

## **Pride in Parenting (PIP): Parenting Education Impacts on Health Care Utilization**

**Methodology:** This program was designed to develop and test a community-based intervention program for low-income, minority women who have poor or no prenatal care in Washington, DC. The primary goals were effective utilization of health care services and optimal infant development. The target population included postpartum women who live in DC who had poor or no prenatal care during their pregnancy. Eligible mother-infant dyads within each of the four DC area hospitals were randomized to a control group with standard social services or a multi-component intervention (intervention group). Program participation for each mother and infant was 1 year. Both groups received standard social services from a licensed social worker that focused on informing and helping the participating mother's access existing community support services. In addition to the standard social services component, the intervention group received a parenting program consisting of home visits, a parent-infant developmental play group, and a parent support group. Home visits began after hospital discharge and complemented the hospital-based group intervention for mothers and their infants, which began when the infants were 4 months old. Outcomes measured at the end of the 1 year intervention included infant development and health care utilization, as well as the mother's parenting knowledge, skills, and attitudes.

Recruitment for the PIP protocol began on April 12, 1995, and ended on April 30, 1997. During this period, a total of 13,705 mother-infant dyads were screened and of these, a total of 788 mother-infant dyads were considered eligible for the study. Of the 788 eligible mother-infant dyads, 426 (54.1 percent) were approached for recruitment; 140 (32.9%) of these refused, and 286 (67.1 percent) agreed to participate in the program. Of the 286 mothers who agreed, 146 were randomized to the intervention group, and 140 were randomized to the control group. Follow-up activities continued for 1 year beyond recruitment. Exit interviews and development evaluation continued until July 1998. Of the 286 cases enrolled, 168 completed the protocol and 118 terminated prematurely. Provider verification data collection activities were completed on 195 mothers and 212 infants.

**Results:** Infants in the intervention group initiated well care at an earlier age than those in the control group (by 6 weeks, 62.5 percent compared to 50 percent had received their first well infant visit). Infants in the intervention group had more frequent well visits (by 12 months of age, 3.5 compared to 2.7 visits). Multivariate analyses showed infants in the intervention group to be more likely to complete their scheduled immunizations (by 9 months, odds ratio = 2.2, 95 percent confidence interval: 1.09–4.53). Those in the intervention group with more frequent contacts (30 or more visits) with study personnel were most likely to have followed age-appropriate immunization schedules when compared with infants in the control group (at 9 months odds ratio = 3.63, 95 percent confidence interval: 1.58–8.33).