

The Lifelong Impact of Supporting Attachment and Bonding


October 23, 2008
 Healthy Brain Development Conference
 Eugene, Oregon

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A History of Careful Program Design

Dr. David Olds and NFP:
 a vision born in an inner-city childcare center

- Understanding root causes
- Designing effective cures
- Informed by science



David Olds, Ph.D.
 Professor of Pediatrics and Director,
 Prevention Research Center for Family and Child Health

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Strong Theoretical Underpinnings

- **Self-Efficacy Theory** - mother's ability to change certain behaviors by learning to draw upon her own strengths and successes. (*Albert Bandura 1977*)
- **Human Ecology Theory** - the mother's and child's social context are profound influences on the mother's life. (*Urie Bronfenbrenner 1979*)
- **Attachment Theory** - sensitive parental caregiving is a major influence on the child's growing sense of security in the world. (*John Bowlby & Mary Ainsworth 1991*)

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Program Goals


- Improve pregnancy outcomes
- Improve child health and development
- Improve parents' economic self-sufficiency



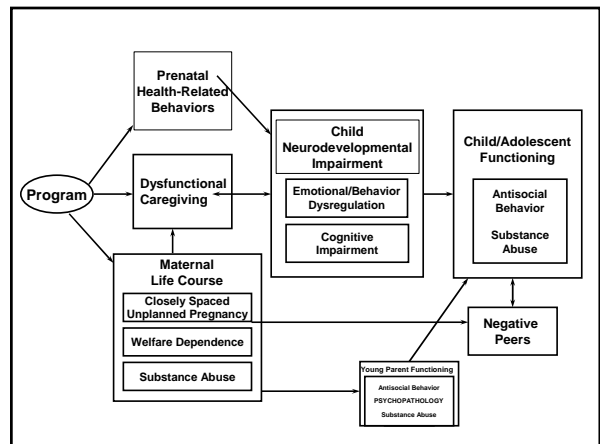
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Key Program Components

- Serves low-income, first-time parents and their children
- Nurse Home Visitors are highly educated registered nurses
- Visits begin early in pregnancy and continue through the first two years of the child's life
- Nurses follow developmentally appropriate guidelines
- Clinical Information System (CIS) monitors program implementation
- Powerful relationship fosters client strengths, oriented around client's goals



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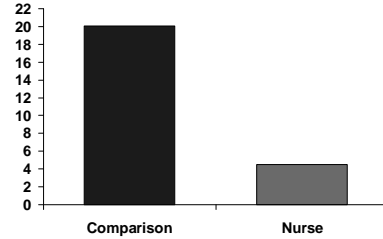
Diagnosis for Hospitalization where Injuries Ingestions Detected

Control Group (n=453)

	Age (in months)	Length of Stay
▪ Head Trauma	2.	1
▪ Fractured Fibula/Congenital Syphilis	2.4	12
▪ Strangulated Hernia with Delay in Seeking Care/ Burns (1 st to lips)	3.5	15
▪ Bilateral Subdural Hematoma	4.9	19
▪ Fractured Skull	5.2	5
▪ Bilateral Subdural Hematoma (Unresolved)/ Aseptic Meningitis - 2nd hospitalization)	5.3	4
▪ Fractured Skull	7.8	3
▪ Coin Ingestion	10.9	2
▪ Child Abuse/Neglect Suspected	14.6	2
▪ Fractured Tibia	14.8	2
▪ Burns (2 nd face/neck)	15.1	5
▪ Burns (2 nd & 3 rd bilateral leg)	19.6	4
▪ Gastroenteritis/Head Trauma	20.0	3
▪ Burns (splinting/grafting) - 2nd hospitalization	20.1	6
▪ Finger Injury/Osteomyelitis	23.0	6

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Childhood Mortality Birth to Age Nine - Memphis (per thousand live births)



P = .08, OR = .21 *Pediatrics*, 2007;120(4):e832-45.

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Effects on Maternal Life Course in Memphis (Child Age 5)

- 31% Fewer Rapid (<6 months) Subsequent Pregnancies
- 50% Fewer Subsequent Therapeutic Abortions
- 30% Fewer Subsequent Child NICU Admissions
- 3.64 Fewer Months of Welfare Use
- 32% Increase in Father Presence in Household
- 50% Increase in Marriage

Kitzman, Olds, Sidora, et al. *Journal of the American Medical Association (JAMA)*, April 19, 2000 1983-1989.

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Effects on Child Development: Memphis 6-Year

- Higher IQ's
- Better language development
- Better emotion integration & regulation
- Fewer dysregulated & incoherent narrations
- More reliance on adults
- Fewer mental health problems



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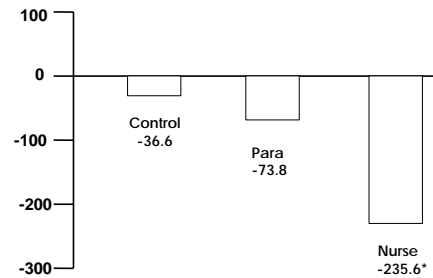
Pattern of Denver Program Effects

Maternal and Child Functioning



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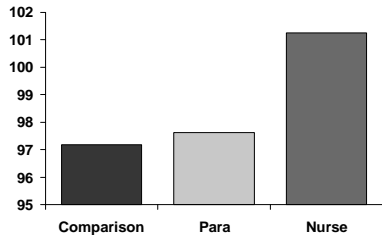
Change in Cotinine From Intake to End of Pregnancy



*Pc-n < .05

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Preschool Language Scale- 21 months



$P_{C-N} = .04, ES = .40$

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Why Nurses?

- Knowledge, judgment and skills
- High level of trust on nurses, little stigma
- Credibility and perceived authority in addressing parents' health and developmental concerns during pregnancy and infancy
- Program model, training and materials presume nursing preparation

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Is NFP Cost-Effective?

- NFP returns more than **\$17,000 in benefits over and above** program costs for each family enrolled (Washington State Institute of Public Policy (WSIPP) 2004)
- Savings accrue to government from decreased spending on health care, child protection, education, criminal justice, mental health, public assistance, and increased taxes paid by employed parents - **\$5.70 per dollar invested** (RAND 1998, 2005)

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Further Cost-Benefits from WSIPP

NFP was identified as a valuable investment in two other WSIPP reports:

- 2006 evaluation to determine policy options to reduce future prison construction, criminal justice costs and crime rates with a cost-benefit of: **\$27,005**
- 2008 study looking at how to prevent children from entering the child welfare system with a cost-benefit of: **\$18,054**

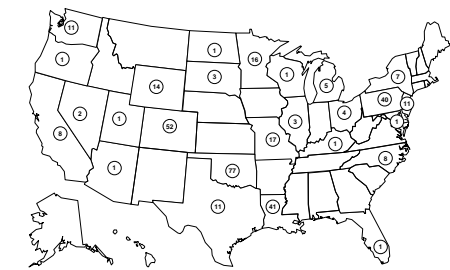
www.wsipp.wa.gov

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Nurse-Family Partnership is endorsed as model program by:

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Counties Served by Nurse-Family Partnership as of August 2008



○ Numbers indicate number of counties in which the program is serving clients
 Currently serving clients in approximately 335 counties across 26 states.
 ○ States (4) where Nurse-Family Partnership is a state initiative

Broad Replication Goals

- Enable diverse communities, agencies and nurses to *conduct NFP effectively*
- Make NFP *widely available*
- Make NFP *sustainable* in its effectiveness and operations at the local level
- Nest NFP within a continuum of care for families

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From Science to Practice: National Replication

National Office services that support local implementation

- Nurturing Community, Organizational and State (program) Development
- Education and Technical Assistance
- Clinical Information System (CIS) quarterly & annual reports on local outcomes
- Quality Improvement Support
- Marketing, advocacy & communications support



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Replication Research Projects

- Client Retention Intervention
 - OK and PA sites, RCT
- Mental Health Screening Improvement Initiative
 - NYC pilot study to test feasibility
- Development and Evaluation of an Intervention for Intimate Partner Violence
- Services to High Risk Clients
- Engaging Fathers



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