



Why Do Research?

JOHN HOPKINS CENTER FOR AMERICAN INDIAN HEALTH

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Introduction

- Your project
 - Who do you want to help?
 - How do you want to help?
 - What is the setting or system?
 - Who will do the helping?
 - How can you tell if it is working?
 - If it is not working how do you find out what is wrong?
 - Does it save money?
 - Are there any other benefits?
- Why we did home visiting

Who do you want to help?

- ❑ Young first time moms?
- ❑ Older experienced moms?
- ❑ A mix

How do you want to help?

- Small, medium or large intervention?
- Unstructured, semi-structured, structured curriculum?

What is the setting or system?

- Where will the intervention take place?
 - Existing system like IHS, Head Start, Tribal Health?
 - A new or parallel system?
- Where will the intervention take place?
 - Home?
 - How far will you travel?
 - Car or truck?
 - Office?

Who will do the helping?

- Professionals?
- Paraprofessionals?
- Men or women?
- Community or non-community members?

How can you tell if it is working?

- What is the key outcome?
 - Mother change?
 - Father change?
 - Baby change?
- Change in what?
 - Doing better than they were at the beginning?
 - Doing better similar families that didn't get the intervention?
- Who will do the assessment
 - People who do the training?
 - Independent people?

How can you tell if it is working?

- ❑ Do you want to know if the trainers are doing what they are supposed to do?
- ❑ Do you want to know if the participants are doing what they are supposed to do?
- ❑ Do you want to know what parts of the intervention are most and least effective?
- ❑ Do you want to know whether there are some families who don't benefit?

If it is not working how do you find out what is wrong?

- Is it the curriculum?
- Is it the staff?
- Is it how the training is being done with participants?
 - Rapport building problems?
 - Training problems?
- Are the participants not well matched to the program and the staff?

Does it save money?

- Is the cost of the program offset by the benefit?
- How will you be able to tell?

Are there any other benefits?

- What are the benefits to the staff?
- Are there any secondary benefits to the program or the tribe?

Why we did home visiting

- ❑ What did we know that helped up decide on home visiting?
- ❑ Who did we want to help?
- ❑ How did we want to help?
- ❑ How did we pick the setting or system?
- ❑ Who did we pick to do the helping?
- ❑ How can we tell if it is working?
- ❑ If it is not working how do know out what is wrong?
- ❑ Does it save money?
- ❑ Are there any other benefits?

Who did we want to help?

- ❑ Young, mostly first time moms
- ❑ Native women often begin child bearing in their teen years
- ❑ Native women often have a number of children close together in time

What did we know that helped up decide on home visiting?

- ❑ Large burden of problems in reservation communities related to family functioning
- ❑ Problems start really early
- ❑ Prevention is less expensive than treatment
- ❑ Starting earlier is easier than later

How did we want to help?

- ❑ We did a structured manualized curriculum.
- ❑ A manualized curriculum could be passed down from one trainer to the next
- ❑ A manualized curriculum can be shared with other communities
- ❑ A manualized curriculum can be comprehensive
- ❑ We counted on our staff to personalize the training for participants

How did we pick the setting or system?

- We had a free standing system in place
- We had good relationships with IHS ob-gyn and pediatrics based on previous projects
- We decided to prove the project worked as a free standing project then we would work with IHS, Head Start and other tribes to integrate the project into existing institutions

Who did we pick to do the helping?

□ Professionals

- Few in number.
- Might have had to hire non-community members
- Professionals are less affordable

□ Community paraprofessionals

- Large number of smart, talented and eager paraprofessionals
- Match the participants in background
- Paraprofessionals are more affordable

How can we tell if it is working?

- ❑ We assess mothers and their children and their progress overtime.
- ❑ We compare change in knowledge and skills over time.
- ❑ We compare mothers and babies in the program to mothers and babies in a comparison group
- ❑ We have the ability to identify early factors in a mothers life or her training experience that will allow for us to predict how she will do longer-term
- ❑ We use independent people to evaluate whether the project is working.

If it is not working, how do we know out what is wrong?

- ❑ We train, train; supervise, supervise
- ❑ We test our trainers to make sure they know what they are doing
- ❑ We audio tape the training and evaluation sessions to see if the trainers and evaluators are doing what they are trained to do.
- ❑ One of our assessments that mother complete tells us whether they are getting the training.
- ❑ We ask mothers about life issues than may get in their way of full benefit and provide resources to address those needs.

Does it save money?

- Not sure yet. That aspect of the project is being evaluated in our next study

Are there any other benefits?

- ❑ Our staff become better parents
- ❑ Our staff feel like they are helping people and their tribe
- ❑ Some of our staff have taken on tribal leadership roles because of the public nature of the project
- ❑ Our staff get tuition re-imbursment for advanced degrees
- ❑ The tribe feels some comfort that some of the most vulnerable are getting help
- ❑ The IHS, Head Start and Health Board are engaged and interested in what we are doing
- ❑ We are able to raise money for more projects

Home-Visiting Intervention to Improve Child Care Among American Indian Adolescent Mothers

A Randomized Trial

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Objective: To assess the impact of a paraprofessional-delivered home-visiting intervention to promote child care knowledge, skills, and involvement among pregnant American Indian adolescents.

Design: Randomized controlled trial comparing a family-strengthening intervention with a breastfeeding education program.

Setting: One Apache and 3 Navajo communities.

Participants: Fifty-three pregnant American Indian adolescents were randomly assigned to intervention ($n=28$) or control ($n=25$) groups. Follow-up data were available for 19 intervention and 22 control participants.

Intervention: Paraprofessionals delivered 41 prenatal and infant care lessons in participants' homes from 28 weeks' gestation to 6 months post partum.

Main Outcome Measures: Child care knowledge, skills, and involvement.

Results: Mothers in the intervention compared with the control group had significantly higher parent knowledge scores at 2 months (adjusted mean difference [AMD], +14.9 [95% confidence interval (CI), +7.5 to +22.4]) and 6 months post partum (AMD, +15.3 [95% CI, +5.9 to +24.7]). Intervention group mothers scored significantly higher on maternal involvement scales at 2 months post partum (AMD, +1.5 [95% CI, -0.02 to +3.02]), and scores approached significance at 6 months post partum (AMD, +1.1 [95% CI, -0.06 to +2.2]). No between-group differences were found for child care skills.

Conclusions: A paraprofessional-delivered, family-strengthening home-visiting program significantly increased mothers' child care knowledge and involvement. A longer and larger trial is needed to understand the intervention's potential to improve adolescent parenting and related child outcomes in American Indian communities.

Randomized Controlled Trial of a Paraprofessional-Delivered In-Home Intervention for Young Reservation-Based American Indian Mothers

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ABSTRACT

Objective: To evaluate the efficacy of a paraprofessional-delivered, home-visiting intervention among young, reservation-based American Indian (AI) mothers on parenting knowledge, involvement, and maternal and infant outcomes. **Method:** From 2002 to 2004, expectant AI women aged 12 to 22 years ($n = 167$) were randomized (1:1) to one of two paraprofessional-delivered, home-visiting interventions: the 25-visit "Family Spirit" intervention addressing prenatal and newborn care and maternal life skills (treatment) or a 23-visit breast-feeding/nutrition education intervention (active control). The interventions began during pregnancy and continued to 6 months postpartum. Mothers and children were evaluated at baseline and 2, 6, and 12 months postpartum. Primary outcomes included changes in mothers' parenting knowledge and involvement. Secondary outcomes included infants' social and emotional behavior; the home environment; and mothers' stress, social support, depression, and substance use. **Results:** Participants were mostly teenaged, first-time, unmarried mothers living in reservation communities. At 6 and 12 months postpartum, treatment mothers compared with control mothers had greater parenting knowledge gains, 13.5 ($p < .0001$) and 13.9 ($p < .0001$) points higher, respectively (100-point scale). At 12 months postpartum, treatment mothers reported their infants to have significantly lower scores on the externalizing domain ($\beta = -.17$, $p < .05$) and less separation distress in the internalizing domain ($\beta = -.17$, $p < .05$). No between-group differences were found for maternal involvement, home environment, or mothers' stress, social support, depression, or substance use. **Conclusions:** This study supports the efficacy of the paraprofessional-delivered Family Spirit home-visiting intervention for young AI mothers on maternal knowledge and infant behavior outcomes. A longer, larger study is needed to replicate results and evaluate the durability of child behavior outcomes. *J. Am. Acad. Child Adolesc. Psychiatry*, 2009;48(6):591-601. **Key Words:** American Indian, home visiting, parenting, infant development. Clinical trial registry information—Family Spirit Study. URL: <http://www.clinicaltrials.gov>. Unique identifier: NCT00356551.

“In-Home Prevention of Substance Abuse Risk in Native Teen Families” (Grant #1 RO1 DA019042)

Cradling Our Future



An RCT of home-based, paraprofessional-delivered
“Family Spirit” intervention to prevent drug abuse risk

Cradline Our Future

- The goal of the grant is to evaluate whether the Family Spirit intervention is effective in promoting positive health and behavior outcomes known to reduce the risk for mental health problems and drug abuse over the lifetime of American Indian teen mothers and children served.



Cradling Our Future Study Significance



- ❑ Addressing highest risk and hardest to reach population in the US
- ❑ Effectiveness of home visiting to reduce drug use disparities among American Indians
- ❑ Potential to disrupt multi-generational cycle of drug use by targeting at risk teen families
- ❑ Demonstrate American Indian paraprofessionals as effective behavioral health interventionists
- ❑ The FS intervention has high potential for replication/dissemination in tribal communities

Family Spirit Replication

- The pilot FS Program (to 1 year postpartum)
 - Indian Health Service Early Head Start
 - Chinle Public Health Nursing Program
 - Seattle Indian Health Board
- Proposed/Under Review
 - Navajo – via PHN/CHR programs

Why Do Research?

- Many of the decision involved in planning, developing, implementing and evaluating your program uses research strategies
- A rigorously implemented program assures program credibility, enhances chances for long term acceptance and building of other opportunities



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