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About This Program

Target Population: First-time, low-income mothers (no previous live births)

For children/adolescents ages: 0 – 5

For parents/caregivers of children ages: 0 – 5

Program Overview

The *Nurse-Family Partnership (NFP)* program provides home visits by registered nurses to first-time, low-income mothers, beginning during pregnancy and continuing through the child's second birthday.

Program Goals

The primary goals of *Nurse-Family Partnership (NFP)* are:

- To improve pregnancy outcomes by promoting health-related behaviors
- To improve child health, development and safety by promoting competent care-giving
- To enhance parent life-course development by promoting pregnancy planning, educational achievement, and employment

The program also has two secondary goals:

- To enhance families' material support by providing links with needed health and social services
- To promote supportive relationships among family and friends

Essential Components

The essential components of *Nurse-Family Partnership (NFP)* include:

- Clients:
 - Voluntary
 - First time mothers
 - Low income
 - Enrolled early in pregnancy
- Intervention context:

- Within a 1:1 therapeutic relationship
- Visits are in the clients home
- Visit schedule per guidelines and client's needs
- Nurses and Supervisors:

Complete all **NFP** core education

- Application of the intervention:
 - Nurses use their judgment to apply the *NFP* visit guidelines across 6 domains:
 - Personal Health
 - Environmental Health
 - Life Course Development
 - Maternal Role
 - Family and Friends
 - Health and Human Services

Nurses apply the three theories through current strategies:

Self-Efficacy

Human Ecology

Attachment

- Nurses carry manageable caseloads, no more than 25 families
- Reflection and Clinical Supervision:
 - 1:1 weekly clinical supervision for each nurse with the nurse supervisor
 - o Case conferences are structure, at least 2 times a month
 - Nurse supervisors conduct joint home visits with each nurse three times a year
- Program Monitoring and Use of Data:
 - Nurses collect data as specified by the *Nurse-Family Partnership* National Service Office (NFP NSO), and all data is sent to the *NFP* NSO's national database called Efforts to Outcomes (ETO)
 - *NFP* NSO reports data to agencies to assess and guide program <u>implementation</u>
 - Agencies use these reports to monitor, identify and improve variances, and assure <u>fidelity</u> to the **NFP** model
- Agency:
 - Is networked with other services in the community
 - Has community support for sustainability

Program Delivery

Child/Adolescent Services

Nurse-Family Partnership (NFP) directly provides services to children/adolescents and addresses the following:

First child of a mother with a low socio-economic status

Parent/Caregiver Services

Nurse-Family Partnership (NFP) directly provides services to parents/caregivers and addresses the following:

Pregnant with first child, low socio-economic level

Recommended Intensity:

Ideally, nurses begin 60-90 minute visits with pregnant mothers early in their pregnancy (about 16 weeks gestation). Registered nurses visit weekly for the first month after enrollment and then every other week until the baby is born. Visits are weekly for the first six weeks after the baby is born, and then every other week through the child's first birthday. Visits continue on an every-other-week basis until the baby is 20 months. The last four visits are monthly until the child is two years old. Nurses use their professional nursing judgment and increase or decrease the frequency and length of visits based on the client's needs.

Recommended Duration:

Clients are able to participate in the program for two-and-a-half years and the program is voluntary.

Delivery Settings

This program is typically conducted in a(n):

- Birth Family Home
- Community Agency

Homework

This program <u>does not</u> include a homework component.

Languages

Nurse-Family Partnership (NFP) has materials available in a language other than English:

Spanish

For information on which materials are available in this language, please check on the program's website or contact the program representative (contact information is listed at the bottom of this page).

Resources Needed to Run Program

The typical resources for implementing the program are:

- Office space that facilitates confidentiality related to clients and health care records
- Computer and telecommunication capabilities
- Cell phones
- 1 FTE Nurse Supervisor per 4 FTE nurse home visitors
- 0.50 FTE clerical/data entry support for each 4-nurse team serving 100 families
- Adequate travel expense reimbursement (mileage) for home visitors

In addition, a community advisory board and strong, stable, and sustainable funding for agency operations is recommended.

Education and Training

Prerequisite/Minimum Provider Qualifications

Nurse home visitors:

Registered Nurse with a Bachelor's Degree in nursing, as a minimum qualification

Nurse Supervisor:

Registered Nurse with a Bachelor's Degree in nursing, as a minimum qualification, and a Master's Degree in Nursing preferred

Education and Training Resources

There <u>is a manual that describes how to implement this program</u>, and there <u>is training</u> available for this program.

Training Contact:

Joan Barrett, Education Manager Nurse-Family Partnership - National Service Office <u>joan.barrett@nursefamilypartnership.org</u> phone: (866) 864-5226

Training is obtained:

Orientation self-study plus training provided in Denver, which also includes distance-learning strategies

Number of days/hours:

For Nurse Home Visitors AND Supervisors:

Unit One: 40 hours of orientation self-study

- Unit Two: 25 hours over 3 ¾ days in Denver of face-to-face education and experiential practice
- Unit Three: approximately 10 hours of additional distance education and a series of team-based, supervisor-led topical professional development modules

For Supervisors (in addition to the above):

- Supervisor Unit One: 10 hours of additional self-study
- Supervisor Unit Two: 1 additional day of Supervisor
- Orientation during Unit Two education week in Denver
- Supervisor Unit Three: 20 additional hours over 3 days, face-to-face in Denver
- Ongoing consultation with a Nurse-Family Partnership Nurse Consultant
- Annual Supervisor Education and Refresher: 20 hours over 3 days, face-to-face in Denver annually

Implementation Information

Pre-Implementation Materials

There are pre-implementation materials to measure organizational or provider readiness for *Nurse-Family Partnership (NFP)* as listed below:

The pre-implementation materials are used as part of **NFP**'s planning and development process. Key steps in the local planning and development process include the following:

- Data-driven <u>assessment</u> of need: Interested parties can request program materials to help them determine whether implementing the program makes sense in their own com m unities. These materials pose pertinent questions and suggest statistical analyses (e.g., identifying child abuse rates, crime, unemployment, and health problems) to inform decision-making.
- Review of existing services: Interested parties perform a thorough <u>assessment</u> of currently available services for low-income women and children to determine how the program could fit into that continuum.
- Creation of task force to select program host: Based on the <u>assessment</u> of existing services, interested parties set up a planning task force with representatives of the various organizations (e.g., hospitals, public health departments, women's clinics, community organizations) that might host or support the program. This task force then decides which agency would be the best host for the program.
- Feasibility <u>assessment</u>: The selected agency performs a feasibility <u>assessment</u> during which it considers its ability to staff and finance the program, including whether it can serve enough women to be viable.
- Determination of referral sources and outreach methods: Using program materials,

- the agency designs a referral and outreach process to ensure that qualified women hear about the program.
- Development of <u>implementation</u> plan: The agency develops an <u>implementation</u> plan that incorporates processes for identifying sustainable sources of funds, hiring and training staff, ensuring client identification and outreach, and managing the program with <u>fidelity</u> to the model.
- Hiring: The agency hires nurses and a nursing supervisor. The Nurse-Family
 Partnership National Program Office offers sample job descriptions and interviewing
 guidance.

The materials are available at www.nursefamilypartnership.org.

Formal Support for Implementation

There is formal support available for <u>implementation</u> of **Nurse-Family Partnership (NFP)** as listed below:

Ongoing training is provided for nurses and their supervisors. Nurses and their supervisors participate in a 9-month comprehensive training program to learn how to conduct the inhome visits. The training incorporates a combination of a self-study workbook, web-based training activities, and two onsite training sessions at the Nurse-Family Partnership National Service Office in Denver. Ongoing education and training occurs for both new nurse home visitors and supervisors hired to implement the program. Supervisors receive ongoing consultation to help them develop strong skills with respect to reflective supervision, along with coaching from experienced program consultants.

Fidelity Measures

There are <u>fidelity</u> measures for *Nurse-Family Partnership (NFP)* as listed below:

Before becoming a NFP Implementing Agency, there must be assurance by the applying agency of its intention to deliver the program with fidelity to the model tested. Such <u>fidelity</u> requires adherence to all of the Nurse-Family Partnership Model Elements. The elements can be found at <u>www.nursefamilypartnership.org/communities/model-elements</u>.

Nurses collect client and home visit data as specified by the Nurse-Family Partnership National Program Office, and all data is sent to the Nurse-Family Partnership National Program Office's national database. The Nurse-Family Partnership National Program Office reports out data to agencies to assess and guide program implementation, and agencies use these reports to monitor, identify and improve variances, and assure <u>fidelity</u> to the **NFP** model.

Implementation Guides or Manuals

There are <u>implementation</u> guides or manuals for *Nurse-Family Partnership (NFP)* as listed below:

The Nursing team at the Nurse-Family Partnership National Service Office provides both face-to-face and distance learning environments for the core education required of all Nurse-Family Partnership Nurse Home Visitors and Nurse Supervisors prior to client enrollment. This specialized nurse training helps establish therapeutic relationships between the client and nurse home visitor, which in turn preserves the clinical integrity of the *Nurse-Family Partnership* model. New nurses also learn the visit-to-visit guidelines, which provide a consistent content and structure for each of the 64 planned home visits. With assistance from supervisors and consultation from the National Service Office, nurses develop strong communication, personal relationship building, and problem-solving skills. Teams of nurses at local Nurse-Family Partnership Implementing Agencies meet regularly for case conferences, where they receive guidance from supervisors and colleagues to help them deliver the best possible care to their clients. Team meetings also help individual nurses cope with the stress inherent in working with clients who may have numerous personal and health-related crises, and who may be at high-risk for violence in their homes and neighborhoods. In addition to Nurse-Family Partnership core education and the visit-tovisit guidelines, nurse home visitors meet regularly with their supervisors to develop a reflective practice and continuously assess their clinical nursing skills. - See more at: http://www.nursefamilypartnership.org/nurses/initial-education#sthash.mjNCITrK.dpuf. For more information, contact Erika Messenger-Bantz at erika.bantz@nursefamilypartnership.org or (866) 864-5226.

Research on How to Implement the Program

Research has been conducted on how to implement *Nurse-Family Partnership (NFP)* as listed below:

The Denver trial compared the **NFP** model delivered by RNs vs paraprofessionals, and is on target comparing the **NFP** model delivered by two different home visiting providers.

- Olds, D., Robinson, J., O'Brien, R., Luckey, D. W., Pettitt, L. M., Henderson Jr., C. R., ... Talm, A. (2002). Home visiting by paraprofessionals and by nurses: A <u>randomized</u> <u>controlled trial</u>. *Pediatrics*, *110*(3), 486-496.
- Olds, D., Robinson, J., Pettitt, L. M., Luckey, D. W., Holmberg, J., Ng, R. K., ... Henderson Jr., C. R. (2004). Effects of home visits by paraprofessionals and by nurses: Age four follow-up results of a randomized trial. *Pediatrics*, *114*(6), 1560-1568.
- Olds, D., Holmberg, J., Donelan-McCall, N., Luckey, D. W., Knudtson, M. D., & Robinson, J. (2014). Effects of home visits by paraprofessionals and by nurses on children: Follow-up of a randomized trial at ages 6 and 9 years. *JAMA Pediatrics*, 168(2), 114-121.

Studies to develop strategies to increase client participation and retention and analyses are

being conducted in partnership with the Children's Hospital of Philadelphia to examine differences in <u>implementation</u> and outcomes across communities implementing the model in Pennsylvania.

Relevant Published, Peer-Reviewed Research

Child Welfare Outcomes: Safety and Child/Family Well-Being

When more than 10 research articles have been published in <u>peer-reviewed</u> journals, the CEBC reviews all of the articles as part of the rating process and identifies the 10 most relevant articles, with a focus on <u>randomized controlled trials</u> (RCTs) and controlled studies that have an impact on the rating. The 10 articles chosen for *Nurse-Family Partnership* (*NFP*) are summarized below:

Olds, D. L., Henderson, C. R., Chamberlin, R., &, Tatelbaum, R. (1986). Preventing child abuse and neglect: A randomized trial of nurse home visitation. *Pediatrics, 78,* 65-78.

Type of Study: Randomized controlled trial

Number of Participants: 400

Population:

- Age 47% younger than 19 years
- Race/Ethnicity 89% Caucasian
- Gender 100% Female
- **Status** Participants were determined at intake to have at least one risk factor: mother less than 19 years old, single parent status, or low socioeconomic status.

Location/Institution: Elmira, New York

Summary: (To include comparison groups, outcomes, measures, notable limitations)

Volunteers and women recruited due to a risk factor were randomly assigned to one of conditions described below: 1) Sensory and developmental <u>screening</u> at 12 and 24 months only (control group); 2) Free transportation to regular prenatal and perinatal visits, and sensory and developmental <u>screening</u> at 12 and 24 months; 3) Nurse home visitation during pregnancy only, free transportation to regular prenatal and perinatal visits, and sensory and developmental <u>screening</u> at 12 and 24 months; or 4) Nurse home visits until the child was 2 years old in addition to nurse home visitation during pregnancy, free transportation to regular prenatal and perinatal visits, and sensory and developmental <u>screening</u> at 12 and 24 months [now called **Nurse Family Partnership (NFP)**]. Nurse home visits included education on parenting, involving friends and family, enhancing social support, and linking families to other health and human services. Measures included medical examinations and developmental testing using the *Bayley and Cattell Scales* at 6, 12, and 24 months, and home

observation using the *Caldwell and Bradley Procedure*. The list of participants was also checked against verified cases of abuse and neglect and medical records were examined. Among women at highest risk, those visited by a nurse had fewer reports of child abuse and neglect, were observed to restrict and punish children less frequently, provided more appropriate play materials and had fewer emergency room visits. In the second year, all nurse-visited women, regardless of risk status, had fewer emergency room visits and fewer physician visits for accidents and poisoning. Limitations include generalizability due to gender and lack of follow-up.

Length of postintervention follow-up: Not specified.

Olds, D. L., Henderson, C. R., & Kitzman, H. (1994). Does prenatal and infancy nurse home visitation have enduring effects on qualities of parental caregiving and child health at 25 to 50 months of life? *Pediatrics, 93,* 89-98.

Type of Study: Randomized controlled trial

Number of Participants: 316

Population:

- Age 47% younger than 19 years
- Race/Ethnicity 89% Caucasian
- Gender 100% Female
- **Status** Participants were determined at intake to have at least one risk factor: mother less than 19 years of age, single parent status, or low socioeconomic status.

Location/Institution: Elmira, New York

Summary: (To include comparison groups, outcomes, measures, notable limitations)

Note: This study used the same sample as Olds, et al.(1986). Volunteers and women recruited due to a risk factor were randomly assigned to one of conditions described below:

1) Sensory and developmental screening at 12 and 24 months only (control group); 2) Free transportation to regular prenatal and perinatal visits, and sensory and developmental screening at 12 and 24 months; 3) Nurse home visitation during pregnancy only, free transportation to regular prenatal and perinatal visits, and sensory and developmental screening at 12 and 24 months; or 4) Nurse home visits until the child was 2 years old in addition to nurse home visitation during pregnancy, free transportation to regular prenatal and perinatal visits, and sensory and developmental screening at 12 and 24 months [now called Nurse Family Partnership (NFP)]. Home assessments were made using the Caldwell and Bradley Home Inventory. Interviewers also compiled a checklist evaluating children's exposure to hazardous substances and situations in the home. The Stanford Binet test of intelligence was administered at 36 and 48 months. Finally, pediatric and hospital records were reviewed for the 25th through the 50th month and Child Protective Service records

were checked against the list of participants. No treatment differences were found for child abuse, neglect, or in intellectual functioning. Children in the nurse-visited condition had fewer hazards in the home, fewer injuries and ingestions, and fewer behavioral and parental coping problems noted on medical records. Nurse visited mothers showed higher levels of punishment and restriction, but the authors suggest that their analysis shows this level was associated with the lower instance of injuries and ingestions for the treatment group. Limitations include generalizability due to gender and race and high <u>attrition</u> rate.

Length of postintervention follow-up: Up to 26 months.

*Olds, D. L., Eckenrode, J., Henderson, C. R., Kitzman, H., Powers, J., Cole, R.,...Luckey, D. (1997). Long-term effects of home visitation on maternal life course and child abuse and neglect. Fifteen-year follow-up of a randomized trial. *Journal of the American Medical Association*, 278(8), 637-643.

Type of Study: Randomized controlled trial

Number of Participants: 324

Population:

- **Age** 47% younger than 19 years
- Race/Ethnicity 89% Caucasian
- Gender 100% Female
- **Status** Participants were determined at intake to have at least one risk factor: mother less than 19 years of age, single parent status, or low socioeconomic status.

Location/Institution: Elmira, New York

Summary: (To include comparison groups, outcomes, measures, notable limitations)

Note: This study used the same sample as Olds, et al. (1986) and Olds, et al. (1994).

Volunteers and women recruited due to a risk factor were randomly assigned to one of conditions described below: 1) Sensory and developmental <u>screening</u> at 12 and 24 months only (control group); 2) Free transportation to regular prenatal and perinatal visits, and sensory and developmental <u>screening</u> at 12 and 24 months; 3) Nurse home visitation during pregnancy only, free transportation to regular prenatal and perinatal visits, and sensory and developmental <u>screening</u> at 12 and 24 months; or 4) Nurse home visits until the child was 2 years old in addition to nurse home visitation during pregnancy, free transportation to regular prenatal and perinatal visits, and sensory and developmental <u>screening</u> at 12 and 24 months [now called *Nurse Family Partnership (NFP)*]. <u>Assessments</u> at this follow-up included behavioral impairments due to drug or alcohol use, use of welfare, and reviews of Child Protective Services and New York State criminal justice records. Women visited by

nurses were less likely to be perpetrators of child abuse and neglect, and had fewer arrests, convictions, and number of days jailed. Limitations include generalizability due to gender and ethnicity and high <u>attrition</u> rate.

Length of postintervention follow-up: 13 years.

*Eckenrode, J., Ganzel, B., Henderson Jr, C. R., Smith, E., Olds, D. L., Powers, J.,...Sidora, K. (2000). Preventing child abuse and neglect with a program of nurse home visitation. *Journal of the American Medical Association, 284*(11), 1385-1391.

Type of Study: Randomized controlled trial

Number of Participants: 324

Population:

- **Age** 47% younger than 19 years
- Race/Ethnicity 89% Caucasian
- Gender 100% Female
- **Status** Participants were mothers determined at intake to have at least one risk factor: mother less than 19 years of age, single parent status, or low socioeconomic status.

Location/Institution: Semirural community in New York

Summary: (*To include comparison groups, outcomes, measures, notable limitations*) Note: This study used the same sample as Olds, et al. (1986, 1994, 1997, and 1998). Volunteers and women recruited due to a risk factor were randomly assigned to one of conditions described below: 1) Sensory and developmental screening at 12 and 24 months only (control group); 2) Free transportation to regular prenatal and perinatal visits, and sensory and developmental screening at 12 and 24 months; 3) Nurse home visitation during pregnancy only, free transportation to regular prenatal and perinatal visits, and sensory and developmental screening at 12 and 24 months; or 4) Nurse home visits until the child was 2 years old in addition to nurse home visitation during pregnancy, free transportation to regular prenatal and perinatal visits, and sensory and developmental screening at 12 and 24 months [now called *Nurse Family Partnership (NFP)*]. Mothers were interviewed at 15 years, using a life history calendar designed to help them recall major life events. They also estimated how many months they received Aid to Families with Dependent Children, Medicaid, or food stamps. Mothers reported incidents of domestic violence using the Conflict Tactics Scale and provided consent for researchers to review CPS records. Families receiving nurse visitation during pregnancy and infancy had fewer child maltreatment reports involving mother as perpetrator and study child as victim. The treatment effect decreased as level of overall domestic violence increased. The authors conclude that the presence of domestic violence may limit the effectiveness of early visitation interventions.

Limitations include the presence of domestic violence which may limit the effectiveness of early visitation interventions, high <u>attrition</u> rate, and generalizability due to ethnicity and gender.

Length of postintervention follow-up: 13 years.

*Olds, D. L., Robinson, J., Pettitt, L., Luckey, D. W., Holmberg, J., Ng, R. K.,...Henderson, C. R. (2004). Effects of home visits by paraprofessionals and by nurses: Age 4 follow-up results of a randomized trial. *Pediatrics*, *114*, 1560-1568.

Type of Study: Randomized controlled trial

Number of Participants: 635

Population:

- **Age** Mean=19.8 years
- Race/Ethnicity Approximately 45% Hispanic, 35% Caucasian, and 16% African American
- Gender 100% Female
- **Status** Participants were recruited from clinics serving low income women if no previous live births and either qualified for Medicaid or had no private health insurance.

Location/Institution: Denver, CO

Summary: (*To include comparison groups, outcomes, measures, notable limitations*) Note: This study used the same sample as Olds, et al., 2002. Women were assigned to one of three conditions: developmental screening and referral at 6, 12, 15, 21, and 24 months; the above screenings plus home visitation by a paraprofessional during pregnancy and the first 2 years of the child's life; and equivalent services with home visitations conducted by a nurse [now called Nurse-Family Partnership (NFP)]. Paraprofessionals were limited to those who had a high school education and no bachelors degree or coursework in a helping profession, in order to gauge the viability of using this type of worker in home visiting in comparison with nurses. The paraprofessionals were recruited from other home visitation programs. Assessed at this follow-up were maternal reports of subsequent pregnancies, education and work histories, marriage, cohabitation, domestic violence, mental health, substance use, and sense of mastery. Mother-child interaction and the home environment were observed. Children were assessed for language and executive functioning, and mothers reported on children's externalizing behavior problems. Women visited by paraprofessionals were less likely to be married or live with the biological father of the child, but worked more and had better mental health and sense of mastery. Children visited by paraprofessionals displayed greater sensitivity and responsiveness, and had home environments supportive of early learning. Nurse-visited women had greater intervals

between 1st and 2nd children, experienced less domestic violence, and enrolled their children less in formal daycare or preschool. Nurse-visited children had better home environments, better language and executive functioning skills, and better behavioral <u>adaptation</u> during testing. Limitations include higher study <u>attrition</u> among nurse-visited women and <u>reliability</u> on self-reported measures.

Length of postintervention follow-up: 2 years.

*Olds, D. L., Kitzman, H., Hanks, C., Cole, R., Anson, E., Sidora-Arcoleo, K.,...Bondy, J. (2007). Effects of nurse home visiting on maternal and child functioning: Age 9 follow-up of a randomized trial. *Pediatrics*, *120*, e832-e845.

Type of Study: Randomized controlled trial

Number of Participants: 1139 allocated to treatment; 627 seen in this follow-up

Population:

- **Age** 64% younger than 19 years
- Race/Ethnicity 92% African American
- Gender 100% Female
- **Status** Participants were actively recruited if they had two risk factors: unmarried, less than 12 years of education, or unemployment.

Location/Institution: Memphis, TN

Summary: (*To include comparison groups, outcomes, measures, notable limitations*) Note: This study used the same sample as Kitzman, et al., 1997 and Olds, et al., 2004. Women were randomly assigned to 1 of 4 conditions: free transportation to scheduled prenatal visits only; transportation plus developmental screening and referrals at 6, 12, and 24 months; the above services plus intensive prenatal home visiting services; the above plus continuing nurse visitation through 24 months [now called Nurse Family Partnership (NFP)]. Mothers were assessed at baseline on a created variable called psychological resources, comprised of intelligence, mental health, self-efficacy, and sense of mastery. By the time the child was 9 years old, women visited by a nurse had fewer births and longer intervals between children, used welfare and food stamps for fewer months, and had longer relationships with current partners. Researchers matched participants with the National Death index. Of the 10 children found to have died, control group children were 4.46 times as likely to have died before the 9-year follow-up and more likely to have died by preventable causes (e.g., Sudden Infant Death syndrome.) Limitations include reliability of self-reported measures, program impact on childhood mortality does not reach conventional levels of statistical significance and generalizability due to ethnicity.

Length of postintervention follow-up: 7 years.

*Sidora-Arcoleo, K., Anson, E., Lorber, M., Cole, R., Olds, D., & Kitzman, H. (2010).

Differential effects of a nurse home-visiting intervention on physically aggressive behavior in children. *Journal of Pediatric Nursing*, *25*, 35-45.

Type of Study: Randomized controlled trial

Number of Participants: 1,139

Population:

- **Age** Mean=18.1 years
- Race/Ethnicity 92% African American
- **Gender** Females
- **Status** Participants were actively recruited if they had two risk factors: unmarried, less than 12 years of education, or unemployment.

Location/Institution: Memphis, TN

Summary: (To include comparison groups, outcomes, measures, notable limitations)

The study evaluated longitudinal data from the Olds et al. (2007) <u>randomized controlled trial</u> of the *Nurse-Family Partnership (NFP)* home visitation program. In the original study, mothers were randomized to *NFP* or one of 3 other conditions. The present study evaluated the long-term effects of the *NFP* program on physical aggression and verbal ability in girls and boys. Results at 12-year follow-up indicated that there were significant reductions in physical aggression observed among girls in the intervention group at 2 years old and intervention group children of high-psychological-resource mothers at 6 and 12 years old. Mediation analyses suggest that reductions in physical aggression yield increased verbal ability among girls. Limitations include <u>reliability</u> of self-reported measures, program impact on childhood mortality does not reach conventional levels of statistical significance, and generalizability due to ethnicity.

Length of postintervention follow-up: 10 years.

*Eckenrode, J., Campa, M., Luckey, D. W., Henderson, C. R., Cole, R., Kitzman, H., Anson, E.,...Olds, D. (2010). Long-term effects of prenatal and infancy nurse home visitation on the life course of youths: 19 year follow-up of a randomized trial. *Archives of Pediatrics & Adolescent Medicine*, 164(1), 9-16.

Type of Study: Randomized controlled trial

Number of Participants: 310

Population:

- **Age** 19 years
- Race/Ethnicity 78% Caucasian and 22% Other

- Gender 53% Female and 47% Male
- **Status** Participants were youths whose mothers participated in the Olds et al. (1986) sample.

Location/Institution: Semi-rural country in New York

Summary: (To include comparison groups, outcomes, measures, notable limitations)

The study evaluated longitudinal data from the Olds et al. (1986) randomized controlled trial of the Nurse-Family Partnership (NFP) home visitation program. In the original study, mothers were randomized to one of four treatment conditions. To obtain follow-up data, youth in the present study completed a telephone interview to assess their histories of arrests, convictions, delinquent and criminal behavior, use of substances, educational achievement, pregnancies, births, and use of welfare. Results indicated that youths whose mothers participated in either of the two treatment groups were less likely to have ever been arrested or convicted than were those in the comparison group. Girls in the nurse-visited group also had fewer lifetime arrests and convictions than did those in the comparison group. Girls in the nurse-visited group born to high-risk (unmarried and low-income) mothers had fewer children and were less likely to have received Medicaid than were high-risk girls in the comparison group. The major study limitation was the reliance on youth self-report as the only outcome measure.

Length of postintervention follow-up: 17 years.

Olds, D. L., Kitzman, H., Knudtson, M. D., Anson, E., Smith, J. A., & Cole, R. (2014). Effect of home visiting by nurses on maternal and child mortality: Results of a 2-decade follow-up of a randomized clinical trial. JAMA Pediatrics, 168(9), 800-806. doi:10.1001/jamapediatrics.2014.472

Type of Study: Randomized controlled trial

Number of Participants: 1138

Population:

• **Age** — 18 and younger (64.1%)

- Race/Ethnicity 92.1% African American
- **Gender** 88.3% Women
- **Status** Participants were women from a clinic serving low-income populations.

Location/Institution: Memphis, Tennessee

Summary: (To include comparison groups, outcomes, measures, notable limitations)
This study attempted to determine the effect of prenatal and infant/toddler nurse home visiting [now called **Nurse Family Partnership (NFP)**] on maternal and child mortality during a 2-decade period (1990-2011). Measures utilized include the International Classification of

Diseases, Ninth Revision (ICD-9) and International Statistical Classification of Diseases, 10th Revision (ICD-10). Results indicate during the 2-decade period following registration in this trial, women enrolled in the 2 nurse-visited groups were less likely to have died than women assigned to the control group, and by age 20 years, children whose mothers received home visits during pregnancy and through child age 2 years were less likely to have died from preventable causes compared with their counterparts in the control group. Limitations include sparseness of the data and limited sample size for a study of mortality.

Length of postintervention follow-up: 18 years.

Robling, M., Bekkers, M., Bell, K., Butler, C. C., Cannings-John, R., Channon, S.,... Torgerson, D. (2016). Effectiveness of a nurse-led intensive home-visitation programme for first-time teenage mothers (building blocks): A pragmatic randomised controlled trial. *The Lancet*, *387*(10014), 146-155. doi:10.1016/S0140-6736(15)00392-X

Type of Study: Randomized controlled trial

Number of Participants: 1,645

Population:

- **Age** 19 years and younger
- Race/Ethnicity Not specified
- **Gender** 100% Female
- **Status** Participants were women who were eligible to receive publicly funded health and social care.

Location/Institution: England

Summary: (To include comparison groups, outcomes, measures, notable limitations)

This study tests the effectiveness of The Family Nurse Partnership (FNP) [also called Nurse-Family Partnership (NFP)] in a population of teenage first-time mothers on infant and maternal outcomes up to 24 months after birth. Women were randomly assigned to FNP or usual care, with randomization stratified by site and minimized by gestation, smoking, and preferred language of data collection and weighted towards minimizing the imbalance in trial groups. Measures utilized were from outcome data on birth weight, emergency department attendances and admissions and second pregnancies. As well as self-reported measures of tobacco use and from urine samples. Results showed no evidence of benefit from FNP for smoking cessation, birth weight, rates of second pregnancies, and emergency hospital visits for the child. Limitations include minor adaptations were made for implementation in a UK setting and it was delivered in a substantially different publicly funded and configured health-care system than the previous studies in the U.S., which may have impacted the services received by the usual care group.

Length of postintervention follow-up: 24 months.

Additional References

Dawley, K., Loch, J., & Bindrich, I. (2007). The Nurse-Family Partnership. *American Journal of Nursing*, *107*(11):60-67.

Hill, P., Uris, P., & Bauer, T. (2007). The Nurse-Family Partnership: A Policy Priority, *American Journal of Nursing*, 107(11): 73-75.

Isaacs, J. B. (2007). *Cost-effective investments in children*. Washington D.C.: Brookings Institute January Budget Options series (Budgeting for National Priorities)

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