Historical Trauma
and
Ways Forward

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I have no conflicts of interest to declare.

“As human beings we belong to an extremely resilient species. Since time immemorial we have rebounded from our relentless wars, countless disasters (both natural and man-made), and the violence and betrayal in our own lives. But traumatic experiences do leave traces, whether on a large scale (on our histories and cultures) or close to home, on our families, with dark secrets being imperceptibly passed down through generations. They also leave traces on our minds and emotions, on our capacity for joy and intimacy, and even on our biology and immune systems.”

The Body Keeps the Score: Brain, Mind, and Body in the Healing of Trauma, p. 1

Bessel van der Kolk, 2014

Universal Stories

- My first lesson in historical trauma (term didn't exist yet) came from Dennis Demmert in 1982
  - University of Alaska, Fairbanks course on Native Social Change
  - Only course textbooks: "Things Fall Apart" and "No Longer at Ease" by the great African writer Chinua Achebe
- Around the world, stories of tribal people who had thriving societies, social structures which nurtured healthy development in their youth, and nourishing food
  - Colonialism disrupted these societies, traumatized many people, led to widespread problems including poor nutrition
  - "Guns, Germs, and Steel" and others
- My second lesson: apartheid in South Africa/Transkei, 1986

Intergenerational Transmission of Trauma

- "Posttraumatic stress disorder can be manifested in primary or secondary symptoms. Primary symptoms are those acquired through firsthand account or experience of the trauma. Secondary PTSD is a normal reaction and can be acquired by having family and friends who have been acutely traumatized. These reactive behaviors are passed on and learned and become the norm for subsequent generations. The normal behaviors of the traumatized person have to change in order to deal with the traumatic event."

  (Duran and Duran, 1995, p. 40)

- "If these traumas are not resolved in the lifetime of the person suffering such upheaval, it is unthinkable that the person will not fall into some type of dysfunctional behavior that will then become the learning environment for their children. Once these children grow up with fear, rage, danger, and grief as the norm, it is little wonder that family problems of all types begin to emerge within the family system." (p. 31)

Legacy of Boarding Schools

"…many generations of Indigenous children were sent to residential schools. This experience resulted in collective trauma, consisting of …the structural effects of disrupting families and communities; the loss of parenting skills as a result of institutionalization; patterns of emotional response resulting from the absence of warmth and intimacy in childhood; the carryover of physical and sexual abuse; the loss of Indigenous knowledge's, languages, and traditions; and the systemic devaluing of Indigenous identity."

Lancet 2009;374:76-85 (p. 78)

Trauma Creates Vampires

- Case study of young boy who had been physically abused. Refused to talk about this but drew repeated pictures of vampires
  - Vampire themes: work in darkness and in secret; can be eradicated only by special spiritual means; when they bite a victim, the victim will become a vampire

"Healing the Soul Wound: Counseling with American Indians and Other Native Peoples" (Duran, 2006, work of Butz MR discussed on pp. 17-18)

- **"Inevitably, what we won't face or express moves through our hands into the world."** (Mark Nepo, 2007, p. 19)
- My third lesson occurred at a funeral

"He went as far back as the first time the Western ways entered his culture. From that point on…, Harold traced a sequence of unhealed trauma that each older generation visited on the younger one. Passed down from generation to generation were a whole host of behaviors that came in the guise of tradition and culture but in truth were patterns of emotional detachment, abuse, and addiction.

"Our culture and people have been decimated by these self-destructive behaviors, which will only continue until we take steps to acknowledge our past honestly and to educate our young ones. Without taking these steps, we Native people will never begin healing ourselves so that we may survive into the future…

"The hardest thing for me is to tell the story of my childhood, for in the telling of my story I also must tell stories of those I love. …In truth, when you grow up in an environment of addiction, it is always your loved ones who cause you the greatest pain. Having said this, I will tell a story that is close to my heart and fills my soul."

Velma Wallis, "Raising Ourselves: A Gwich'in Coming of Age Story from the Yukon River, 2002 Preface, pp. 14-15

Historical Trauma

A model which explains <u>the present</u>

Trauma(s) that are often intentionally inflicted and occur at more or less the same time to a defined group of people—these traumas:

Have effects like individual traumas, *plus*

Because the traumas are so pervasive, affect caregivers and elders, affect community and cultural infrastructures and are targeted at a specific group—they have huge effects on:

- People's/communities' abilities to cope with and adapt to traumatic event and aftermath
- Abilities to interpret the meaning/psychologically incorporate the trauma
- Patterns of trauma transmission to subsequent generations

Adverse Childhood Experiences (ACE)

- **Physical, emotional, sexual abuse; mentally ill, substance abusing, incarcerated family member; seeing mother beaten; parents divorced/separated**

  --Overall Exposure: 86% (among 7 tribes)

	Non-Native	Native
Physical Abuse-M	30%	40%
Physical Abuse-F	27	42
Sexual Abuse-M	16	24
Sexual Abuse-F	25	31
Emotional Abuse	11	30
Household alcohol	27	65
Four or More ACEs	6	33

Am J Prev Med 2003;25:238-244

ACEs and Adult Health

- **ACE Score ≥4**
  - **4-12x risk: alcoholism, drug abuse, depression, suicide attempt**
  - **2-4x risk: smoking, teen pregnancy, multiple sexual partners**
  - **1.4-1.6x risk: severe obesity**
  - **Strong graded relationship at all levels of ACEs for almost all outcomes, including heart disease**

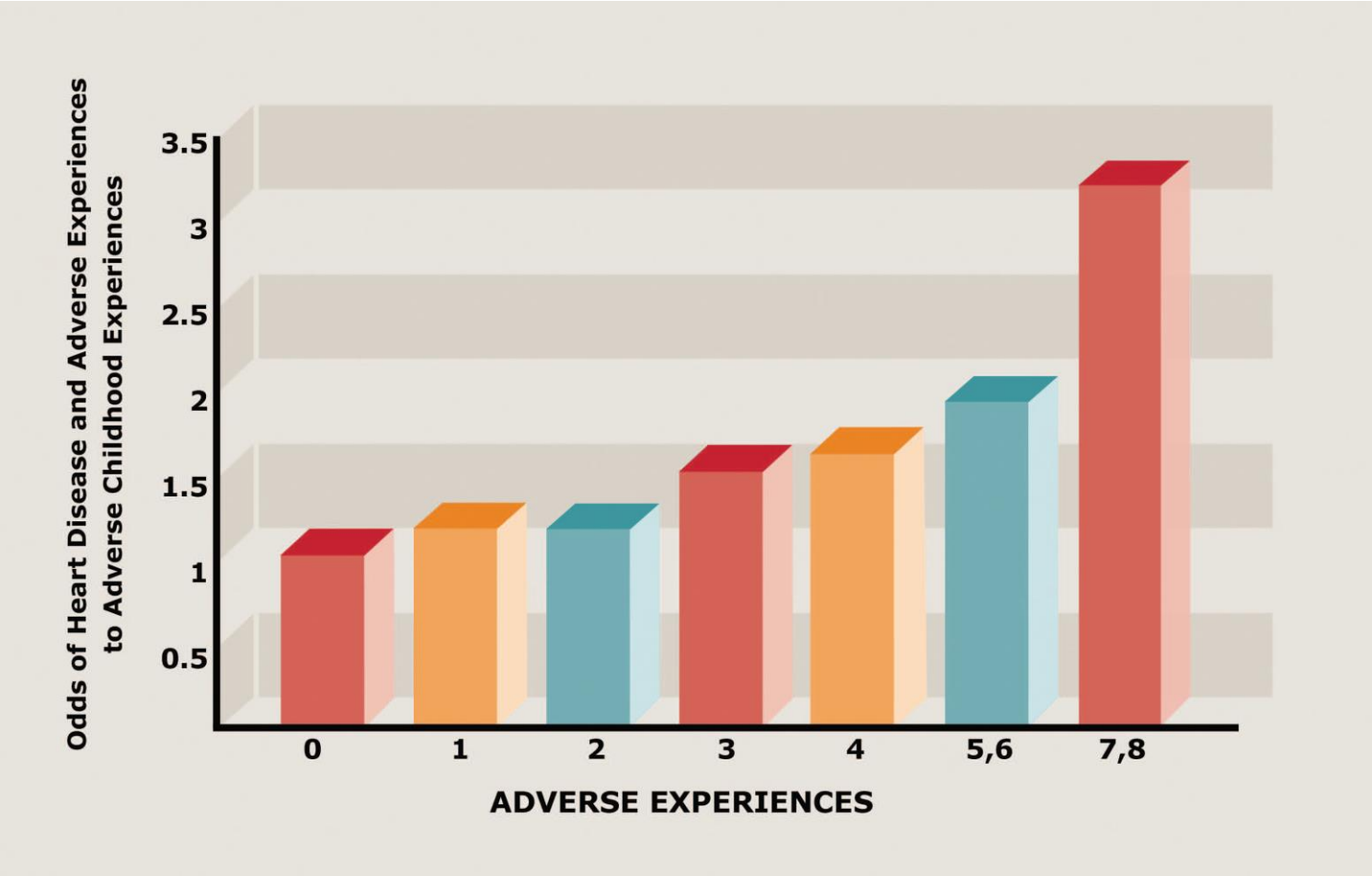
Am J Prev Med 1998;14:245-258 and *Circulation* 2004;110:1761-6

- Across 10 countries, adults who experienced ≥3 childhood adversities: Hazard ratios 1.59 for diabetes, 2.19 for heart disease
  - Risk similar to the association between cholesterol and heart disease
    - Both in magnitude and pop. prevalence *Arch Gen Psych* 2011;68:838-844
- U.K. study: increasing ACEs strongly related to adverse behavioral, health, and social outcomes *J Public Health* 2014;36:81-91
  - "That ACEs are linked to involvement in violence, early unplanned pregnancy, incarceration, and unemployment suggests a cyclical effect where those with higher ACE counts have higher risks of exposing their own children to ACEs."

What is the average ACE score of:
--the clients in your practice?
--the staff in your practice?

What is *your* ACE score?

3:1 odds of adult heart disease after 7-8 adverse childhood experiences



Center on the Developing Child at Harvard website

Source: Dong et al. (2004)

Stress in Children: Long-term Consequences

- Chronic exposure to Intimate Partner Violence almost doubles (OR 1.8) risk of obesity at age 5 years

Arch Pediatr Adolesc Med 2010;164:540-546

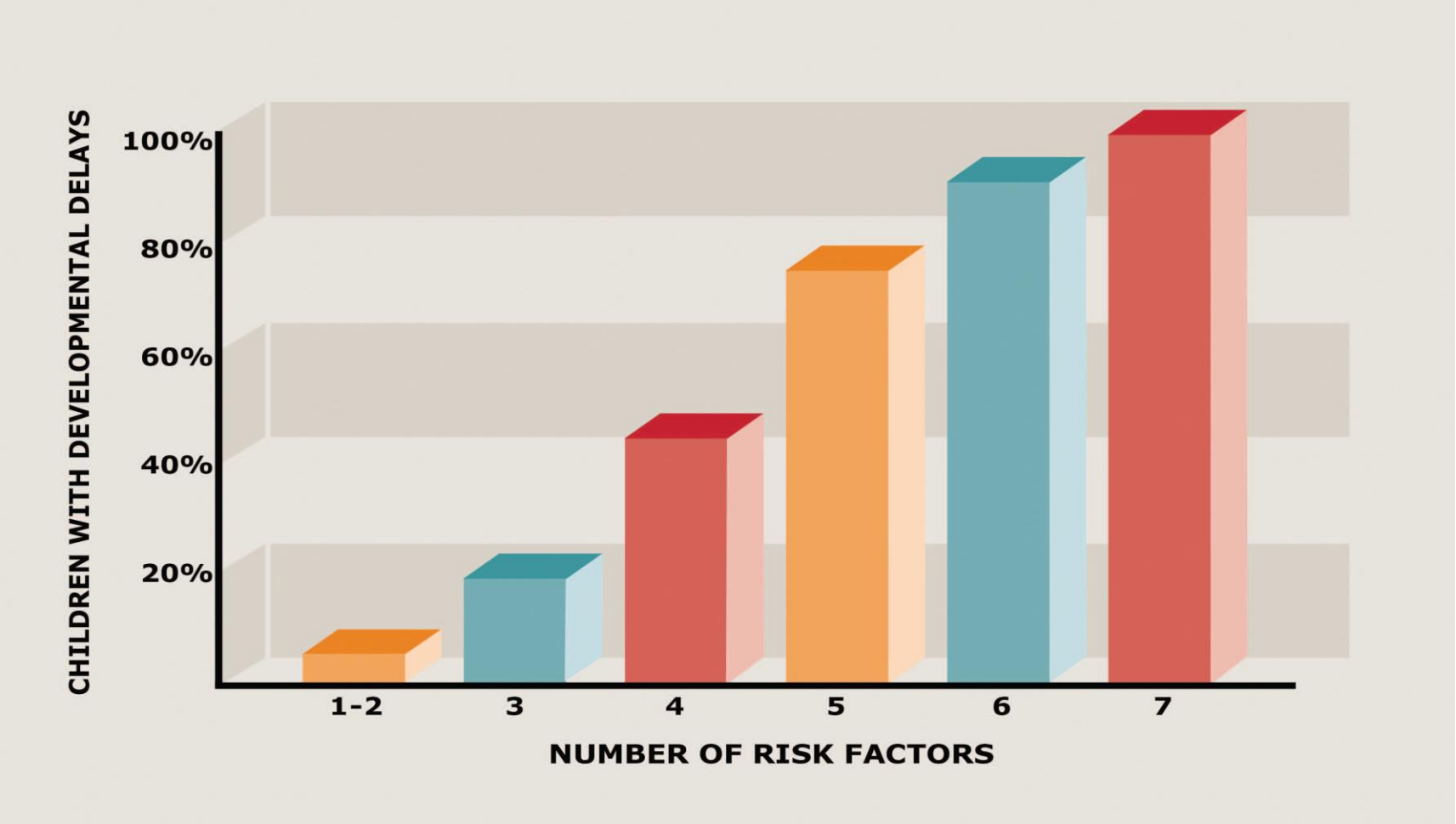
- Young children who had objectively-measured poor quality maternal-child relationships had 2 ½ x ↑ prevalence of *adolescent* obesity c/w those who did not

Pediatrics 2012;129:132-40

- "…reducing toxic stress can target the common physiologic pathway implicated in an enormous array of health outcomes from asthma to cardiovascular disease."

Pediatrics 2013;131:319-327

90-100% chance of developmental delays when children experience 6-7 risk factors



Center on the Developing Child at Harvard website
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Accumulation of multiple risk factors in areas of:

-- family structure: e.g. parental employment, father's absence, teen parenthood;

--human capital: e.g. maternal education, maternal verbal ability; and

--mental health: e.g. maternal depression, stressful life events

is associated with lower IQ scores as early as age 2-4 years and more behavior problems by age 3.

Fuligni and Brooks-Gunn from *Promoting Health: Intervention Strategies from Social and Behavioral Research,* 2000

Early Social-Emotional Functioning and Public Health

- Nearly 800 kindergarteners evaluated on social competence skills by their teachers
  - 8 questions, including whether they shared with others, were helpful, cooperated, followed directions
    - Results formed an overall score for each child
  - Participants tracked for up to 20 years
- Results were striking
  - Those with lower scores: more likely to drop out of high school, abuse drugs or alcohol, have employment problems
  - Those with high scores: more likely to achieve higher education, jobs, and overall health
  - For every 1-point ↑, child was twice as likely to graduate from college
  - For every 1-point ↓, child had a 67% higher chance of being arrested by early adulthood *Am J Public Health*. Published online ahead of print July 16, 2015: e1–e8. doi:10.2105/AJPH.2015.302630)

“Secure attachments with caregivers play a critical role in helping children develop a capacity to modulate physiological arousal. Loss of ability to regulate the intensity of feelings and impulses is possibly the most far-reaching effect of trauma and neglect. It has been shown that most abused and neglected children develop disorganized attachment patterns. The inability to modulate emotions gives rise to a range of behaviors that are best understood as attempts at self-regulation. These include aggression against others, self-destructive behavior, eating disorders and substance abuse.”

van der Kolk and Fisler, *Bulletin of the Menninger Clinic*, Spring 1994; 58(2):145-168 (p 145)

“Youth who overeat may have or be at risk for serious psychological distress, including deficits to self-esteem, compromised mood, and suicide risk. Overeating may be a tangible behavior that signals the need for intervention.”

Pediatrics 2003;111:67-74

SIDEBAR 1.

Domains of Impairment in Children Exposed to Complex Trauma

I. Attachment

- Problems with boundaries
- Distrust and suspiciousness
- Social isolation
- Interpersonal difficulties
- Difficulty attuning to other people's emotional states
- Difficulty with perspective taking

II. Biology

- Sensorimotor developmental problems
- Analgesia
- Problems with coordination, balance, body tone
- Somatization
- Increased medical problems across a wide span (eg, pelvic pain, asthma, skin problems, autoimmune disorders, pseudoseizures)

III. Affect regulation

- Difficulty with emotional self-regulation
- Difficulty labeling and expressing feelings
- Problems knowing and describing internal states
- Difficulty communicating wishes and needs

IV. Dissociation

- Distinct alterations in states of consciousness
- Amnesia
- Depersonalization and derealization
- Two or more distinct states of consciousness
- Impaired memory for state-based events

V. Behavioral control

- Poor modulation of impulses
- Self-destructive behavior
- Aggression toward others
- Pathological self-soothing behaviors
- Sleep disturbances
- Eating disorders
- Substance abuse
- Excessive compliance
- Oppositional behavior
- Difficulty understanding and complying with rules
- Reenactment of trauma in behavior or play (eg, sexual, aggressive)

VI. Cognition

- Difficulties in attention regulation and executive functioning
- Lack of sustained curiosity
- Problems with processing novel information
- Problems focusing on and completing tasks
- Problems with object constancy
- Difficulty planning and anticipating
- Problems understanding responsibility
- Learning difficulties
- Problems with language development
- Problems with orientation in time and space

VII. Self-concept

- Lack of a continuous, predictable sense of self
- Poor sense of separateness
- Disturbances of body image
- Low self-esteem
- Shame and guilt

Cook, *et al*. 2005. *Psychiatric Annals* 35(5) p. 392

Emerging science on Diabetes risk factors

- In utero and early life stress/nutrition
  - Leg length in adulthood (marker of early life deprivation) independently associated with lower insulin sensitivity

    Diabetes Care 2013;36:3599-3606
  - Lower insulin sensitivity ***predicts*** decline in physical activity in peripubertal Hispanic and African American girls

    Diabetes Care 2013;36:3739-3745
- Diet ***quality*** associated with weight gain ***even if calories are restricted***
  - Overeating, ↓ physical activity as ***consequences*** of poor diet quality, stress

    JAMA, published online May 16, 2014

What then must we do?

"The medicine is already within the pain and suffering. You just have to look deeply and quietly. Then you realize it has been there the whole time." Duran, 2006

- Intervention Themes:
  - Prevent trauma: by strengthening parenting skills
  - Detect and intervene in ongoing trauma
  - Increase the ratio of protective to risk factors (resilience)
  - Heal past trauma
  - Address poverty, food insecurity

“We …know that sound maternal and fetal nutrition, combined with positive social-emotional support of children through their family and community environments, will reduce the likelihood of negative epigenetic modifications that increase the risk of later physical and mental health impairments.”

Center on the Developing Child at Harvard University

Working Paper 10, 2010

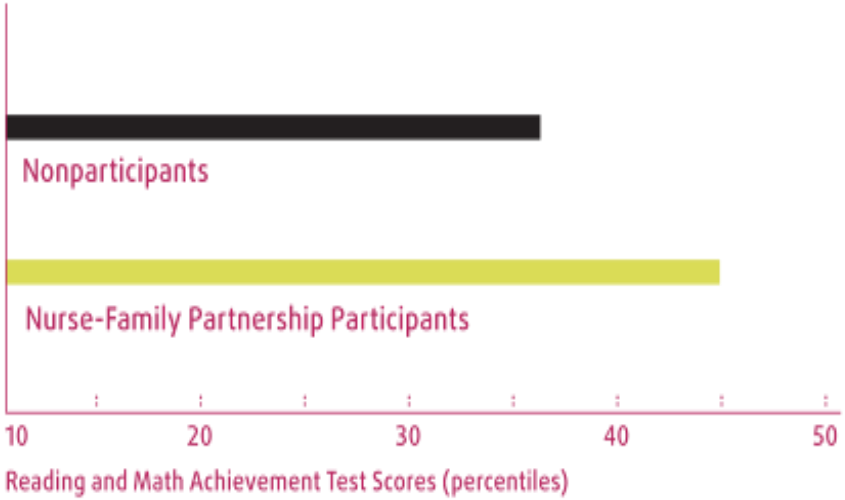
Stronger Parents Raise Stronger Children

- Infant mental health
- Court referral programs
  - Zero to Three's Infant-Toddler Court Teams
    - Intervention includes referral of young parents to behavioral health for parenting assessment/training
- Prenatal/Early Life Home Visiting
  - Evidence-based interventions proven to improve the life trajectories of low income women and children
  - Positive effects now shown up to ***age 19 yrs***

Arch Pediatr Adolesc Med 2010;164:9-15, 412-418, 419-424

Academic Achievement

Grades 1–3, Age 9—Memphis
(Born to low-resource mothers)



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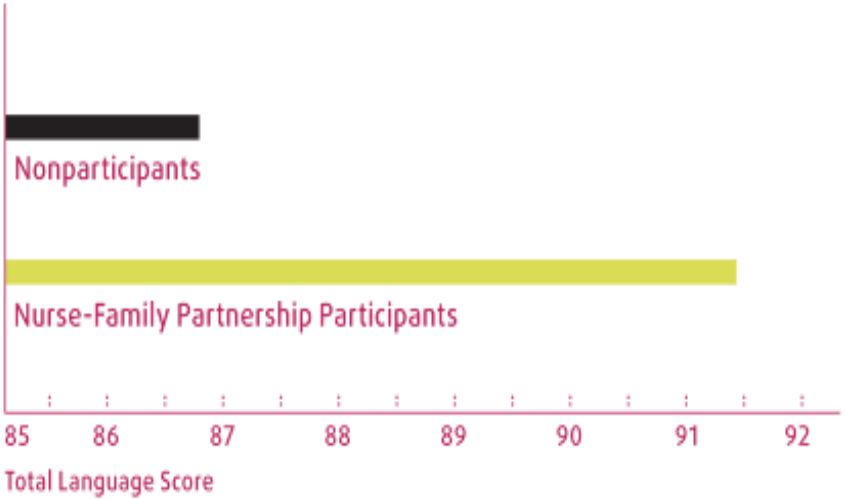
Preschool Language Scale

Age 4—Denver
(Born to low-resource mothers)



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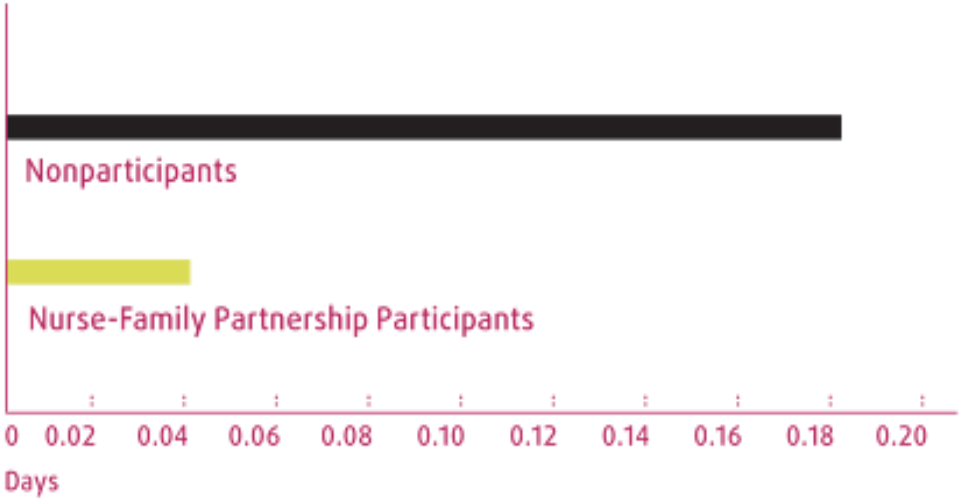
Days Hospitalized for Injuries

Birth to age 2—Memphis



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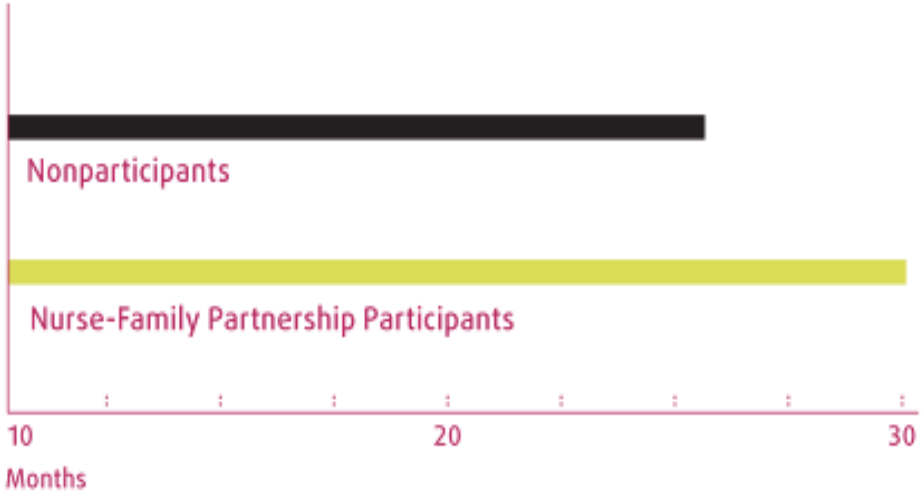
Months Between Births

Between first and second child
(by first child's fifth birthday)—Memphis



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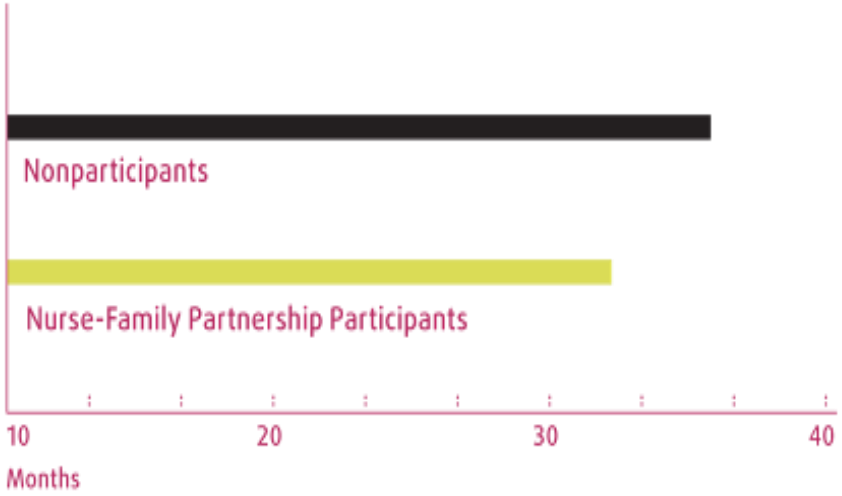
Months Receiving Welfare Assistance (AFDC)

Birth through age 5—Memphis



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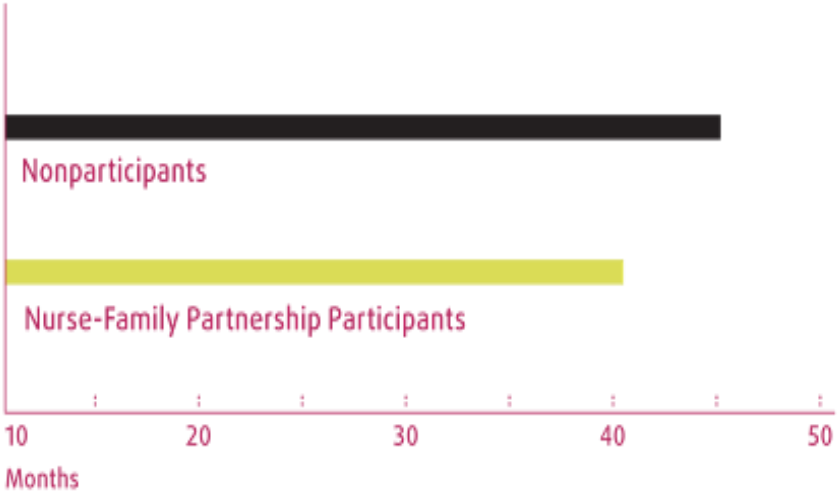
Months Receiving Food Stamps

Birth through age 5—Memphis



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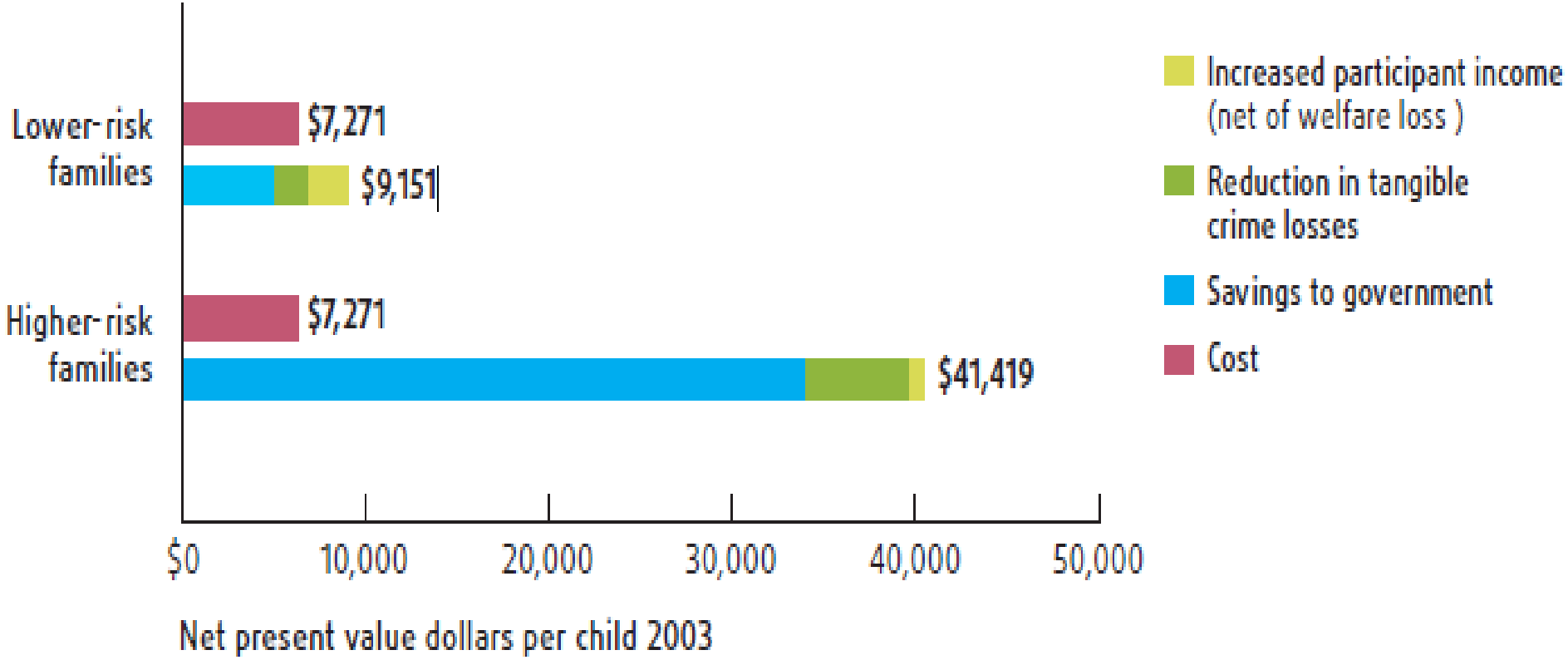
Monetary Benefits



Source: 2005 RAND Corporation Study

Family Spirit Impact: Pregnancy to Age 3

Parenting

- Increased maternal knowledge [1,2,3,4]
- Increased parent self-efficacy [3,4]
- Reduced parent stress [2,4]
- Improved home safety attitudes[3]

Mothers' Outcomes

- Decreased depression. [1,2,4]
- Decreased substance use [4]
- Fewer risky behaviors [3,4]

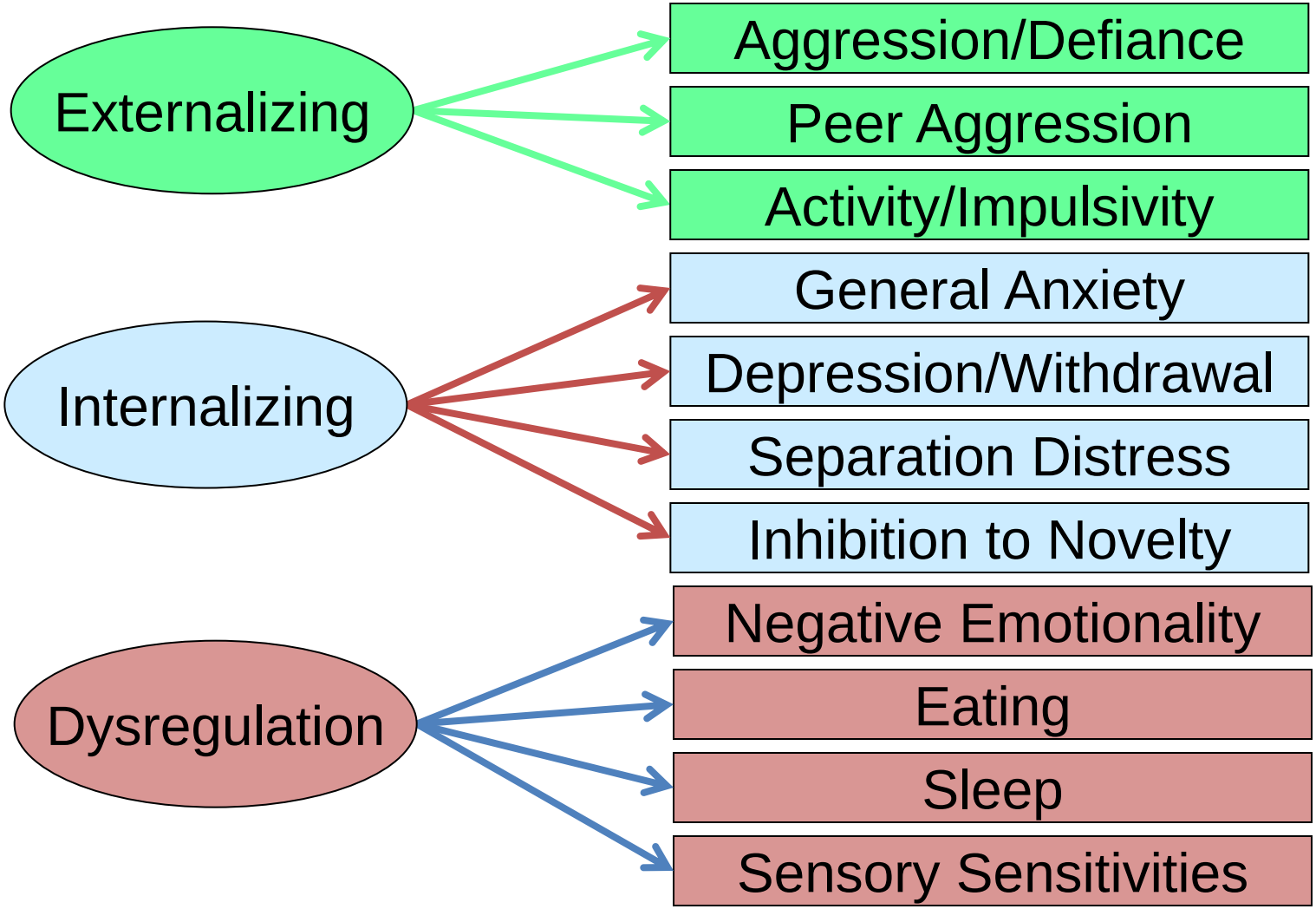
Child Outcomes

- Fewer social, emotional and behavior problems through age 3. [2, 3, 4]
- Lower clinical risk of behavior problems over life course [4]

→ Decreased Externalizing, Internalizing and Dysregulation

1 Barlow A, Varipatis-Baker E, Speakman K, et al *Arch Pediatr Adolesc Med.* 2006;160:1101-1107
2 Walkup J, Barlow A, Mullany B, et al. *Journal of the American Academy of Child and Adolescent Psychiatry.* June 2009.
3 Barlow A, Mullany B, Neault N, et al. *American Journal of Psychiatry.* January 2013.
4 Barlow A, Mullany B, Neault N, et al. *American Journal of Psychiatry.*, February 2015.

ITSEA Problem Domains and Subscales within Domains



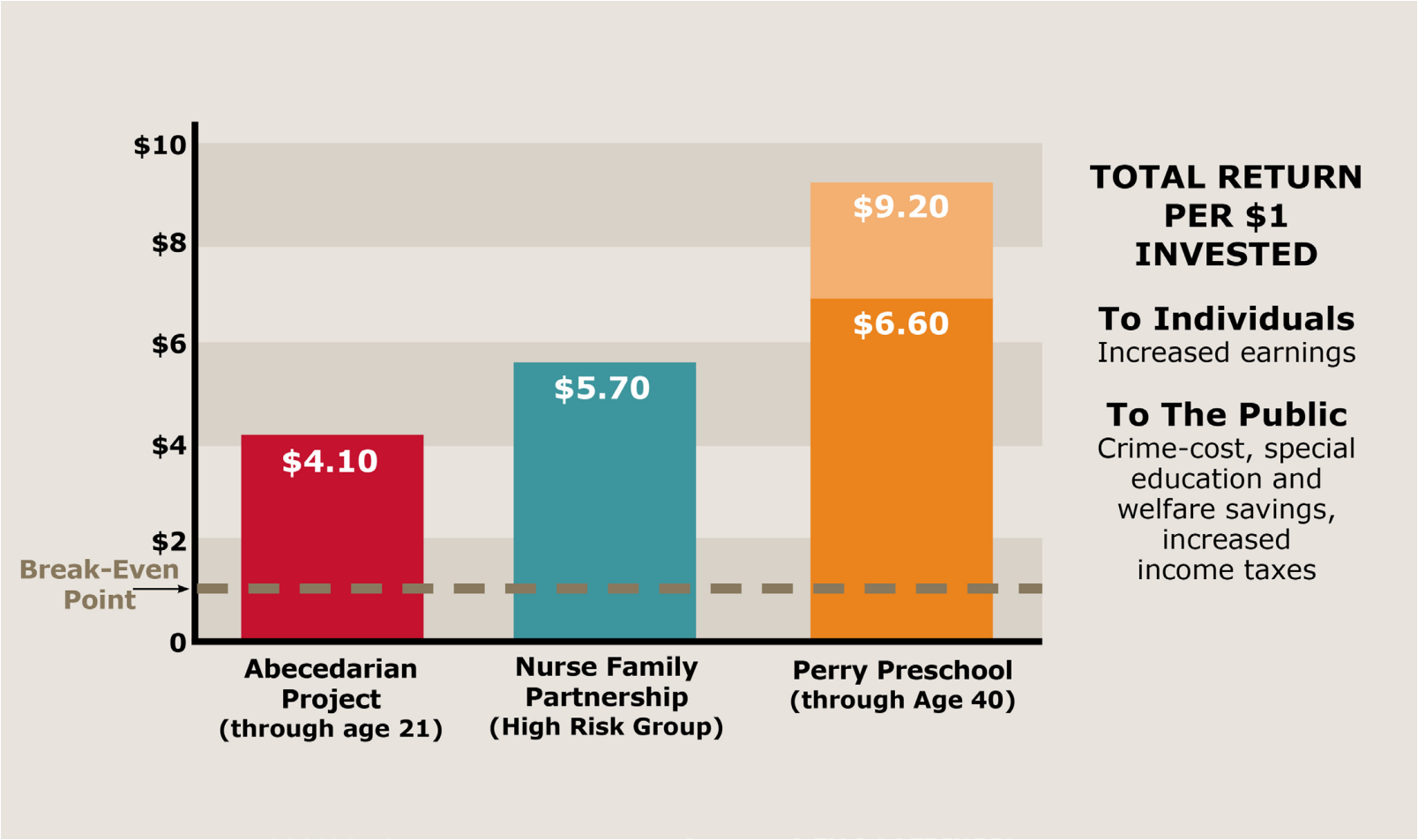
Parenting and Early Childhood Behavior Problems Associated with Obesity

- Negative parenting (inconsistent discipline; restrictive, coercive parenting) associated with increased obesity risk in children.
  - Int J Obes (Lond). 2006 Dec;30(12):1766-74.
  - Trends Endocrinol Metab. 2013 Apr 19 E-pub

- Externalizing behaviors at 24 mos associated with higher BMI at 24 months and thru age 12
  - *BMC Pediatr*. 2010 Jul 14;10:49

- Obese children have higher rates of externalizing and internalizing disorders.
  - *Acad Pediatr*. 2013 Jan-Feb;13(1):6-13

$4-$9 in returns for every dollar invested in early childhood programs



Center on the Developing Child at Harvard website

Sources: Masse, L. and Barnett, W.S., A Benefit Cost Analysis of the Abecedarian Early Childhood Intervention (2002); Karoly et al., Early Childhood Interventions: Proven Results, Future Promise (2005); Heckman et al., The Effect of the Perry Preschool Program on the Cognitive and Non-Cognitive Skills of its Participants (2009)

“Early Life Investments Substantially Boost Adult Health”

- Carolina Abecedarian Project
  - 4 cohorts of disadvantaged children born 1972-77
    - Intervention provided from birth to age 5 years
  - Intervention:
    - Development of language, emotional regulation, cognitive skills
    - Caregiving/supervised play
    - Nutrition: 2 meals and a snack at childcare center
    - Primary pediatric care
- In their mid-30s: lower prevalence of CVD and metabolic disease risk factors including BP, A1C, obesity, HDL

Science 2014;343:1478-1485

Poverty

- Prevalence of many health and social problems inversely related to SES
  - Geoffrey Canada: Goal of Harlem's Children Zone
    - "…to transform every aspect of the environment that poor children were growing up in; to change the way their families raised them and the way their schools taught them as well as the character of the neighborhood that surrounded them." ("Whatever It Takes", 2008, p. 19)
  - Low SES students sent to high performing schools had higher test scores and decrease in very risky behaviors *Pediatrics* 2014;134:e89-e396
- Raising income (tribal casinos) associated with ↓ child obesity, ↓ psychopathology risk *JAMA* 2014;311:929-936 and 2003;290:2023-2029
- Great Smoky Mountains Study
  - Income supplements improved parental self-efficacy and led to decreased psychopathology in children *JAMA 2003;290:2023-2029*
  - Which persisted into adulthood *JAMA* 2010;303(19):1954-1960

Culture and Group Support: The Pima Pride Study

- Pilot study for the Diabetes Prevention Program (DPP) clinical trial conducted by NIH
- Obese normoglycemic Pima Indian people
  - Randomized to "Pima Action" intervention group
    - Structured diet/exercise meetings
  - Randomized to "Pima Pride" control group
    - Unstructured activities emphasizing Pima culture and history
- "Pima Pride" group showed more positive outcomes on every biological parameter measured

Narayan *et al, Diabet Med* 1998;15:66-72

Let's Implement Comprehensive Interventions

- Home Visiting and Case Management
- Provide *good* nutrition in sufficient quantities
  - Tribal food sovereignty: Traditional foods, tribal food programs
- Parenting
  - Bonding, breastfeeding starting at delivery (e.g. BFHI)
  - Parenting and coping skills training
  - Screen for/treat depression, substance abuse
  - Screen/intervene *early* in adverse childhood experiences
    - Court Referral Program (e.g. Zero to Three)
  - Strengthen, renew tribal pregnancy/childrearing practices
    - Traditional midwifery, doulas, support young parents by elders/family
- Learning
  - Strong Head Start/Early Head Start, Child Care
  - Encourage parents to read to kids (e.g. Reach Out and Read)
- Mentoring and support for youth (e.g. Boys & Girls Clubs)
- Economic Development—reduce poverty

Trauma-informed care: reflected in the shift from “What’s *wrong* with you?” to “What *happened* to you?”

The Integration of Trauma-Informed Care in the Family Partner Program, Issues Brief, Massachusetts Dept. of Mental Health, Children’s Behavioral Health Research and Training Center, 2012

What would our health/mental health systems, schools, courts, and work places look like if we all understood how trauma works?

Example: Washington State
http://www.psmag.com/books-and-culture/what-does-it-take-for-traumatized-kids-to-thrive-56488

What would our communities look like if we implemented intensive, comprehensive interventions to prevent and treat trauma?

“Trauma is now our most urgent public health issue, and we have the knowledge necessary to respond effectively. The choice is ours to act on what we know.”

Bessel van der Kolk, 2014, p. 356