



## MEMPHIS TRIAL OUTCOMES: REDUCTIONS IN MATERNAL AND CHILD MORTALITY

### NURSE-FAMILY PARTNERSHIP IS THE FIRST EARLY INTERVENTION TO FIND REDUCTIONS IN MATERNAL AND CHILD MORTALITY

Nurse-Family Partnership® (NFP) is an evidence-based community health program that helps transform the lives of vulnerable, low-income mothers pregnant with their first children. Built upon the pioneering work of David Olds, Ph.D., Nurse-Family Partnership's model is based on over 37 years of evidence from randomized, controlled trials that prove it works to improve maternal and child health.

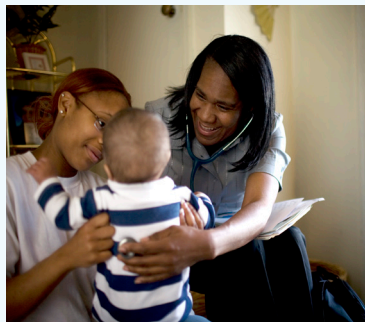
Beginning in 1990, the second randomized, controlled trial was conducted in Memphis, Tenn. to study the effects of Nurse-Family Partnership on low-income, primarily African-American mothers living in disadvantaged, urban neighborhoods.

In July of 2014, JAMA Pediatrics published a study that found for participants in Nurse-Family Partnership there were lower rates of preventable causes of death among children and all causes of death among mothers.

*“Death among mothers and children in these age ranges in the United States general population is rare, but of enormous consequence. The high rates of death in the control group reflect the toxic conditions faced by too many low-income parents and children in our society. The lower mortality rate found among nurse-visited mothers and children likely reflect the nurses’ support of mothers’ basic human drives to protect their children and themselves.”*

DAVID OLDS, Ph.D.  
Program Founder, Nurse-Family Partnership

#### MEMPHIS TRIAL



TRIAL BEGAN: 1990  
MORTALITY STUDY FOLLOW-UP: 1990-2011  
POPULATION: LOW-INCOME AFRICAN-AMERICAN  
ENVIRONMENT: DISADVANTAGED, URBAN AREA

#### MEMPHIS TRIAL - MORTALITY OUTCOMES

##### Reductions in Child Mortality

- Among Nurse-Family Partnership participants, there were lower rates of preventable child mortality from birth until age 20.
- 1.6% of the children not receiving nurse-home visits died from preventable causes – including sudden infant death syndrome, unintentional injuries and homicide – while none of the nurse-visited children died from these causes.

##### Reductions in Maternal Mortality

- Mothers who did not receive nurse-home visits were nearly 3 times more likely to die from all causes of death than nurse-visited mothers (3.7% versus 1.3%).
- Mothers that did not receive nurse-home visits were 8 times more likely to die from external causes – including unintentional injuries, suicide, drug overdose and homicide – than nurse-visited mothers (1.7% versus 0.2%).

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 two-decade follow-up of a randomized, clinical trial. JAMA Pediatrics.

## SIGNIFICANCE OF MORTALITY STUDY

This is the first study of NFP to show significant findings of reductions in maternal and child mortality based upon a randomized, clinical trial with over two decades of follow-up. The evidence of this effect will be further strengthened when replicated in future studies.

In addition, unlike many other outcomes, death is an outcome of unequivocal importance. The study uses the gold standard measure of death – the National Death Index – which records all deaths in the U.S.

This mortality study provides findings that are consistent with previous evidence that Nurse-Family Partnership is effective at meeting its goals of improving maternal and child health as shown by outcomes of the Memphis randomized, clinical trial.

## MEMPHIS TRIAL – OTHER OUTCOMES FROM EARLIER STUDIES

Earlier follow-up studies of the Memphis trial showed Nurse-Family Partnership showed better outcomes for maternal health including:

- Better prenatal health and behavior;
- Decreased use of welfare, Medicaid and food stamps;
- Fewer behavioral impairments due to substance use; and
- Fewer parenting attitudes that predispose them to abuse their children.

In addition, earlier follow-up studies of the Memphis trial showed that nurse-visited children had better outcomes in child health including the children were:

- Less likely to be hospitalized with injuries through age 2;
- Less likely to have behavioral problems at school entry; and
- Less likely to reveal depression, anxiety and substance use at age 12.

## TOP TIER EVIDENCE

The Coalition for Evidence-Based Policy – a nonprofit, nonpartisan organization – has identified Nurse-Family Partnership as the only prenatal or early childhood program that meets its “Top Tier” evidence standard, which is used by the U.S. Congress and the executive branch to distinguish research-proven programs.



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