

Preventing Child Abuse and Domestic Violence: Why We Must and How We Can

Bring the Kids Home

Juneau Meeting

February 16, 2010

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- Alaska Native non-profit health care corporation
 - Incorporated in 1982
 - Operates under the tribal authority of Cook Inlet Region, Inc. (CIRI), pursuant to Public Law 93-638 Indian Self Determination and Educational Assistance Act.
 - CIRI is one of the 13 Alaska regional corporations established by Congress under the Alaska Native Claims Settlement Act of 1971.



SCF Board of Directors

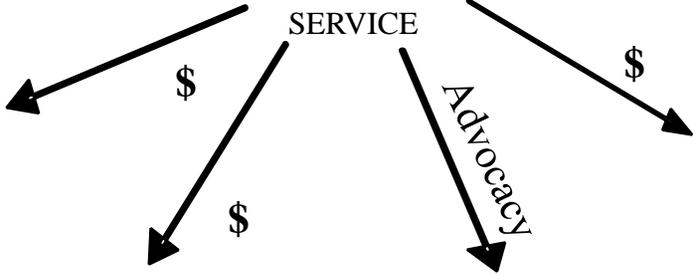


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ALASKA NATIVE HEALTH SYSTEM

INDIAN HEALTH SERVICE



ALASKA NATIVE TRIBAL HEALTH CONSORTIUM (Statewide Services)

ALASKA NATIVE HEALTH BOARD (Advocacy & Coordination)

Cooperative Agreement

ALASKA NATIVE MEDICAL CENTER

SOUTHCENTRAL FOUNDATION

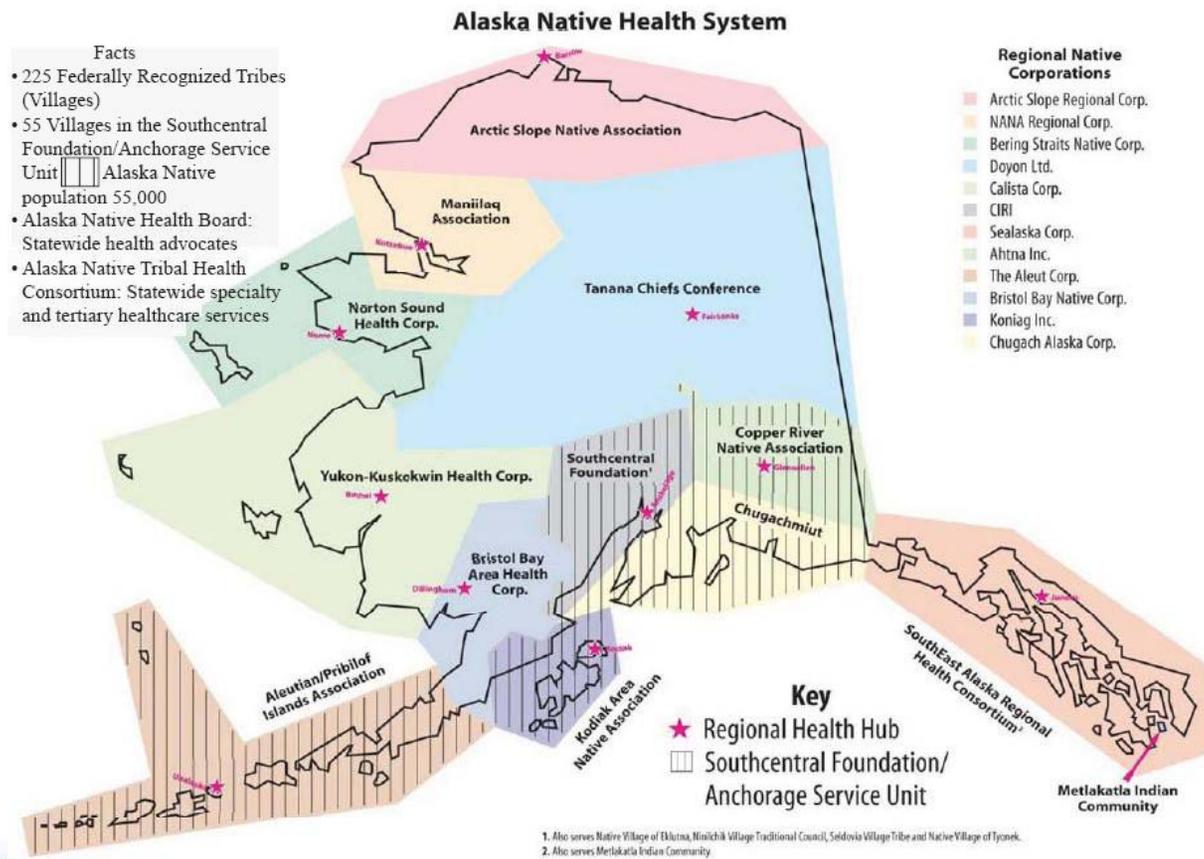
Regional and Local Health Providers

TRIBAL GOVERNMENTS

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Alaska Native Health System



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Operational Principles

- **R**elationships between customer/owner, the family, and provider must be fostered and supported
- **E**mphasis on wellness of the whole person, family and community (physical, mental, emotional and spiritual wellness)
- **L**ocations convenient for customer/owners with minimal stops to get all their needs addressed
- **A**ccess optimized and waiting times limited
- **T**ogether with the customer/owner as an active partner
- **I**ntegration of services throughout SCF- no more islands
- **O**ne seamless system
- **N**o duplication of services or roles and responsibilities
- **S**imple and easy to use systems and services
- **H**ub of the system is the family
- **I**nterests of customer/owners come first; the system is created around what works best for customer/ owners
- **P**opulation-based systems and services
- **S**ervices and systems that are culturally appropriate and build on the strengths of Alaska Native cultures



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Today:

- 1,400+ staff
- Serve 50,000 individuals of Alaska Native and American Indian heritage
- Operating budget of 180 million dollars
 - 44% IHS
 - 41% 3rd Party
 - 12% grant revenue
 - 3% non-operating income

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Why We Must Prevent Child Abuse

- I. Health impact across lifespan
 - ACE study
- II. Neurobiological changes of child abuse
 - foundation for intergenerational abuse
- III. Economic research on early intervention
 - largest return on investment



Health Impact of Child Abuse:

Adverse Childhood Experiences Study (ACE study)

- Collaborative between CDC and Kaiser
- Over 17,000 adults surveyed.
- Average age = 57 years.
- Medical histories available.
- Key question: Do ACEs impact adult health across the lifespan?



Adverse Childhood Experiences Study (ACE study)

- 10 Adverse Childhood Experiences (ACEs) surveyed:
 - 1. Physical abuse
 - 2. Sexual abuse
 - 3. Emotional abuse
 - 4. Emotional neglect
 - 5. Physical neglect
 - 6. Witness domestic violence
 - 7. Mental illness in home
 - 8. Family member incarcerated
 - 9. Alcohol/drug problems
 - 10. Parental separation or divorce
- Critical finding: all 10 ACEs linked harmful effects on health across the lifespan.



ACE: Prevalence data

- Prevalence of ACEs in study group:
 - Sexual abuse = 21%
 - Domestic violence in childhood home = 13%
 - Substance abuse in home = 28%
 - Parental separation or divorce = 24%
 - Physical abuse = 28%
 - Emotional neglect = 15%
 - Emotional abuse = 11%
 - Physical neglect = 10%
 - Mental illness in home = 20%
 - Criminal household member = 5%

M Dong et al. (2003) Child Abuse and Neglect v27, pp 625-639.

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ACE: Prevalence data

- Key prevalence findings:
 - About 1/3rd reported no ACEs.
 - This group, across all health measures, was more healthy.
 - About 2/3rds of study group reported at least one ACE



ACE Score

- ACE score = total number of ACEs person had.
 - Example:
 - Childhood history of 1. exposure to domestic violence only
ACE score = 1
 - Childhood history of 1. parental alcoholism and 2. physical abuse. ACE score = 2.
 - Childhood history of 1. physical neglect, 2. sexual abuse, 3. parental divorce. ACE score = 3.
- Key finding: higher ACE score = greater risk for health problem.



ACEs & Domestic Violence

- ACE Score

ACE Score	Risk for D.V. as an adult
0	1.0
1	1.8x
2	2.4x
3	3.3x
4 or more	5.5x

RF Anda et al. (2006) Eur. Arch Psychiatry Clin Neurosci. v256:174-86

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ACEs & Cancer

- ACE score of 4 or greater nearly doubles the risk for cancer.

VJ Felitti et al. (1998) Am J Prev. Med. v14: 245-58

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ACEs & Suicide Attempts

Attempted suicide during childhood or adolescence:

ACE Score	Risk for suicide attempt
0	1.0
1	1.4x
2	6.3x
3	8.5x
4	11.9x
5	15.7x
6	28.9x
7 or more	50.7x

S.H. Dube et al. (2001) JAMA v 286:3089-96

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ACEs & Alcohol Abuse

- Alcohol use before age 14 :

ACE Score	Relative Risk
0	1.0
1	1.5x
2	2.4x
3	3.9x
4	6.2x.

S. R. Dube et al. (2006) J Adolescent Health, v38:444.e1-444.e10

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ACEs and Adult Alcoholism



ACEs & Illicit Drug Use

ACE score	Relative risk
0	1.0
1 - 2	2.0 x
3	2.5x
4	4.0x
5	6.5x.

SR Dube et al. (2003) Pediatrics, v111:564-572

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Diabetes

National Co-morbidity Study (2004)

Key Finding: A history of childhood neglect more than doubles (2.2x) the risk for adult diabetes.

RD Goodwin (2004) Psychol. Medicine v34:509-20

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ACEs & Cardiovascular Disease

Risk factors for heart disease:	Relative risk
Domestic violence in home	1.4x
Childhood sexual abuse	1.4x
Childhood neglect	1.4x
Childhood physical abuse	1.5 x

Physical inactivity	1.7x
Hypertension	1.9x
Severe obesity	2.7x

Multiple ACEs	3.6x

M Dong et al. (2004) Circulation v110:1761-66



Common Diseases & ACEs

Stepwise increased risk for:

- Heart disease
- Cancer
- COPD
- Skeletal fractures
- Sexually transmitted diseases
- Liver disease
- Autoimmune disorders



Health risk behavior & ACEs

Stepwise increased risk for:

- Smoking
- Alcohol abuse
- Over eating and obesity
- Illicit drug use
- Promiscuity
- IV drug use



Behavioral health & ACEs

Stepwise increased risk for:

- Clinical depression
- Suicide
- Domestic violence
- Anxiety disorders
- Hallucinations
- Sleep disturbances
- Autobiographical memory disturbances
- Poor anger control
- Relationship problems
- Employment problems



Reproductive Health & ACEs

Stepwise increased risk for:

- Early age at first intercourse
- Teen pregnancy
- Unintended pregnancy
- Teen paternity
- Fetal death



Biology of Child Abuse

(Why ACEs Increase Risk for Disease Decades Later in Life)

- Dysregulation of stress hormones.

G Gerra et al.(2007) *Addiction Biology* v13:95-104.

- Chronic inflammation (elevated C-reactive protein).

A.Danese et al., (2008) *Arch Gen Psych*, v65: 409-416.

- Early life experience impacts expression of genes in critical social areas of the brain, e.g., the hippocampus.

P. McGowan et al.,(2008).*PLoS*,v3.5 e2085.

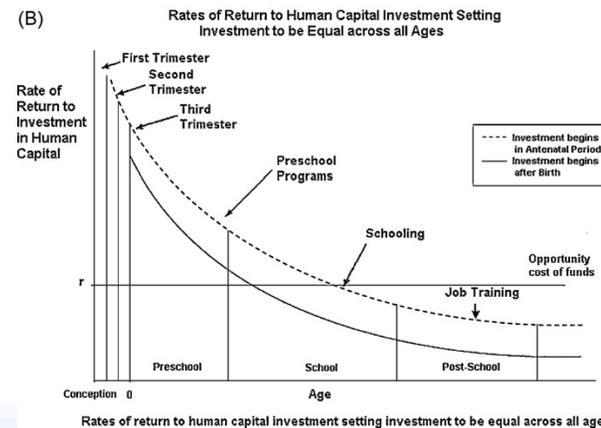
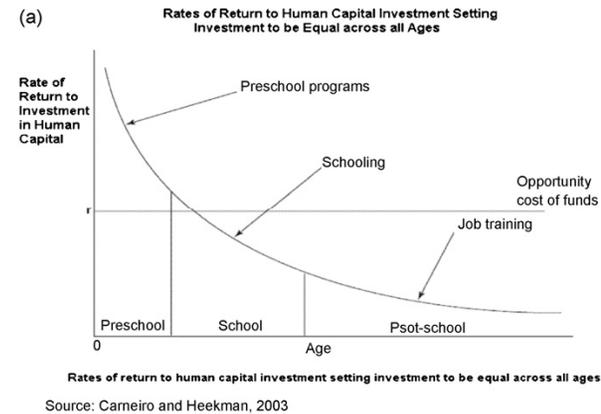
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Economics of Early Intervention & Prevention

- Econometric studies show that health care funding for early interventions can provide the largest possible return on investment.

Doyle et al. (2009) Investing in Early Human Development. In: Economics and Human Biology v7:pp1-6



Why we must: Summary

- ACEs are common
- Health impact is enormous
- Neurobiological impact of ACEs increases risk of intergenerational abuse - compounding problem
- Econometric studies show early intervention is best possible investment
- Prevention may be more possible than we think.



Preventing Child Abuse: How We Can

Two Prevention Initiatives at SCF

- Family Wellness Warriors
- New Generations (0-3 yrs)

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Preventing Child Abuse: How We Can

- Multiple paths to prevention
 - Innate influences
 - Learning how to better parent
 - Self understanding, spiritual growth (FWWI)
 - Adequacy of resources to families
- Integrated approach may be optimal



Innate Influences on Prevention: The Birth Experience

Landmark Study: (Klaus, Kennel et al. 1972)

- Half of mothers received hospital care as usual (separation)
- Half of mothers roomed in with infant

Key findings:

- At one month mothers who roomed in with infant were
 - more responsive to infants cry
 - more reluctant to leave infant
 - more direct eye contact
 - more affectionate
- At one year mothers who roomed in still doing better.

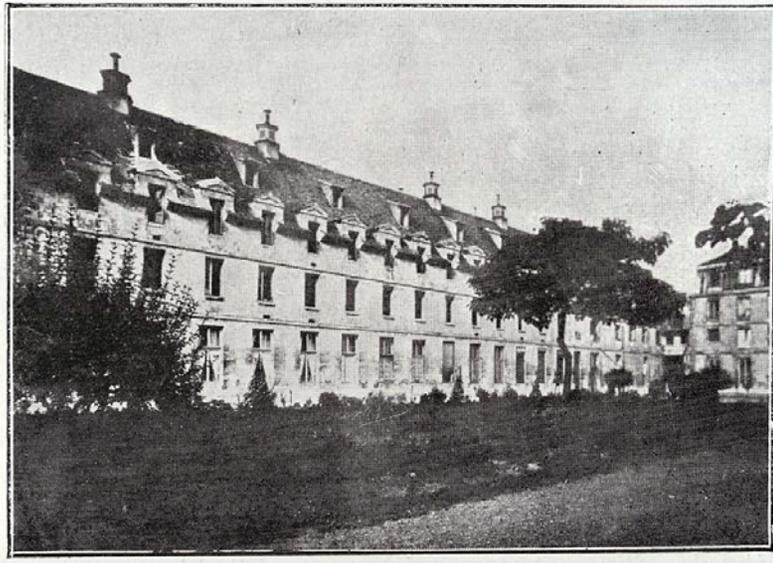
M Klaus, J Kennell, et al. (1972) NEJM, v286:460-463

J. Kennel et al. (1974) Dev. Med. Child Neur. v16:172-79

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Innate Influences on Prevention: The Birth Experience



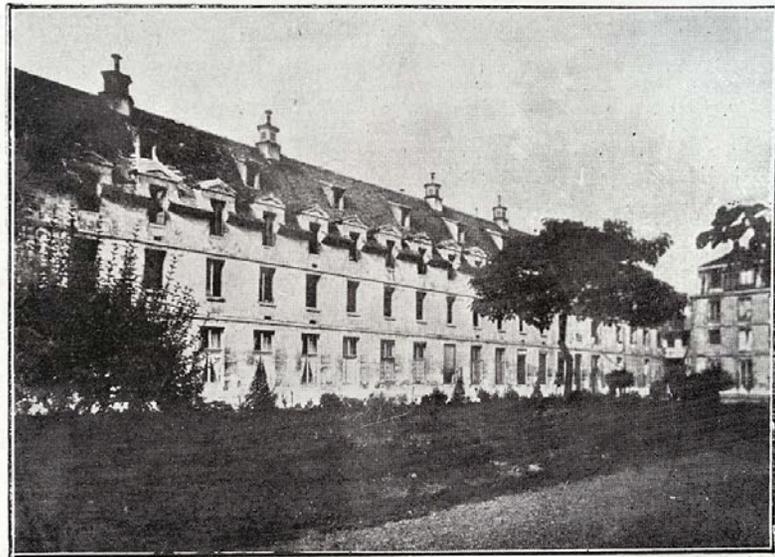
- Paris 1800's
- La Maternité charity hospital.
- In 1830 - 64% of infants born at La Maternité were abandoned.

Rachel Fuchs (1987). *Journal of Interdisciplinary History*, v18:55-80

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Innate Influences on Prevention: The Birth Experience



In 1837 hospital policies changed at La Maternite:

- Mothers were asked to stay and nurse.
- Abandonment decreased ~40%
- Policies changed over the decades
- Key finding: the longer mothers stayed and nursed the less likely they were to abandon infant.
- Rachel Fuchs (1987). *Journal of Interdisciplinary History*, v18:55-80.



Innate Influences on Prevention: The Birth Experience

- Costa Rica - Policy change increased mother-infant post-partum contact and reduced abandonment ~ 70% (n~78,000) (L. Mata et al. (1988) In Programs to Promote Breastfeeding, ed B. Jelliffe, Oxford Univ. Press.)
- Thailand - Hospital adopts UNICEF proposal increasing mother-infant contact resulting in decreased abandonment, n~4000 births (B Baranasin (1991) Asia-Pacific J Public Health v5:217-220.)
- Russia - Large maternity hospital increased mother-infant contact in at-risk women resulting in ~46% reduction in infant abandonment, n~20,000. (N. Lvoff et al. (2000) Arch Pediatr Adolesc Med v154:474-77).



Innate Influences on Prevention: Breastfeeding

- Duration of breastfeeding has recently been linked with prevention.
 - Study:
 - 6,621 mother-infant pairs followed over 15 years (Australia)
 - Results:
 - Mothers who breastfed more than 4 months were 4.8x less likely to maltreat child.
 - After controlling for 18 potential confounding variables mothers who nursed 4 months or more were still 2.6x less likely to neglect child

L Strathearn et al (2009). Pediatrics v123:483-93.



Practices that Increase Duration of Breastfeeding

- **Birth experience:**
 - Skin to skin immediate post partum - effective
 - Rooming in post delivery – effective
 - Doula support during birth – effective
 - Unicef Baby Friendly Hospital - effective
 - Vaginal vs caesarian delivery – effective
 - Lactation consultant - effective
- **Education:**
 - Pregnancy interactive group education - effective
 - Nurse family partnership: not effective
 - Pamphlets, lectures - not effective.
 - Training health professionals – not effective
- **Generous maternity policies:** - effective



Birth Experience at ANMC

- 1400 births per year at ANMC:
 - 800 are Anchorage area births.
 - 46% (~370) are at-risk (e.g., mother is homeless, single, inadequate income, abused as children).
 - Maternity admit = 2.1 days.
 - Risk for abandonment, neglect and abuse entering is high.
- SCF current plan (New Generations Charter):
 - rethink current pregnancy & birth practices
 - e.g., doulas, lactation consultants, birth center, Unicef Baby Friendly Hospital, maternal haven.



Learning Parenting Skills and Prevention

- **Nurse-family partnership:**
 - Nurses visit home, teach and support parents for 2 years post birth.
 - Program design by David Olds at U. Colorado
 - State wide initiatives in Colorado, Oklahoma & Pennsylvania
 - Key Finding 1: Families visited by a nurse were 48% less likely to have abused or neglected offspring at 15 year follow-up.
 - Key Finding 2: Para-professional programs have not been effective for prevention e.g., Healthy Families Alaska

D Olds et al (2007) J Child Psy. and Psych, v48:355-91



Learned Parenting Skills and Prevention

- SCF Nutaqsiivik - started in 1994.
- A nurse visitation program
- But there are important differences:
 - Nutaqsiivik nurse family ration is 1:60 (Olds 1:25)
 - Nutaqsiivik follows family one year post partum (Olds - 2 years)
- SCF now considering major changes in Nutaqsiivik



The Power of Story & Self Understanding: Family Wellness Warriors Initiative (FWWI)



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Family Wellness Warriors Initiative (FWWI)

- Attachment research shows that adults who remember and “tell their story” in a full and honest way are unlikely to repeat generational abuse

M Main and R Goldwyn (1984) Child Abuse and Neglect
v8:203-17.

- SCF Family Wellness Warriors Initiative (FWWI) helps people remember and tell their story from the heart.



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Family Wellness Warriors Initiative (FWWI)

- Created in 1998 by Alaska Native and American Indian Peoples
- Goal: To end child abuse and neglect in this generation.
- Method: Helping people to tell their story in 3-5 day gatherings that integrate spiritual and cultural renewal with evidence-based psychology.



Family Wellness Warriors Initiative (FWWI)

- Over 1,400 have attended FWWI trainings
- Assessment at 6 month follow-up shows the association between “real family” and “ideal family” has become much closer ($p=.00039$).



Summary

- Prevention is possible:
 - To date, prevention studies have explored whether a specific intervention reduces abuse.
 - A more important question is how to create optimally effective prevention programs
 - An integrated prevention model may be more effective (e.g., linking FWWI, quality birth experience and improved parenting skills).
 - This is the approach that SCF is currently considering.



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Additional information...

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Prevention and Adequate Parental Resources: Does family leave prevent child abuse?

- Study: A measure of family leave policy was created - family leave score (weeks of leave x % of base income provided).
- Family leave scores for 27 OECD nations compared with national rates of child mortality due to maltreatment (Source: Unicef Innocenti Report Card No. 5 September 2003).
- Finding: Nations with higher family leave scores (more generous benefits) had lower mortality due to child maltreatment (Wilcoxon rank sum $p=0.0164$)



Prevention: A Global Perspective

- World Health Organization (2006)
 - Prevention of child maltreatment is viewed as a “human rights based commitment.”
 - There is a great need for prevention research to learn how to build more effective programs.
 - Countries, states, and health care organizations who create prevention programs should study their model and publish findings.



Costs of Child Abuse: USA

- \$104 billion spent annually for the direct costs of child abuse.
- An additional \$69.5 billion spent for indirect costs including special education, mental and physical health care and juvenile delinquency.
- Cost per maltreated child ~\$182,000

C Wang and J Holton (2007) Economic Impact Study funded by Pew Charitable Trusts, and S. Fromm (2001) Total estimated costs of child abuse and neglect in the United States: Statistical evidence, http://member.preventchildabuse.org/site/PageServer?pagename=research_child_abuse;)

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Child Maltreatment Research

I. Prevalence studies:

- First good data published just 30 years ago.
- Key finding: Abuse is far more common than was imaged

II. Health impact of maltreatment:

- Numerous studies in last 25 years
- Virtually all studies too small (forest for the trees problem)
- CDC-ACE study: a new paradigm and current gold standard

III. Prevention research:

- Remarkably little evidence-based research exists
- Need for research is urgent (e.g., CDC, WHO)
- Current findings are poorly integrated but when taken together suggest novel approaches.



CDC Study concluding comment

“The mind-body dichotomy that persists in Western medical training may lead clinicians away from understanding the role that childhood trauma and stress has on the health of their adult patients....understanding the role of these childhood experiences on adult health will become increasingly important in making decisions about prognosis, diagnosis and treatment.”

CDC research group (2008) BMC Public Health 8:198.

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CDC Study concluding comment:

- “Current practices of medicine...are fragmented by... a symptom based system of medical care. Prevention ...of our nation’s leading health problems is likely to benefit from understanding that many of these problems tend to be co-morbid and may have common origins in the enduring ...consequences of abuse and...experiences during childhood.”

RF Anda et al. (2006) Eur. Arch Psychiatry Clin Neurosci. v256:p183

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ACE Questionnaire

- Is a first step to telling ones story.
- Is in public domain and available without charge.
- None of the anticipated difficulties manifested (e.g., no one became suicidal)
- In small study a psychiatrist saw people with high ACE score immediately after medical evaluation. 81% found this highly desirable and appreciated.
- Survey may be therapeutic
 - At Kaiser after some ACE questions integrated into their general health survey:
 - 35% reduction in primary care visits in first year.



ACE: SCF Family Wellness Objectives

FMW1: Reduce the rate child abuse and neglect

FMW1': Reduce the rate of domestic violence

FMW2: Reduce the rate of preventable cancers

FMW3: Reduce the incidence of suicide

FMW4: Reduce the rate of obesity

FMW5: Reduce the rate of substance abuse

FMW6: Reduce the rate of diabetes

FMW7: Improve oral health

FMW8: Reduce the rate of cardiovascular disease



Parental Mental Illness and Prevention

- Parental mental illness is an ACE.
 - With measurable effects on lifelong health:
 - Increases risk for suicide attempts later in life 3.3x
 - Increases risk for becoming alcoholic 2x
 - Increases risk for heart disease 40%
 - Increases risk for early use of tobacco by 70%
 - Increases risk of lifetime illicit drug use 1.9x
 - And so on...



Athabascan Birthing Traditions

- During the first 10 days post-partum mother and infant remained together constantly and were totally supported by family (leveraging bonding).
- Following this extended family helped with ongoing care (optimize parental learning and support).
- This traditional wisdom is not currently recorded for future generations.
- Should we seek funding for project to interview elders and create book on traditional birthing practices?

Thanks to Agnes Brown - SCF Board member

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ACE Study: Survey question for Domestic Violence

While you were growing up in your first 18 years of life, how often did your father (or stepfather) or mother's boyfriend do any of these things to your mother

- 1. Push, grab, slap or throw something at her?
- 2. Kick, bite, hit her with a fist, or hit her with something hard?
- 3. Repeatedly hit her over at least a few minutes?
- 4. Threaten her with a knife or gun, or use a knife or gun to hurt her?
 - 1=never
 - 2=once, twice
 - 3=sometimes
 - 4=often
 - 5=very often

A response of sometimes, often or very often for questions 1 and 2 and any response other than never for questions 3 and 4 defined a battered mother

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Why Any Success at Prevention is Important

Example: A prevention program that reduced ACEs in a family from 3 to 1 results in:

- Elimination of 5 of 6 suicide attempts
- Risk for alcohol dependence cut in half for next generation
- and so on for 33 health measures studied to this point.



Birth Experience and Prevention

Dena A Coy is SCF residence for drug addicted mothers (extremely high risk moms).

- Of pregnant women who plan to adopt out their baby (before birth) only about 20% actually do (Personal communication, Carolee Kukahindin, 2008)

