Breastfeeding Makes All the Difference
Breastfeeding’s Role in Overcoming Adversity
Kathleen Kendall-Tackett, PhD, IBCLC, FAPA

We do not live in a perfect world

Mothers are often overwhelmed

Many have a history of trauma or adversity

Can breastfeeding help?

What is childhood adversity?
**Child Maltreatment**
CSA, CPA, CEA, Neglect

**Parental Impairment**
Substance abuse, mental illness, partner violence, criminal activity

**Parental Loss**
Death or divorce

**Low Socioeconomic Status**
Community violence, unsafe housing, food insecurity, medical care

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**Study of 1,581 pregnant women**

- 25% reported depression, PTSD, or other disorder
- 36% reported interpersonal trauma
- 93% reported at least one traumatic event

Seng et al. 2014, Psychological Trauma, 6(1), 41-49

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**Seng et al. 2011, Arch Womens Ment Health, 14(4), 295-306**

- PTSD

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- Suburban
- Urban

**PRENATAL DEPRESSION**

- 22%
- 22%

**LIFETIME ABUSE**

- 46%
- 57%

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**Survey of Mothers’ Sleep and Fatigue**

- 6,410 mothers
- 16% Rape
- 25% CSA
- 32% Parental Substance Abuse
- 34% Physical Abuse
- 36% Parental Depression

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**The Health Effects of Childhood Adversity**
Neuroscience, Molecular Biology, and the Childhood Roots of Health Disparities: Building a New Framework for Health Promotion and Disease Prevention
Jack P. Shonkoff; W. Thomas Boyce; Bruce S. McEwen JAMA. 2009;301(21):2252-2259

"Adult disease prevention begins with reducing early toxic stress"

"An increasing amount of research in neuroscience, social epidemiology, and the behavioral sciences suggests that a reduction in the number and severity of early adverse experiences will lead to a decrease in the prevalence of a wide range of health problems."

1,521 pregnant women in Peru

History of childhood physical or sexual abuse

Self-reported poor health in early pregnancy
Antenatal depression
Risk of partner violence 2 to 7 times
Barrios et al. 2015, PLoS One

Metabolic Endocrine Cardiovascular Immune HPA axis

High Risk
Childhood Adversity
Low Risk

Prenatal adversity increased inflammation for the baby in adulthood by 3 times
Slopen et al. 2015, Psychoneuroendocrinology, 51, 403-413
Early life adversity

Moffit et al. 2013, Dev Psychopathol, 25(4 0 2)

Child trauma associated with reduced gray matter in medial prefrontal cortex and left hippocampus, increasing sensitivity to stress in later life

Gorka et al. 2014, Biol Mood Anx Dis, 4, 12

Health Effects of Early Adversity

- Age 15
  - Increased stress

- Age 15-20
  - Increased Depression

- Age 20
  - Increased physical health problems

Raposa et al. 2014, Health Psychol, 33(5), 410-418

Maternal Depression as Early Adversity

Still-Faced Mother Paradigm

Still - Faced Mother Paradigm
How does breastfeeding protect against the effects of childhood adversity?

It’s more than milk

Grant et al. 2009, Dev Psychobiol, 51, 625-637

Cortisol
Good for both mother and baby

“Adult disease prevention begins with reducing early toxic stress”

Inflammation
Fight-or-flight
Cortisol

Survival Mode
Learning Mode

Oxytocin

Stress
Well-being
Affiliation
Bonding
Depression & anxiety
Alienation
Hostility & strife

Short-term lessening of the stress response
Response to induced stressor
ACTH
Cortisol

Baby at the Breast Lowers Mothers’ Stress

Heinrichs et al. 2001, J Clin Endo Metabol, 86, 4798-4804
Lifetime Protection For Mothers

Schwartz et al. 2009, Obstet Gyn, 113, 974-982

Attachment is essential to survival above and beyond food and shelter

Ainsworth & Bowlby 1991, Am Psychologist, 46, 333-341

Proximity and maternal responsiveness promote secure attachment

Ainsworth & Bowlby 1991, Am Psychologist, 46, 333-341

Breastfeeding protects babies from the effects of maternal depression

Depressed-BF moms touched, stroked and looked at babies more

Jones et al. 2004, Biol Psychology, 67, 103-124

Breastfeeding >12 months = Better child mental health

14-year longitudinal study in W. Australia of 2900 pregnant women

Oddy et al. 2009, J Pediatrics 156, 568-574
Child Behavior Checklist Scores

<table>
<thead>
<tr>
<th>Age</th>
<th>Never BF</th>
<th>BF 12+ Months</th>
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<tbody>
<tr>
<td>Age 2</td>
<td>16.1</td>
<td>9.6</td>
</tr>
<tr>
<td>Age 5</td>
<td>26.3</td>
<td>16.0</td>
</tr>
<tr>
<td>Age 8</td>
<td>19.4</td>
<td>13.5</td>
</tr>
<tr>
<td>Age 10</td>
<td>15.2</td>
<td>12.6</td>
</tr>
<tr>
<td>Age 14</td>
<td>16.7</td>
<td>10.9</td>
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Neurocoritical study revealed that longer duration of exclusive breastfeeding gave infants a “happy bias”

*Krol et al. 2015, Frontier Behav Neurosci, 8, 485*

Secure Attachments Decrease Adult Health Problems

Insecure attachments at 12-18 months associated with inflammation-based illness at age 32

*Puig et al. 2013, Health Psychology, 32(4), 409-417*

Breastfeeding lowers risk of intergenerational abuse and trauma

*Hairston et al. 2011 Sleep, 34(10), 1378-1383*

Infant sleep difficulties

Maternal depressed mood
Maternal Mental Health

Groer & Kendall Tackett (2011) Breastfeeding protects women’s health throughout the lifespan. Amarillo, TX: Hale Publishing

Feeling Down, Depressed or Hopeless

Breastfeeding | Mixed | Formula
--- | --- | ---
0.4 | 0.49 | 0.59

Anhedonia

Breastfeeding | Mixed | Formula
--- | --- | ---
0.45 | 0.55 | 0.69

Mothers’ Depression

Breastfeeding | Mixed | Formula
--- | --- | ---
0.5 | 1 | 1.5

Does breastfeeding help with child abuse?

Strathearn et al. 2009, Pediatrics, 123, 483-493

Mothers who breastfed for 4 months were 3.8 times less likely to neglect their children
And 2.6 times less likely to physically abuse them.

Strathearn et al. 2009, Pediatrics, 123, 483-493

The Impact of Sexual Assault

<table>
<thead>
<tr>
<th>Total Sleep Time</th>
<th>No Sexual Assault</th>
<th>Sexual Assault</th>
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<tr>
<td></td>
<td>6.59</td>
<td>6.44</td>
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<table>
<thead>
<tr>
<th>Minutes to Get to Sleep</th>
<th>No Sexual Assault</th>
<th>Sexual Assault</th>
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<tr>
<td></td>
<td>19.44</td>
<td>24.54</td>
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<table>
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<tr>
<th>Physical Health</th>
<th>No Sexual Assault</th>
<th>Sexual Assault</th>
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<td></td>
<td>3.72</td>
<td>2.4</td>
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<table>
<thead>
<tr>
<th>Current Depression</th>
<th>No Sexual Assault</th>
<th>Sexual Assault</th>
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<tbody>
<tr>
<td></td>
<td>0.853</td>
<td>1.11</td>
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</table>
Anxiety

Does breastfeeding help these mothers?

Percentage who are Breastfeeding

Hours Mothers Sleep

Minutes to Get to Sleep

Angry or Irritable
“It is easier to build strong children than repair broken men”