Adverse Childhood Experiences and Evidence-Based Home Visiting

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Laura Porter, Washington State Family Policy Council
June 16, 2011
Overview

- New evidence about the impact of Adverse Childhood Experiences on lifelong health
- Increased interest and evidence about home visiting as a strategy for improving outcomes
- How can understanding ACE improve home visiting practice?
Question for you

Are you familiar with the ACE Study findings?

Yes

No

In the feedback box on the left of your screen, indicate your answer to each question now.

If you have experience with ACE you’d like to share, use the chat box on the lower left anytime during the presentation. We’ll review your responses during the discussion.
Question for you:

Are you applying the ACE Study findings in your work?

Yes
No
ADVERSE CHILDHOOD EXPERIENCES
The Most Powerful Determinate of the Public’s Health

REDUCING ACEs - HIGH LEVERAGE
Reliably Predicts Improved Health, Safety, & Productivity, Lowers Need for High Cost Services

WASHINGTON LEADS THE NATION
ADVERSE CHILDHOOD EXPERIENCES
The Most Powerful Determinate of the Public’s Health

Abuse and Neglect
1. Child physical abuse
2. Child sexual abuse
3. Child emotional abuse
4. Neglect

Indicators of Family Dysfunction
5. Mentally ill, depressed or suicidal person in the home
6. Drug addicted or alcoholic family member
7. Witnessing domestic violence against the mother
8. Parental discord – indicated by divorce, separation, abandonment
9. Incarceration of any family member

ACE Score: the number of categories of adverse childhood experience to which a person was exposed.
ACEs INFLUENCE VIA BIOLOGIC IMPACT ON NEURODEVELOPMENT

TRAUMATIC STRESS

BRAIN
Hormones, chemicals & cellular systems prepare for a tough life in an evil world

INDIVIDUAL
• Edgy
• Hot temper
• Impulsive
• Hyper vigilant
• “Brawn over brains”

OUTCOME
Individual & species survive the worst conditions.

NEUTRAL START

BRAIN
Hormones, chemicals & cellular systems prepare for life in a benevolent world

INDIVIDUAL
• Laid back
• Relationship-oriented
• Thinks things through
• “Process over power”

OUTCOME
Individual & species live peacefully in good times; vulnerable in poor conditions.
CHRONIC DISEASE
ALCOHOL, TOBACCO, DRUGS
PSYCHIATRIC DISORDERS
IMPAIRED COGNITION
WORK/SCHOOL Attendance, Behavior, Performance
OBESITY
ALCOHOL, TOBACCO, DRUGS
RISKY SEX
CRIME
POVERTY

INTERGENERATIONAL TRANSMISSION, DISPARITY

BRAIN DEVELOPMENT
Electrical, Chemical, Cellular Mass

ADAPTATION
Hard-Wired Into Biology

CRITICAL & SENSITIVE DEVELOPMENTAL PERIODS
Early childhood, ages 7-9, Pre-puberty, Aging into adulthood

ADVERSE CHILDHOOD EXPERIENCE
MORE CATEGORIES – GREATER IMPACT
Physical Abuse, Sexual Abuse
Emotional Abuse, Neglect
Witnessing Domestic Violence
Depression/Mental Illness in Home
Incarcerated Family Member
Substance Abuse in Home
Loss of a Parent

GENETICS
Including gender – Remember that experience triggers gene expression (Epigenetics)

ACEs HAVE MANY IMPACTS THROUGHOUT THE LIFESPAN
IN THE LIVES OF WASHINGTONIANS:

**ACEs ARE COMMON**

- 38% report 0 ACE
- 62% report 1 or more ACE

**ACEs CO-OCCUR / CLUSTER**

- 26% of adults report 3 or more ACEs
- 5% of adults have 6 or more ACEs
- Among adults exposed to physical abuse, 84% reported at least 2 more ACEs
- Among adults exposed to sexual abuse, 72% reported at least 2 more ACEs
A CLASSIC CAUSAL RELATIONSHIP
MORE ACEs = MORE HEALTH PROBLEMS

*Dose-response* is a direct measure of cause & effect.

The “response”—in this case the occurrence of the health condition—is caused directly by the size of the “dose”—in this case, the number of ACE categories.
BEHAVIORAL HEALTH

Current Smoking

Risk for HIV

CHRONIC DISEASE

Diabetes

Cardio Vascular Disease
MENTAL HEALTH

≥14 of 30 Unhealthy Mental Health Days

Treatment for Mental Health Condition

DISABILITY

Missed Work ≥14 of 30 Days Due to Mental Health

Health Problems Require Special Equipment
OLDER CHILDREN - High School Sophomores and Seniors

Washington School Classroom (30 Students)
Adverse Childhood Experiences (ACEs)

- 6 students with no ACE
- 5 students with 1 ACE
- 6 students with 2 ACEs
- 3 students with 3 ACEs
- 7 students with 4 or 5 ACEs
- 3 students with 6 or more ACEs

- 58% (17) students with no exposure to physical abuse or adult to adult violence
- 29% (9) of students exposed to physical abuse or adult to adult violence
- 13% (4) of students exposed to physical abuse and adult to adult violence

Population Average
All Adults
25.5%, or 1.2m people: either or both

Women
28.6%: either or both

Among Parenting Adults, 26.1% experienced child physical and/or sexual abuse; of those, 78% have 3 or more ACEs; 29% have 6 or more ACEs

Among Parenting Women, 29.8% experienced child physical and/or sexual abuse
ACEs INFLUENCE VIA BIOLOGIC IMPACT ON NEURODEVELOPMENT

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Normal Biologic Response to Toxic Stress
Can Make Parenting Harder
ACE REDUCTION IS A WINNABLE ISSUE

HIGH CAPACITY COMMUNITIES REDUCE PERCENT OF YOUNG ADULTS WITH ≥ 3 ACEs

POSITIVE ACE TREND MEANS REDUCED CASES:

<table>
<thead>
<tr>
<th>Condition</th>
<th>Low capacity</th>
<th>High capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limited Activity (due to disability)</td>
<td>1888</td>
<td>5767</td>
</tr>
<tr>
<td>Asthma</td>
<td>2128</td>
<td></td>
</tr>
<tr>
<td>Cancer</td>
<td>2828</td>
<td></td>
</tr>
<tr>
<td>Heart Disease</td>
<td>1004</td>
<td></td>
</tr>
<tr>
<td>Missed work due to MI</td>
<td>1065</td>
<td></td>
</tr>
<tr>
<td>Mental Illness (MI)</td>
<td>3845</td>
<td></td>
</tr>
<tr>
<td>HIV</td>
<td>1264</td>
<td></td>
</tr>
<tr>
<td>Binge Drinking</td>
<td>3727</td>
<td></td>
</tr>
<tr>
<td>Smoking</td>
<td>10874</td>
<td></td>
</tr>
</tbody>
</table>

Youngest Age Cohort

ACE REDUCTION (n=1,537,995)
A large portion of many health, safety and prosperity conditions is attributable to Adverse Childhood Experience. ACE reduction reliably predicts a decrease in all of these conditions simultaneously.
National Interest in Home Visiting

- Evidence shows that when families volunteer to receive home-based support in partnership with trained professionals, their children are born healthier and are less likely to suffer from abuse or neglect.

- Public investment in quality programs not only fosters stronger families, it yields fiscal returns for states of up to $5.70 per dollar.
Federal Home Visiting Initiative

- Included in Health Care Reform legislation
- Funded at $1.5 Billion over 5 years
- Mandatory funding not subject to the annual appropriations process for 5 years
- Began October 2010. After 5 years, must be reauthorized or extended by Congress to continue.
- Allocation to each state choosing to participate based on population of children.
Critical Opportunity!

☐ This is the chance to show that home visiting makes a difference so funding will be continued.

☐ 75% of funding can only be used for programs that have been evaluated and shown to be effective.

☐ 25% can be used for promising practices that have a strong evaluation planned or in process.

☐ Data collection to show outcomes is central to the program.
What outcomes?

- A bright future begins before birth
- Stronger bonds, better lives
- A foundation for lifelong learning
- Healthy and safe at home
- Lasting benefits beyond the home

Pew Center on the States
Interventions Build on One Another

- Intervene early to reduce stress in pregnancy
- Begin development of mother-infant bond in pregnancy
- Early mother-infant relationship forms basis for development of empathy and ability to learn
- Less stressed mother and baby are more socially competent, which fosters learning and safety
- Healthy pattern of relationship and safety carries forward to relationships with others
Evidence-Based Home Visiting

- Starts in pregnancy
- Has sufficient intensity and duration to build trust
- Establishes a trusting relationship between mother and visitor – visitor keeps coming back regardless
- Models a trusting relationship for the mother to the infant
- Majority of participants identify wanting to parent differently than they were parented as a goal.
Why start in pregnancy?

Support women to improve their health practices

- Get consistent prenatal care
- Improve diet and activity
- Reduce smoking
- Reduce alcohol and drug use

Provide support to reduce the impacts of stress on the mother and the fetus
Nurse Family Partnership
Sustainable Results:

Mothers

<table>
<thead>
<tr>
<th>Verified reports of child abuse and neglect</th>
<th>79%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioral problems due to drug or alcohol use</td>
<td>44%</td>
</tr>
<tr>
<td>Arrests</td>
<td>69%</td>
</tr>
</tbody>
</table>
## Nurse Family Partnership

**Sustainable Results:**

### Adolescents

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arrests</td>
<td>54%</td>
</tr>
<tr>
<td>Convictions</td>
<td>69%</td>
</tr>
<tr>
<td>Sexual Partners</td>
<td>58%</td>
</tr>
<tr>
<td>Cigarettes Smoked</td>
<td>28%</td>
</tr>
<tr>
<td>Number of days consuming alcohol</td>
<td>51%</td>
</tr>
</tbody>
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15-YEAR OLDS BORN TO UNMARRIED, LOW-INCOME MOTHERS
Home Visiting and ACE

Acknowledgements:

Christopher Blodgett, Ph.D.
Washington State University Child & Family Research Unit
Building a Response to ACE

- Adversity is pervasive and transmitted across generations
- Trauma is a combination of exposure and the process of adjustment once exposure occurs
- Complex trauma risk:
  - Early exposure at times of foundational development
  - Multiple risks
  - Unpredictable and persistent
  - Who you love is who you may not be able to count on
- Normal responses to extraordinary circumstances
Reasons to Hope

- Resiliency buffers the effects of trauma.
- Social support and resources are protective factors that build resiliency at any age.
- Safety can be created from multiple sources and a little may go a long way.
- Brain development is far more dynamic than we used to think.
- Language and cognition can form a buffer.
Building Resiliency

- Resilience – positive adaptation despite adversity

- Goals across the lifespan:
  - In early childhood, successful secure attachment
  - In later childhood, mastery of school and establishing meaningful peer and adult relationships
  - Reduce exposure to vulnerability and increase access to protective resources
Home visiting and Resiliency

- Providing support and resources build resiliency and are key activities in evidence-based home visiting programs.
- Increasing knowledge of development and support for parenting increase parents’ sense of competence and increase resilience.
- Cross-generation outcomes of home visiting programs are evidence of increased resilience.
Specific Focus on Trauma?

- HV outcomes may be improved by adapting practices to incorporate more focus on trauma
  - Use ACE questions as a screen for who needs more intensive services
  - Educate parents about ACE so they understand the impact on their life course and parenting
  - Use understanding of ACE to develop community resources and supports for families

- “The ACE questionnaire is a tool to help clients understand their own lives and to inspire them to make decisions to protect their children from having a high ACE score.”

  Quen Zorrah, NFP PHN
What can we do?

- Educate our workforce about ACE and developmentally sensitive periods
- Use evidence-based interventions whenever possible
- Evolve screening practices for ACE as a definition of risk
- Assess the value of adopting a trauma focus in our work with targeted populations
- Adoption and adaptation of practice can occur within existing capacity and with new resources
Discussion

- What ideas do you have about how to use the ACE information to improve home visiting practice?
Maternal and Child Public Health Leadership Training Program
University of Washington, Seattle

Past training sessions can be viewed at
http://www.nwcphp.org/training/courses/maternal-child-health-mch-training-for-professionals

The *Northwest Bulletin*, a newsletter focused on issues affecting the health of children and families living in the Northwest Region and Alaska, is available at http://depts.washington.edu/nwbfch/

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