Early Brain and Child Development Series

- Building Better Brains - Core Story of EBCD
- Toxic Stress - Why Environment Matters
- Adverse Childhood Experiences - What Happens Early can Change Lives
- Supporting Parents and Cultivating Community Relationships
- EBCD Advocacy - An Opportunity to Change Childhood Outcomes
Supporting Parents and Cultivating Community Relationships

Katherine TeKolste, MD

November 3, 2014
Objectives

• Brief review of brain development and stressors
• Identify some of the strategies that improve resilience of children and families
• Identify interventions that support families and communities in Washington State
Core Concepts of Development

- Brains are built over time, from the prenatal period through adulthood.
- Neural circuits are wired in a bottom-up sequence.
  - Simple circuits scaffold more advanced circuits
- The capacity for change decreases with age.
Core Concepts Review

“The first 1000 days are vital to long-term health...That period can permanently affect everything from a child’s chances of developing diabetes or having a heart attack in old age, to their future weight and life expectancy.”
Early Years are Critical!

- Early relationships, environments and experiences affect all aspects of a child’s development
- **Toxic stress** has a negative impact on a child’s development
- **Significant adversity** can create biological ‘memories’ that can undermine stress responses and affect lifelong health and wellbeing
Positive
Brief increases in heart rate, mild elevations in stress hormone levels.

Tolerable
Serious, temporary stress responses, buffered by supportive relationships.

Toxic
Prolonged activation of stress response systems in the absence of protective relationships.
Positive parenting and nurturing emerging social, emotional, and language skills buffers toxic stress and builds resilience by promoting healthy, adaptive coping skills.
ACEs are Common

<table>
<thead>
<tr>
<th>ACE Score</th>
<th>Prevalence</th>
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<tbody>
<tr>
<td>0</td>
<td>33%</td>
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<tr>
<td>1</td>
<td>26%</td>
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<td>2</td>
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<td>3</td>
<td>10%</td>
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<td>4 or more</td>
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Trauma “Dose” = Number of individual types of ACEs
ACEs and Developmental Delay

- Physical, sexual or emotional abuse
- Physical or emotional neglect
- Household mental illness
- Living in a household with substance abuse
- Having a parent/caregiver divorce or separate
- Exposure to domestic violence
- Living in a household where a member was or has been incarcerated
Its not just ACEs: Family Income

Achievement Gap as Children Enter Kindergarten

Brain’s Capacity to Change

Spending on Programs to “Change the Brain”

Age 0  3  6  12  20

- Mental Health - Juvenile Justice
- Headstart - Public Education - Substance Abuse Tx
Strengthening Systems

Addressing the social determinants of health
Stimulating experiences
Health-promoting environments
Optimizing the Future of Child Health

**Today:**
- Breakthroughs in molecular genetics and biology
  - Mental illness
  - Substance abuse
  - Violence
- Improved recognition and treatment of:
  - Mental illness
  - Substance abuse
  - Domestic violence
  - Child abuse

**As it Could Be:**
- Mass education about child development & parenting
  - Media
  - Schools
- Documenting the societal burden of child health as it stands today
- Routine screening for trauma

*New directions in prevention and treatment*
Tasks

• Promote positive parenting, development-enhancing activities and supportive relationships for families
• Screen for families at risk
• Minimize toxic stress (ACEs, poverty, environment, food insecurity, neighborhood violence)
• Provide an environment for healthy development (safe neighborhoods, access to parks and services, toxins, disease prevention, media effects, optimal nutrition)
All, Some, Few

Using A Public Health Approach to Building Healthy Brains

Social-Emotional Safety Nets

Universal Primary
Preventions
Anticipatory guidance
Consistent messaging
Social supports
Engaging communities
High Quality Childcare

Screening and Targeted Interventions
(for those "at risk")
Developmental and Risk Screening
HELP ME GROW
Home Visiting
Head Start
Parenting Education and Support
Early Intervention

Evidence-Based Treatments
(for the symptomatic)
CPP, COS, PCIT; TB-CBT; Care Coordination with EC Communities
Relationships are a ‘vital sign’

Development

– Serve and return

Reading and literacy

– Routines

– And discipline (5-10 ‘time ins’ for every time out!)

– Rhyming and playing

Rewards and praise

A small study in *Pediatrics* (Nov 2014) found about 25% of infant vocalizations received adult feedback, with the responses coming from mothers alone more than 70% of the time and from fathers alone just 6% to 12% of the time. Researchers also found fathers rarely involve themselves in baby talk unless mothers were a part of the activity.

Universal Primary Prevention

- Pediatricians/PCPs - Anticipatory guidance
  - 97% of infants and toddlers have regular access to healthcare (CDC, 2006)

- Positive Parenting
  - Triple P – Positive Parenting Program
  - Promoting First Relationships
    - Circle of Security

- Bright Futures – AAP and Community efforts
  - WA collaboration with Whatcom Co. – Head Start, tribal health, other public health venues
Bright Futures

- Child health must be viewed in its broadest context
- Healthy communities support healthy children
- Attention to health promotion activities and psychosocial factors
- Focus on child and family strengths
- Promoting mental health and child development
- Sets stage for creative models
Washington

• Goal: to identify children at risk for developmental delays and to connect them intervention services and community based programs.
  – Free developmental screening for all kids under 5 (no waiting lists or income requirements)
  – Activities and games that support healthy growth and learning
  – Community resources like parenting classes, medical clinics, and food banks
  – Referrals for further evaluation and early intervention services
Trauma-Sensitive Schools

• WA and MA – leaders; e.g. Walla Walla, Spokane, others
• WA State – 13 of every 30 students in a classroom will have toxic stress from 3 or more traumatic experiences.
  – Likely to be more “unruly”, more “unmotivated” or more absent than the others.
• With a school-wide strategy, trauma-sensitive approaches are woven into the school’s daily activities:
  – Classroom, cafeteria, halls, buses, playground
  – “This enables children to feel academically, socially, emotionally and physically safe wherever they go in the school. “
  – And when children feel safe, they can calm down and learn
WithinReach

Connecting Families

Can We Help? How WithinReach Connects Families With Basic Needs (3:40)
Home Visiting Programs

A voluntary service, designed to reach expectant parents, babies and young children, who face barriers in supporting their child’s healthy development

– Offers support and information in the home environment

– Increasing recognition of need to coordinate with other early childhood programs (e.g. Early Head Start)
Home Visiting in Washington State

• In 4 years, expanded from 4 to 36 grantees serving about 120 children to capacity for about 2,000 children statewide
  
  – DSHS First Steps
  – Nurse-Family Partnership
  – Parents as Teachers
  – Parent-Child Home Program
  – Early Head Start

About 87,000 live births annually in WA state
Early Head Start: National Evaluation Documents Strong Positive Impacts

• Positive child outcomes (at 36 months) include:
  – Larger vocabularies
  – Greater ability to solve problems and understand basic concepts
  – Higher levels of functioning
  – Better outcomes on several aspects of social emotional development

• Positive parent outcomes include:
  – Parents more likely to read to their children daily
  – Parents more positive with their child and greater repertoire of discipline strategies
Early Support for Infants and Toddlers (ESIT)

- A system of services that helps babies and toddlers with developmental delays or disabilities*
- Serve eligible children from birth through age 2
- Eligible children have an Individualized Family Service Plan (IFSP) developed by a team of professionals with the family
  - Services vary based on individual child’s needs; may include: assistive technology, audiology or hearing services, medical services, nutrition services, PT, speech therapy, psychological services, and/or counseling and training for the family
Exemplary Programs Supporting Healthy Child Development

ABCD
Assuring Better Child Health & Development

OTHERS?

DSHS First Steps
Nurse-Family Partnership
Parents as Teachers
Parent-Child Home Program
Early Head Start

American Academy of Pediatrics
DEDICATED TO THE HEALTH OF ALL CHILDREN™
Washington State is the first in the nation to have detailed information about ACE prevalence and its relationship to mental, physical, behavioral health, and other factors that affect worker performance, parenting and intergenerational transmission of trauma.
State Performance Measure 5:

Percent of households with children (0-18 yrs) in which the reporting adult has an Adverse Childhood Experience (ACE) Score of 3 or more.
A study: how communities can reduce and mitigate ACEs (www.appi-wa.org)

- Five networks around Washington State
  - The Coalition for Children & Families of North Central WA (Chelan and Douglas counties),
  - Okanogan County Community Coalition,
  - Skagit County Child & Family Consortium,
  - Walla Walla Community Network/Children's Resilience Imitative, and
  - Whatcom Family & Community Network.
DOH – ACEs Efforts
## Selected Strategies from Washington State Plans

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<th></th>
<th>WA Plan for Healthy Communities</th>
<th>Agenda for Change</th>
<th>Early Learning Plan</th>
<th>Developing Child Frontiers of Innovation</th>
<th>Rural Health Care</th>
<th>Substance Abuse Prevention and Mental Health Promotion</th>
<th>Healthiest Next Generation</th>
<th>Prevention Alliance</th>
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<td><strong>Healthy Starts</strong></td>
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<tr>
<td>Nutrition in Pregnancy and Early Childhood</td>
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<td>Developmental Screenings</td>
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<td>Promote Home Visiting Programs</td>
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<td>Establish strong caregiver-child relationships</td>
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<td>Increase community capacity to prevent ACEs</td>
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<td>Promote resiliency</td>
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<td>Build protective factors against ACEs</td>
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Examples:
Other Resources

- Health Insurance /Exchange
- Human Services
  - Advocacy and legal
  - Domestic Violence support
  - Housing
  - Recreation
- Economic Development
  - Financial literacy
  - Job resources and worker training or retraining
A THEORY OF CHANGE

Build Adult Capabilities

Improve Child Outcomes

narrated by
Jack P. Shonkoff, MD
Center on the Developing Child at Harvard University

http://www.youtube.com/watch?v=urU-a_FsS5Y
Take Home Messages

• Experiences and environment can affect how your genes work
• Healthy early development needs:
  • Appropriate nutrition
  • Stable and responsive environment with nurturing relationships
  • Safe and supportive physical, chemical and built environments
Take Home Messages

- Parents need knowledge, encouragement and support
  - Recognition of and addressing ACEs can be helpful in altering adverse life course trajectories, for parents and for children
- It takes a village to create a healthy and capable next generation
- You can be part of the solution!
LIFE IS PECULIAR...

WOULDN'T YOU LIKE TO HAVE YOUR LIFE TO LIVE OVER IF YOU KNEW WHAT YOU KNOW NOW?

WHAT DO I KNOW NOW?