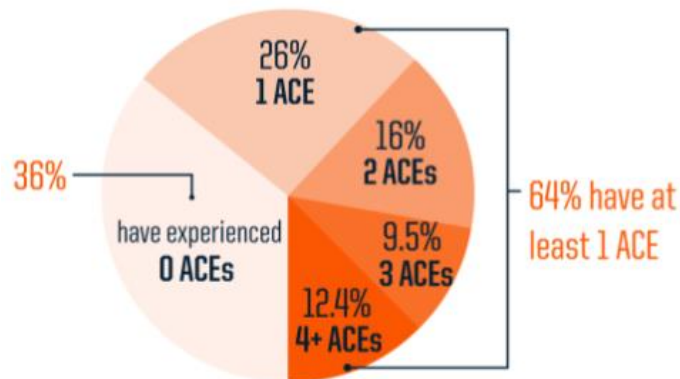


ACEs Screening in Primary Care

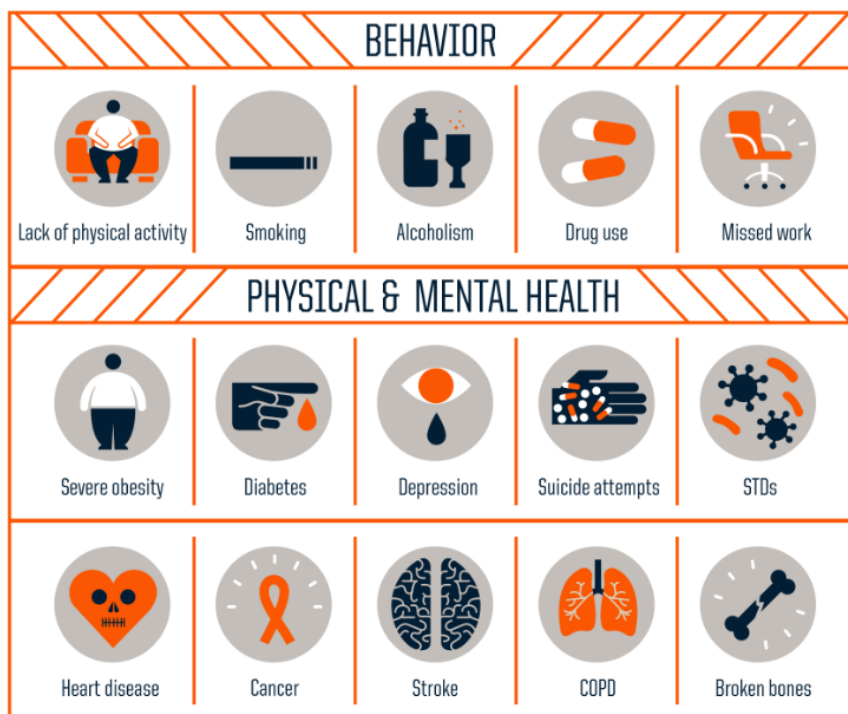
Rationale

ACEs Prevalence in Adults

- CDC/Kaiser cross-sectional study in 1995-1997
 - 17,000 adults, mostly Caucasian and higher SES
- Survey about childhood trauma and current health



Adult Health Outcomes of ACEs



Dose-dependent response

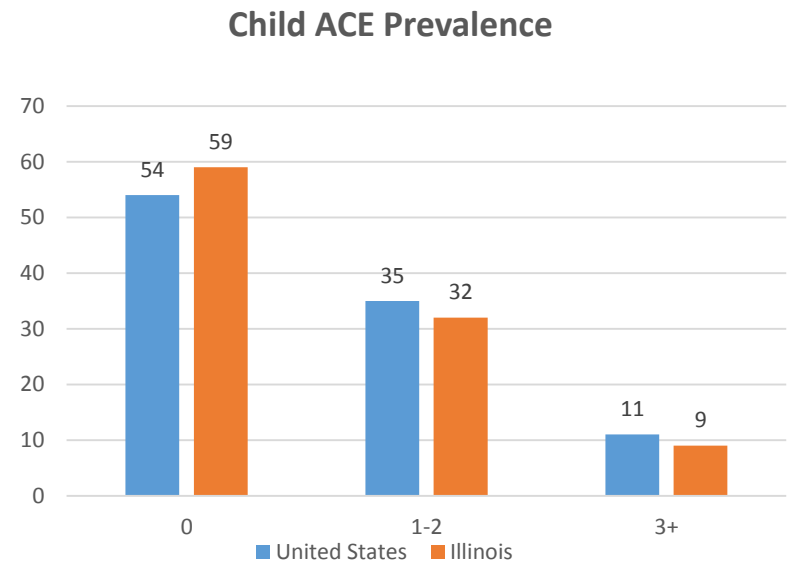
Odds Ratios for 4+ ACE (vs 0 ACE):

- 2x ischemic heart disease
- 2x cancer
- 7x alcoholism
- 10x intravenous drug abuse
- 12x suicide attempts

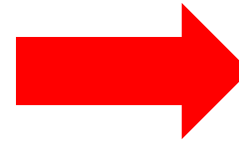
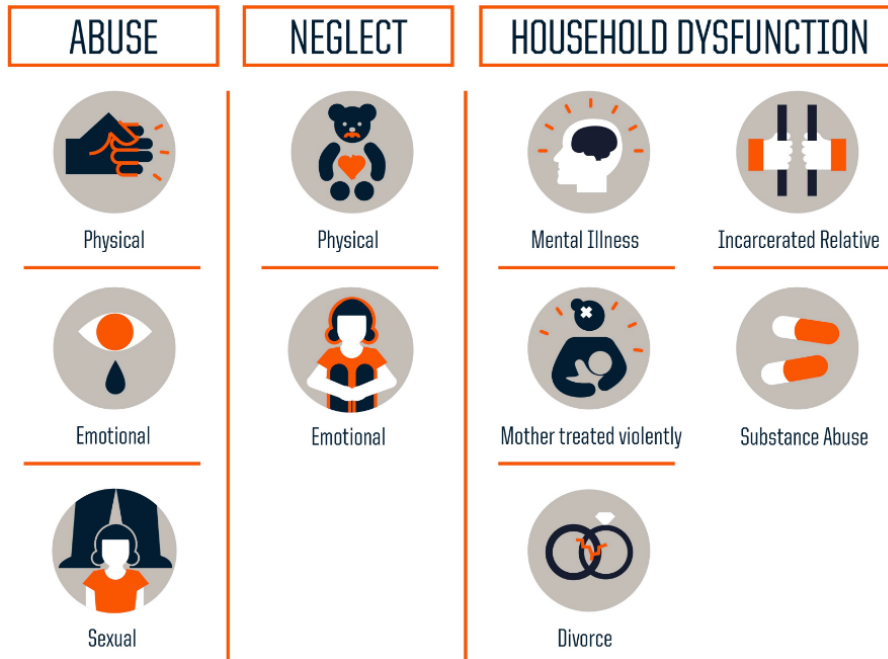
People with 6+ ACE had a 20 year decrease in life span!!!

ACEs Prevalence in Children

- National Survey of Children's Health, 2011-2012
- 95,677 Random Phone Interviews of Parents with Children 0-17 years old
- Asked about:
 - Parental mental illness
 - Parental substance abuse
 - Parental divorce
 - Parental death
 - Household member incarcerated
 - Child witnessed neighborhood violence
 - Child witnessed adult treated violently
 - Child treated violently
 - Economic hardship



Child Health Outcomes of ACEs



Child Health Outcomes

- Obesity
- Hypertension
- Developmental delay
- Cognitive impairment
- Psychosomatic concerns
- Substance abuse
- Teen pregnancy
- Juvenile incarceration
- Mental health disorders
- Suicide attempts
- Uncontrolled chronic disease

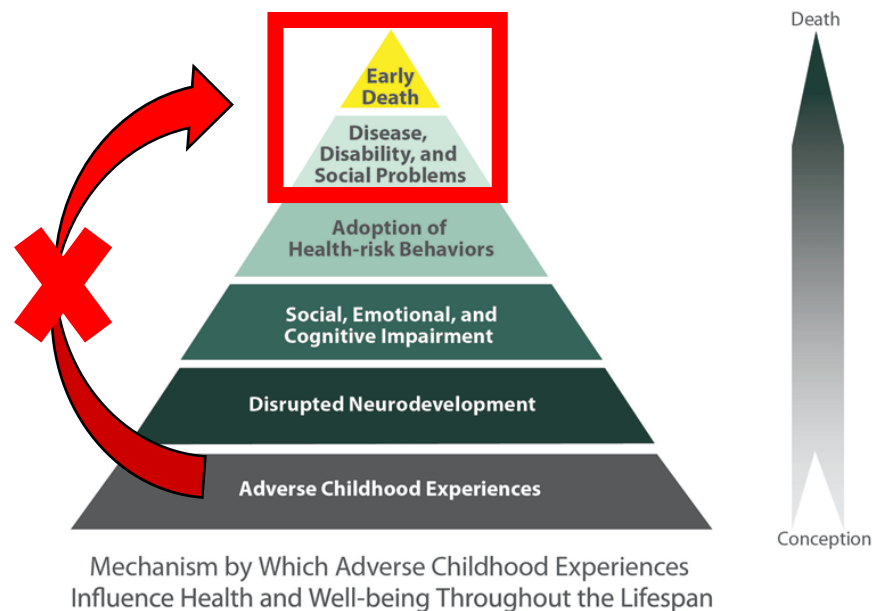
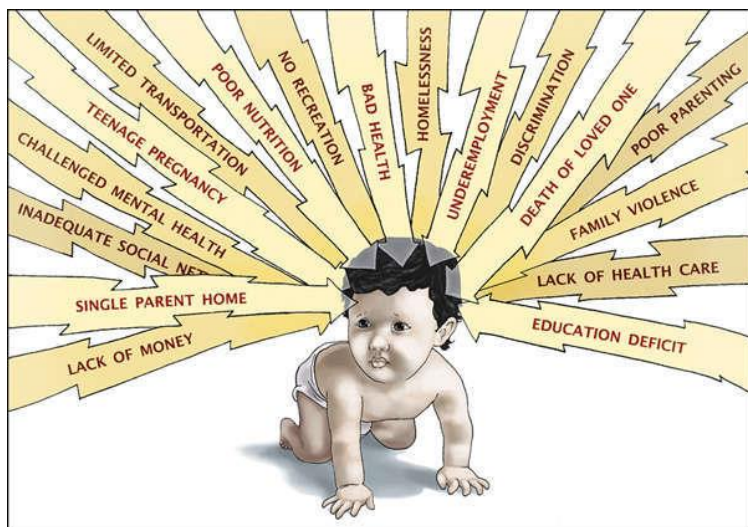
What Does Child Toxic Stress Look Like?

- Overeating or undereating
 - Obesity and related co-morbidities
- Developmental delay or regression (bed wetting)
- Sleep disturbances
- Psychosomatic complaints: headache, stomachache
- School avoidance and truancy
- Inattention, hyperactivity, academic underachievement
 - Mimics ADHD
- Feeling sad, anxious, or hypervigilant
 - Overlaps with depression, anxiety, and PTSD
- Social withdrawal, isolation
- Behavioral outbursts, irritability, mood swings
- Risk taking behaviors – smoking, alcohol, drugs, sex
 - Teen pregnancy, preventable injuries
- Uncontrolled chronic disease (asthma, diabetes, hypertension)

...anything and everything.



Early ACEs Identification Helps!



Not every child with ACEs will have significant dysfunction.

Early identification and intervention can reduce the risk of unhealthy behaviors, disease, and death.

The American Academy of Pediatrics Endorses Screening

American Academy
of Pediatrics



DEDICATED TO THE HEALTH OF ALL CHILDREN®

Organizational Principles to Guide and Define the Child
Health Care System and/or Improve the Health of all Children

POLICY STATEMENT

Early Childhood Adversity, Toxic Stress, and the Role of the Pediatrician: Translating Developmental Science Into Lifelong Health

Within this highly variable and multi-dimensional context, the AAP and others have encouraged pediatric providers to develop a screening schedule that uses age-appropriate, standardized tools to identify risk factors that are highly prevalent or relevant to their particular practice setting.^{29,66,67}



ACEs Screening in Primary Care

Controversy

WHO Principles of Screening as they relate to child ACEs

1. the condition should be an important health problem - **YES**
2. there should be a recognizable latent or early symptomatic stage - **YES**
3. the natural history of the condition, including development from latent to declared disease, should be adequately understood – **SOMEWHAT YES**
4. there should be an accepted treatment for patients with recognized disease - **NO**
5. there should be a suitable test or examination that has a high level of accuracy - **NO**
6. the test should be acceptable to the population - **UNKNOWN**
7. there should be an agreed policy on whom to treat as patients - **NO**
8. facilities for diagnosis and treatment should be available - **NO**
9. the cost of screening (including diagnosis and treatment of patients diagnosed) should be economically balanced in relation to possible expenditure on medical care as a whole - **UNKNOWN**
10. screening should be a continuing process and not a 'once and for all' project. - **YES**

Avoiding the Unintended Consequences of Screening for Social Determinants of Health

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Department of
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University School of
Medicine, Boston
Medical Center, Boston,
Massachusetts.

Screening for social determinants of health, which are the health-related social circumstances (eg, food insecurity and inadequate or unstable housing) in which people live and work, has gained momentum as evidenced by the recent Centers for Medicare & Medicaid Services innovation initiative of \$157 million toward creation of accountable health communities.¹ Funding

(ment) requires effective care coordination and cross-sector collaboration. The relatively few exemplary, evidence-based models (eg, WE CARE, Health Leads, Project DULCE, Safe Environment for Every Kid, Help Me Grow) that use such strategies are limited in scope and reach and must be expanded to address the needs of diverse patient populations.⁶

“Screening for any condition in isolation without the capacity to ensure referral and linkage to appropriate treatment is ineffective and, arguably, unethical.”

Argument 1:

We Don't Know Exactly What To Screen For Yet

- Screening questions are still in flux
 - Original 10 ACEs were chosen somewhat arbitrarily
 - Newer/as of yet unknown ACEs may be more relevant
 - Bullying, witnessing neighborhood violence, life-threatening illness
 - ACE burden may change over time
 - Parental divorce is not as strongly linked to negative health outcomes now as it was 20 years ago
- No age-specific guidelines
 - Do we ask the same questions to parents of 1-year-olds and 17-year-olds?
- When should the child/teen start answering the screen?
- Should we screen for parental ACEs with or instead of child ACEs?
- Validated screening tools work in research settings but may not work in a real-world busy clinic

Argument 2:

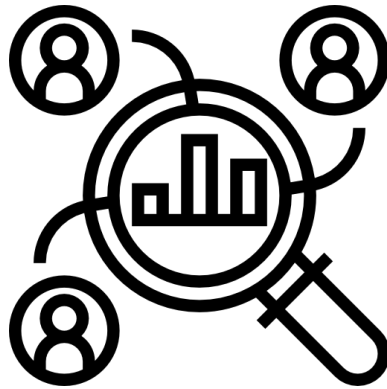
Screening May Cause More Harm Than Good

- Expensive and time-intensive to train staff
- Underdiagnosis or overdiagnosis
- Undertreatment or overtreatment
- Patient may feel stigmatized which could disrupt patient-doctor relationship
- Burden on mental health system is already too high
- Real or potential involvement of Department of Child And Family Services (DCFS) may lead to families avoiding the medical home

Argument 3:

We Don't Have Solid Interventions Yet

- Screening should only be performed when we have **proven** interventions that reduce harm
- Evidence-based interventions for high child ACEs:
 - Are in the early stages of development (ie trauma-informed cognitive behavioral therapy)
 - Are not widely available or practiced by most behavioral health specialists
- Disclosure of ACEs may itself be therapeutic, but this is a theoretical benefit



Our Experience

The ASK Questions for Health Study

The Problem

- Pediatricians under-identify toxic stress risk factors
 - ACEs
 - Unmet social needs (USNs) – food, housing, childcare, etc
- No studies have examined feasibility and efficacy of universal toxic stress screening in pediatric primary care
- No validated screening tool assesses for both ACEs + USNs
 - WE CARE Screening for USN, SEEK Screening for ACE

Objectives

1. Determine the prevalence of toxic stress risk factors (USNs + ACEs) with universal screening using the Addressing Social Key (ASK) Questions for Health Questionnaire.
2. Determine referral rates to community resources before and after implementation of ASK screening.
3. Determine feasibility and families' acceptance of ASK screening.

Setting, Population, and Study Period

- Setting
 - Four academic pediatric primary care clinics in Chicago
- Patient Population
 - Age < 18 years
 - Urban
 - Racially diverse
 - Medicaid recipients
- Study Period
 - August 2016 – February 2017



Study Design: Two Components

- Clinical Initiative

- To identify and address toxic stress risk factors
- To integrate a **novel screening tool** for toxic stress risk factors into well child visits
- To increase **referral to community resources** for toxic stress risk factors

- Research Study

- To determine characteristics of children with greater chance of having toxic stress risk factors
- To determine feasibility and **families' acceptance** of the new clinical initiative

***Underlined** – addresses WHO screening principles not yet studied for ACEs

Study Design: Clinical Initiative

- Multidisciplinary team developed the ASK Questionnaire
 - Novel 13-item screening tool for toxic stress (USNs + ACEs)
- Social workers from each site developed 13 topic-specific community resource lists corresponding to each ASK question
- Toxic stress training was provided to clinicians, social workers, and clinic staff members
- Protocols were developed for:
 - Distributing the ASK to families
 - Clinician assessment, counseling, and referral

Study Design: Clinical Protocol

- Families receive the ASK Questionnaire upon check-in
 - Well child visits for children 0-17 years (excluding newborn visit)
 - Accompanied by a parent or legal guardian
 - Caregiver spoke English or Spanish comfortably
- Families complete questionnaire in waiting room

Study Design: Clinical Protocol

- Clinicians review ASK results during well child visit
- For all screens, clinicians initial questionnaire
- For positive screens, clinicians:
 - Refer to community resources using the question-specific resource lists
 - **CHICAGO RESOURCES AVAILABLE AT: <http://www.askproject.org/>**
 - Consult social work if necessary

ASK Website

The screenshot shows the ASK Project at CHUI website. At the top left, the URL www.askproject.org is visible. The main heading is "ASK Project at CHUI". Below this is a navigation bar with five tabs: "HOME", "HOUSING SUPPORT", "FOOD SUPPORT", "BEHAVIORAL HEALTH & SUBSTANCE ABUSE", and "TRAUMA-INFORMED SUPPORT". The "HOME" tab is currently selected. Below the navigation bar, there is a prompt: "Select a question below to be directed to the appropriate resource handouts, based on responses to ASK questionnaire". A list of 12 numbered questions follows, each with a link to resource handouts in English or Spanish. To the right of this list, under the heading "Other information/resources", there are two additional links: "ASK training powerpoint" and "Guardianship Support".

www.askproject.org

ASK Project at CHUI

[HOME](#) [HOUSING SUPPORT](#) [FOOD SUPPORT](#) [BEHAVIORAL HEALTH & SUBSTANCE ABUSE](#) [TRAUMA-INFORMED SUPPORT](#)

Select a question below to be directed to the appropriate resource handouts, based on responses to ASK questionnaire

1. [High school degree or GED info](#) in [English](#) | [Spanish](#)
2. [Job info](#) in [English](#) | [Spanish](#)
3. [Childcare Support](#) in [English](#) | [Spanish](#) OR [Before/After School](#) in [English](#) | [Spanish](#)
4. [Food Support](#)
5. [Housing](#) OR [Utility Assistance](#)
6. [Legal Assistance](#)
7. [Grief/Loss Support](#) in [English](#) | [Spanish](#)
8. [Behavioral Health & Substance Abuse](#)
9. [Bullying Support](#) in [English](#) | [Spanish](#)
10. [Community Violence Support](#) in [English](#) | [Spanish](#)
- 11 & 12. [Child Abuse/Neglect](#) OR [Other Trauma](#)

Other information/resources

1. [ASK training powerpoint](#)
2. [Guardianship Support](#)

Study Design: Research Protocol

- Families
 - Upon check-in, families were invited to participate in a research study to evaluate new ASK Questionnaire
 - If yes, family filled out demographic and family satisfaction surveys
- Clinic Staff
 - Clinicians, nurses, MAs, social workers, and front desk clerks
 - Completed online survey about their ASK screening experience at the end of the study
- IRB approval was obtained at each institution

Data Collection

- Demographics
- Prevalence of USNs, ACEs, parental ACEs
- Referrals before and after ASK implementation
- Survey information about satisfaction with ASK screening
 - Family (study patients only)
 - Clinicians
 - Social workers
 - Clinic staff

Statistics

- Frequency distributions
- Chi-square tests
- Poisson regression
- Wilcoxon rank-sum test

Results, Part 1

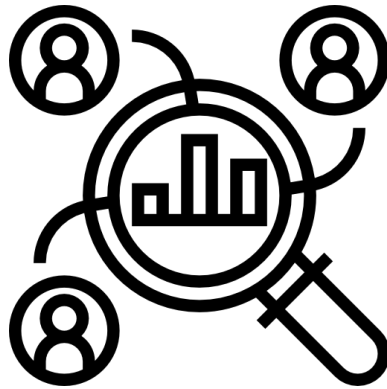
- Nearly 2600 families completed an ASK Questionnaire, representing a little more than half of eligible well-child visits
- Most were English-speaking, ethnic minorities, and had public insurance.
- Half of families had at least one risk factor for toxic stress

Results, Part 2

- Most stressors reported by families were USNs
- Very few families disclosed child ACEs; almost none disclosed parental ACEs
- Male, African-American, Hispanic, and publicly insured patients were more likely to report at least one stressor

Results, Part 3

- ~10% of visits led to at least 1 community referral
 - Parental unemployment, housing/bills, bullying
- Community referrals increased >5x after implementing screening
- Most families had a positive experience with the screening process and wanted clinic to continue screening



Our Experience

Lessons Learned

Conclusions

- Universal screening identified and improved referrals for family needs.
- Prevalence of USNs was consistent with prior studies.
- ASK Questionnaire is unsuccessful in identifying child or parental ACEs.
- Screening was acceptable to families and feasible to implement in the busy clinic setting.

Strengths and Limitations

- Strengths

- Multi-center design with large sample size
- Study design reflects “real world” implementation
- ASK Questionnaire adapted from the literature
- Implementation protocol reflected multi-disciplinary perspectives

- Limitations

- No control group
- Sub-optimal rate of ASK questionnaire distribution
- Relied on self-report data

Lesson 1: It Takes a Long Time to Set Up an ACEs Screening Protocol

- Our group first met in April 2015 to discuss screening, and we started screening in clinics in July 2016
- Need time to:
 - Identify colleagues to spearhead this with you
 - Look into/decide on a screening tool
 - Identify community resources that are accessible, affordable, and address your screening items
 - Train your entire clinic staff
 - Incorporate it into clinical flow

Lesson 2: Choose Your Team Wisely

- This is time-intensive, and you WILL hit road blocks along the way.
- Choose collaborators who are passionate about the topic, challenge you to think creatively, and are willing to put in the work
- We came together from 4 competing organizations to fulfill 1 common mission, and we are stronger for that
- This is especially important if you're doing this work without additional funding/support (like we did!)

Lesson 3: Train Everyone

- Make your whole clinic trauma-informed and train everyone on ACEs!
 - Clinicians, medical assistants, nurses, social workers, front desk staff, security staff
- Each person interact with patients in different capacities
 - Family might be more comfortable talking about this to an MA they've known for a long time
 - Front desk staff or security guards may need to de-escalate charged situations resulting from high parental ACEs

Lesson 4: Re-Train Regularly

- People may be excited about screening at first, but they may forget as time goes on
- Re-train your staff regularly to:
 - Identify and address staff concerns early and often
 - Keep momentum going
 - Train people who missed your original training

Lesson 5: Survey Burden Is Real

- Be cognizant of how many papers you're asking a family to fill out at once
 - ACEs screening
 - Post partum depression screening
 - Developmental screening
 - Autism screening
 - Teenage depression screening
 - Insurance forms
 - HIPAA forms
 - Consent forms
- Try to stagger your screenings so that parents only have to fill out 1-2 medical forms per visit
- Helps medical staff work flow + parents

Lesson 6: Make Sure You're Managing Positive Screens

- Have a mechanism in place to know that families who disclose ACEs or request help have their concerns addressed
- It is unethical to screen for a problem and then do nothing about it
 - May cause distrust in medical system

Lesson 7: Framing Is Everything

- Families want to know why you're asking them these very personal questions
- Emphasize that your screening is routinely done with all patients because you know that these questions are related to their health
- Point of screening is to help, not to pry.
- Parents want to know that you're asking genuinely to help, not to check off a box
- Be clear about what you will do with their information – families are very worried about this!

Lesson 8: Keep Asking

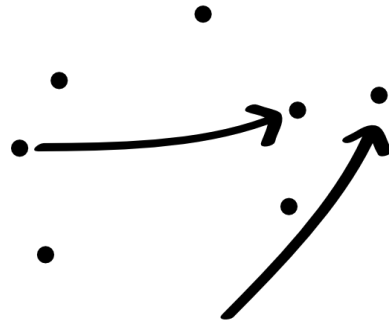
- Even though parents didn't disclose their child's ACEs, they were happy we asked the questions
- Parents have shared that they would disclose family ACEs to their pediatrician instead of their own physician
- Parents might need several opportunities before to disclose an ACE
- Screening sends out a message that your clinic is a place they can turn to if they need help, even if they're ok at the moment

Lesson 9: Form Partnerships Outside Your Setting

- Get to know the community partners you're referring to
- Might expedite referrals/appointment times
- Have a go-to contact person at the organization for questions

Lesson 10: You Don't Need \$\$ To Do This, But It Sure Could Help

- We did this at 4 institutions with no funding
- It's doable, but it's nice to have money if you can get it!
 - Ensure screens are followed up on
 - Help patients navigate referrals
 - Call families to check in between clinic visits



Practical Considerations

What Are You Going To Ask About?

- Ask about issues that are common in your population
- Don't need to ask all 10 original ACEs
 - Consider the expanded ACEs
- Decide whether you will ask:
 - Whether the child experienced the ACE at all
 - Whether the family wants help with the ACE exposure
 - This is probably more important to ask!
 - Both

Start Small

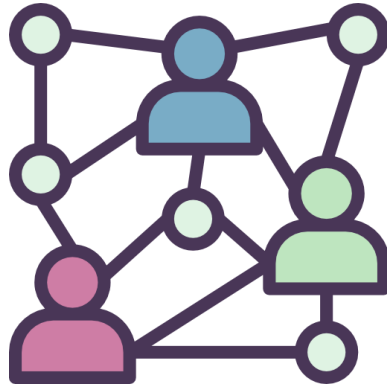
- Instead of screening for all 10 ACEs at once, considering starting with just 1 or 2 questions that are the most relevant to your population
- Add more questions slowly as you incorporate the screening into your work flow

Highlight the Family Strengths

- These conversations can be hard
- Highlight the family/child strengths to end the visit on a positive note
- Parental and social support is the most important protective factor against toxic stress

Screen Everyone

- Targeted screening based on income, class, race, etc is not advised
- You never know who is going through these issues
- Not everyone 'at risk' is having problems



Future of Screening & Opportunities for Collaboration

ASK Short-Term Directions

- Determine parental utilization and satisfaction of community referrals by conducting follow-up telephone interviews
- Revise ASK questionnaire using semi-structured parent interviews to identify barriers to ACEs disclosure and to improve identification of ACE

ASK Long-Term Directions

- Conduct a validation study of the revised ASK questionnaire at expanded sites
- Identify whether early identification and treatment of ACEs improves short and long-term health outcomes

Future of Screening

- Research on prevalence and outcomes of ACEs exist
- Need new research on:
 - Validated screening tools
 - EFFECTIVE TREATMENT models
- Need massive education efforts in all sectors to raise awareness of the impact of ACEs to come up with multidisciplinary solutions

We Can't Do This Alone

- The impact of ACEs stretches across many settings:
 - Homes
 - Neighborhoods
 - Clinics and hospitals
 - Mental health organizations
 - Schools
 - Community organizations
 - Police force
 - Juvenile incarceration centers
- We need to work together to build trauma-informed communities

Pediatrician-Teacher Partnerships

What's the Punchline?: Promoting Child and Teacher Resilience Through Pediatrician-Teacher Partnerships

Kavitha Selvaraj, MD, MPH, MAEd

The Editorial Board of the Section on Pediatric Trainees Monthly Feature is proud to feature an article by Dr Kavitha Selvaraj, who suggests that the effects of toxic stress can be combated through the development of physician-teacher partnerships. Her article concluded our series of featured essays on the Advocacy Campaign for 2016-2017.

Catherine Spaulding, MD, Editor,
Pediatrics, SOPT Monthly Feature

I first learned about toxic stress the day my student “J” punched me in the face.

the dean’s office, and the crowd dispersed. I stood there a moment longer, my cheek throbbing and my ego even more wounded, in shock at what had just occurred.

After finding an ice pack for my swollen face, I dialed the number for J’s mother. To my surprise, the call was answered by a substance abuse rehabilitation facility. After hearing about the morning’s events, she mumbled, “So what?” and hung up the phone. I was instantly worried. Who was taking



Division of Academic General Pediatrics and Primary Care, UNC

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