The State’s Role: Using Science to Inform Program & Policies

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Objectives: *Reframe Our Thinking and Actions based on New Science*

**Toxic Stress**
- There is a stress-trauma continuum; chronic stressors can cause a response that is toxic to the developing brain with long-term negative effects; supportive relationships serve as a buffer against a toxic stress response.

**Brain Architecture**
- Brains are built through an ongoing process that begins before birth and continues into adulthood.

**Serve and Return**
- Young children serve through babbling, gestures or words and adults return by getting in sync with the child.

**Resilience Scale**
- Positive outcome is like a scale tipped to one side, it can be influenced by counterbalancing weights and by adjusting the balance point.
Optimizing Health Development: Reducing Risk & Enhancing Protective Factors

Healthy Development

- Positive Emotional Support
- Reading to Child
- Appropriate Discipline
- Health Services
- Toxic Stress
- Lack of Health Services
- Lead Exposure
- Poverty
- Toxic Stress

At Risk” Trajectory
-Delayed/Disordered ” Trajectory
-“Healthy” Trajectory

Parental resilience, social connections, knowledge, skills, co parenting relationships

Halfon with permission
Resilience Equals Relational Health
Today's Sources of Toxic Stress in Early Childhood

Adverse Childhood Experiences (ACEs)

- Poverty itself: high level of adversity & stress with limited opportunities to buffer effects
- Built-environment disadvantages
- Food Insecurity: unhealthy in-home & community food environments, poor diet quality, obesogenic feeding practices
- Associated household chaos
- Lack of meal time planning
- Maternal stress

Socioeconomic-Related Factors

- Unpredictable relationships alter both behavioral & biological pathways
- Parental toxic stress and ACEs
- Parental mental health

Parenting & Primary Caregiver Relationships
Safe, Stable, Nurturing Relationships

Without protective relationships toxic stress has a life long negative effect on the developing brain

Multiple layers of potential protective factors
The Bad News!

Toxic Stress Effects Both Developing Brains and the Ability of Parents to Provide Protective Factors

Positive Parenting Factors which Buffer the Effects of Toxic Stress

- Discipline
- Sensitivity
- Parental warmth and responsiveness
- Parent-child relationship
- Family routines
And not all individuals experience toxic stress as a result of negative experiences.
The Arkansas Story
2016 National Survey of Children’s Health: Arkansas has the highest prevalence of ACEs!

About one in three children in Arkansas have 2 or more ACEs (n=207,800)

Table 1. State and National Level Prevalence of Adverse Childhood Experiences Items Among Children, Age 0-17 yrs. 2016 NSCH

<table>
<thead>
<tr>
<th>Adverse Child or Family Experiences (ACEs) Items</th>
<th>Arkansas</th>
<th>National</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent served time in jail</td>
<td>16.0%</td>
<td>8.2%</td>
</tr>
<tr>
<td>Treated or judged unfairly due to race/ethnicity</td>
<td>3.7%</td>
<td>3.7%</td>
</tr>
<tr>
<td>Extreme economic hardship</td>
<td>31.5%</td>
<td>25.5%</td>
</tr>
<tr>
<td>Has been a victim/witness of neighborhood violence</td>
<td>5.0%</td>
<td>3.9%</td>
</tr>
<tr>
<td>Witnessed domestic violence in the home</td>
<td>9.7%</td>
<td>5.7%</td>
</tr>
<tr>
<td>Has lived with someone who was mentally ill/suicidal</td>
<td>10.2%</td>
<td>7.8%</td>
</tr>
<tr>
<td>Family disorder leading to divorce/separation</td>
<td>33.3%</td>
<td>25.0%</td>
</tr>
<tr>
<td>Death of parent</td>
<td>5.9%</td>
<td>3.3%</td>
</tr>
<tr>
<td>Has lived with someone who had an alcohol/drug problem</td>
<td>11.6%</td>
<td>9.0%</td>
</tr>
<tr>
<td>Child had &gt;1 ACEs (1/more of above items)</td>
<td>55.9%</td>
<td>46.3%</td>
</tr>
</tbody>
</table>
The Arkansas Department of Health (ADH)

- Leadership, leadership, leadership!
- Internal Awareness
  - Numerous Grand Rounds in Little Rock
  - Numerous presentations throughout the state
  - Incorporation into ADH strategic plan
  - Incorporation into Maternal Child Health (Title V) Block Grant
- Key external partners identified: Cross sectors collaboration
  - Arkansas Foundation for Medical Care (AFMC)
  - Arkansas Children’s Hospital Natural Wonders Parent Support Workgroup
  - Arkansas’s Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)
  - University of Arkansas School of Medicine
    - Departments of Family Medicine and Pediatrics
    - Psychiatric Research Institute
  - University of Arkansas School of Public Health
    - Division of Behavioral Health
- Innovation: Reframe old problems and transform existing programs
It started with the documentary Raising of America: Early Childhood and the future of our Nation (a 5 part documentary series)

Faith-based organization sponsoring new Child Care Center

Small group viewing and discussion of Raising of America

Members of small group led Sunday school sessions for one month

The church was the site for first Arkansas ACEs/Resilience Summit in 2017

www.theraisingofamerica.org
2017 Summit

110 attendees

Evaluation feedback was overwhelmingly positive
- 97% of respondents (n=47) indicated they were satisfied with the summit overall.

2018 Summit to be held September 25 and 26
Arkansas ACEs/Resilience Workgroup

- 242 individuals on the contact list members
- 150 organizations and government agencies represented
- 45 core groups (steering committee, subgroups, etc.)
- Backbone organization (Arkansas Foundation for Medical Care (AFMC): a private, nonprofit organization engaged with beneficiaries and health care providers in all settings to improve overall health and consumers’ experience of care, while reducing health care costs.
- Leadership provided by Arkansas Department of Health
- Continuous communication
- Awareness, systems and policy change, technical assistance
- Collective Impact
Join the Arkansas ACEs/Resilience Workgroup

Transforming Lives and Communities

What are ACEs?
Adverse childhood experiences are harmful events that happen during childhood. Examples include:
- Physical, emotional or sexual abuse
- Domestic violence
- Parental separation or divorce
- Household members who suffer from mental illness or substance abuse
- An incarcerated parent

Adverse community environments are social or economic issues in a neighborhood that have a negative impact on a child's well-being, such as:
- Poverty
- Violent crime
- Racial discrimination
- Poor housing quality and affordability

This “pair of ACEs” combine to create toxic stress, which forces the body into a constant state of fight or flight response. Toxic stress has a detrimental effect on the developing bodies and brains of children, increasing the likelihood of behavior problems and lack of school engagement. It also leaves kids at higher risk for chronic illness, obesity, drug addiction and mental illness later in life.

ACEs and Toxic Stress Can Affect Anyone
Exposure to ACEs cuts across all races, income and educational levels. In Arkansas, 56.5 percent of children have one or more adverse childhood experiences. As children who experience ACEs and toxic stress grow into adulthood without the benefit of protective factors, the cycle can continue with their own children.

History is Not Destiny
The problem is not insurmountable. By working together, we can prevent and heal the damage caused by ACEs. Building resilient individuals, families and communities is the key.

Join Us!
The Arkansas ACEs/Resilience Workgroup is a collaborative whose goal is to coordinate ACEs work in the state and assist communities in building resilience. We need individuals and organizations from all sectors who are interested in addressing the root causes of individual and community trauma.

For information or to join the workgroup, contact Janie Ginocchio, AFMC lead policy and program analyst, at 501-212-8644 or jginocchio@afmc.org.
Figure 1
ACEs Workgroup | Organization by Sector

Figure 2
ACEs Workgroup | Organizations by Focus
Collaboration with Arkansas Children’s Hospital

- Parent and Care Givers Support Workgroup Needs Assessment Study 2017
- Arkansas Parent Needs Assessment included ACEs
ACEs Scores of Arkansas Parents

41% of parents in ACH survey had 2 or more ACEs

Represent 141,000 (out of 345,000) Arkansan Parents with children under 18 years of age

51% of WIC parents had 2 or more ACEs (n=123)
Women, Infant, Children (WIC) special supplemental nutrition support certification: The Opportunity

- Increase protective factors
- Re-enforce parenting education done in hospital (e.g., crying baby, safe sleep, breast feeding)
- Timing: soon after discharge perhaps before seeing baby’s physician
- Opportunity to develop supportive relationship with new mother’s and identify risks to mother baby dyad (e.g., maternal depression, maternal ACEs, food insecurity, housing insecurity)
- Opportunity to support and model nurturing behavior

Add a parent support mentor (PSM) to the WIC staff whose primary role is providing support and to be available as ‘parenting’ resource for the WIC team.

PSMs will incorporate roles of current ‘breast feeding peer counselors’ and community health workers with a focus on parent support

PSMs will be trained to be able to identify social-emotional developmental risks

PSMs will be trained to use motivational interviewing and lead parent support groups
Addressing ACEs in Arkansas: A Legislative and Stakeholder Analysis of ACEs in Arkansas

Legislative Recommendations

1. Amendment of legislation to incorporate trauma-informed care, particularly in the area of criminal justice, which allows mental health professionals and law enforcement officers to collaborate in responding to emergencies.

2. Amendment of legislation to require crisis stabilization units and mental health courts to incorporate ACEs training and take a trauma-informed approach in treating participants.
Eight States Studied: Rationale

**States geographically contiguous**
+ Kentucky
+ Mississippi
+ Missouri
+ Oklahoma
# North Carolina
# South Carolina
*Tennessee

**States with high ACEs prevalence**
+ States with high ACEs prevalence

**Southern states with exemplary ACEs initiatives**
# Southern states with exemplary ACEs initiatives

1. According to the University of Arkansas for Medical Science’s (UAMS) Faith-Academic Initiatives for Transforming Health (FAITH) Network (2017) 74% of people living in Arkansas claim religion is “very important in their lives” and 50% attend church at least once a week.

2. As of 2017 there were over 7,500 religious congregations in Arkansas
<table>
<thead>
<tr>
<th>States</th>
<th>KY</th>
<th>MS</th>
<th>MO</th>
<th>MT</th>
<th>NC</th>
<th>OK</th>
<th>SC</th>
<th>TN</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 or More ACEs (%)</td>
<td>26.9</td>
<td>27.1</td>
<td>27.2</td>
<td>26.1</td>
<td>23.8</td>
<td>26.6</td>
<td>25.3</td>
<td>24.6</td>
</tr>
<tr>
<td>State Rank</td>
<td>43rd</td>
<td>45th</td>
<td>46th</td>
<td>40th</td>
<td>30th</td>
<td>42nd</td>
<td>38th</td>
<td>34th</td>
</tr>
<tr>
<td>Statewide Initiative</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Example Funding Source(s)</td>
<td>Foundation for a Healthy Kentucky</td>
<td>Assortment of Federal Grant Funds</td>
<td>Children’s Trust Fund</td>
<td>U.S. Department of Health and Human Services; Health Federation of Philadelphia; Robert Wood Johnson Foundation</td>
<td>General Assembly of NC; waive employment mandate for IAFMT parents</td>
<td>U.S. Health and Human Services; BlueCross of BlueShield of South Carolina Foundation; The Duke Endowment; S.C. Department of Social Services</td>
<td>Building Strong Brains; TN General Assembly as allocated by Governor Haslem</td>
<td></td>
</tr>
</tbody>
</table>
Arkansas’s Goal: Develop Resilient Communities to Strengthen Parent’s Protective Capability

ACEs & adverse community environments are more than a children’s health problem. The pair of ACEs impact the overall quality of life & economic development of an entire community.

Every system or organization that touches an aspect of a child’s life and family can contribute to community resilience.

ACEs and adverse community environments are issues that can be addressed with existing resources & systems

Building community resilience is about creating & strengthening a network of buffers & supports that help children, families, & whole communities to “bounce forward.”
What can communities do to reduce risk & enhance protective factors?
### Community Improvements

**Policy or Program Options: Family Structure**

<table>
<thead>
<tr>
<th>Enhance</th>
<th>Increase</th>
<th>Advocate</th>
<th>Protect</th>
<th>Reduce</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enhance access to counseling before marriage including parenting</td>
<td>Increase economic incentives for employment and child support</td>
<td>Advocate for federal and state tax policies that increase after-tax family income (e.g., expand the earned income tax credit and the child tax credit)</td>
<td>Protect child poverty programs (e.g., school lunches, Children’s Health Insurance Program)</td>
<td>Reduce incarceration for nonviolent crimes and enhance rehabilitation</td>
</tr>
</tbody>
</table>
Community Improvements
Policy or Program Options: Child Development and Parenting

Increase
- Increase access to affordable quality child care (0-3 years old)

Encourage
- Encourage preschool programs (3 year old-kindergarten)

Support
- Support robust home visiting programs

Promote
- Promote early reading programs (eg, Reach Out and Read)

Enhance
- Enhance access to parent support groups and parent trainers.
Community Improvements
Policy or Program Options:

**Schools**

**Minimize**
- Minimize residential segregation and promote inclusion

**Encourage**
- Encourage parent engagement in schools.

**Engage**
- Engage community resources/businesses as partners with schools.

**Reduce**
- Reduce suspensions and expulsions (restorative over punitive measures).

**Promote and enhance**
- Promote and enhance opportunities at community colleges.

**Require**
- Require parenting education in all high schools.
Community Improvements
Policy or Program Options:
Community

**Encourage**
- Encourage a communal sense of responsibility for each other and all kids.

**Increase and share**
- Increase and share the local social capital

**Promote**
- Promote mentoring programs.

**Support**
- Support inclusive faith communities.

**Invest in**
- Invest in neglected neighborhoods, minimizing disparities.
What can pediatricians do?

Start with early detection

Providing appropriate medical management

Coupled with enhancing protective factors, addressing modifiable risk factors + connecting to therapeutic intervention


Adapted from Bucci et al. Toxic Stress in children and adolescents. Advances in Pediatrics, 2016
What Can State Health Departments Do to Support Parenting?

Focus on Interventions that Help Mothers Develop Secure Attachment Relations with Their Infants

- Transform existing programs such as WIC to WIC Plus
- Help develop high quality affordable child care programs (which mentor new mother’s and include social, pediatric and mental health services (Abecedarian Approach) for low-resource and disadvantages families in Arkansas: Saint Luke’s Child Care and Parent Support Center
- Promote universal home visiting, start with babies who graduate from NICUs
- Support paid family leave
- Screening in WIC clinics for ACEs in parents and their children
What can State Legislators Do?: Provide Better Societal Support for Parenting in the United States

- Develop policies that help offset the financial and opportunity costs associated with raising children.

- Better support working mothers (4 in 10 households with children are supported solely or primarily by mothers’ earnings).

- Develop ways to offset the costs of raising children and decrease the incompatibility between employment and child care.

- Develop state and/or federal policies to assist employed parents. The last federal policy was the 1993 Family and Medical Leave Act.
“The enduring impact of early maternal care and the role of epigenetic modifications of the genome during critical periods in early brain development in health and disease is likely to be one of the most important discoveries in all of science that have major implications for our field.”

Allan Schore, PhD
Thank You!

Questions?

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