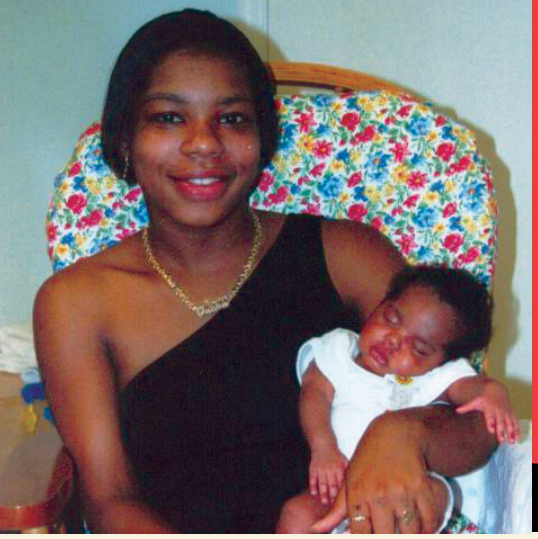


RESEARCH TO PRACTICE

Services and Outcomes for Early Head Start Families Enrolled During Pregnancy: Is there a Magic Window?

EARLY HEAD START RESEARCH AND EVALUATION PROJECT

Research shows that initiating supportive interventions during pregnancy is beneficial for families (Olds, Henderson, Tatelbaum & Chamberlin, 1986). The Advisory Committee for Head Start Programs Serving Infants and Toddlers had this research in mind when it recommended that Early Head Start programs serve pregnant women as well as infants and toddlers. ***The Early Head Start Research and Evaluation Project found that Early Head Start had a particularly strong pattern of positive impacts for children and families who enrolled during pregnancy (i.e., the children in Early Head Start performed significantly better than those in the control group)***. Services during pregnancy might have lasting impacts for several reasons, including:

- The transition to parenthood affords a special opportunity to intervene when parenting issues are especially salient. This may be particularly true for first-time parents, although every pregnancy is a transition for the family.
- Families who seek services during pregnancy may differ from other families in ways that make them more receptive to services. For instance, they may experience more stress associated with pregnancy or becoming a parent.
- If interventions start in pregnancy, families are in the program for a longer amount of time and may receive more services.
- Prenatal health services can improve prenatal care and birth outcomes, and have a lasting impact on child health and functioning.

Expectant families are not served in a program option, as those service options are for children: home-based or center-based services. Services for pregnant women are determined by the needs of the woman and her family, and developed as part of the family partnership agreement. It is important that the program plan ahead so there is a program slot available when the child is born. (This is particularly difficult for programs that provide center-based care.) Despite these challenges, many Early Head Start programs enroll families during pregnancy. According to the 2003 PIR, 630 out of 722 programs (87%) were serving pregnant women. Pregnant women made up more than 10% of enrollment in more than half of the programs serving pregnant women.

So, who enrolls during pregnancy, what services do they use, and how are they and their children are affected by the program? The Early Head Start Research and Evaluation Project provides some information. Most of the information describes pregnant women in the Early Head Start program group only. Special notation is made in this brief when the program group is compared to a control group of pregnant women in their communities who did not enroll in Early Head Start.

All 17 programs in the Early Head Start Research and Evaluation Project enrolled pregnant women. About a quarter of the families enrolled during pregnancy (8-67% across the 17 programs).

- Home-based and mixed-approach programs enrolled more pregnant women than center-based programs.
- Programs that fully implemented key elements of the Head Start Program Performance Standards soon after funding enrolled more pregnant women.

Prenatal health services can improve prenatal care and birth outcomes, and have a lasting impact on child health and functioning.

Summary

Despite the challenges in serving expectant families, many Early Head Start programs choose to serve families during pregnancy. In the Early Head Start Research and Evaluation Project, many of those families who enrolled during pregnancy were at high risk—emotionally, medically, and socially. Early Head Start programs were successful in engaging these families in services and the families benefited greatly from the program—experiencing positive impacts in the areas of breastfeeding, child outcomes, and parenting behaviors.

EARLY HEAD START

- The programs used a wide array of strategies to recruit families with pregnant women. These included seeking referrals from and conducting outreach in health care offices, WIC offices, and prenatal clinics. As a result, many pregnant women who enrolled in Early Head Start were already linked to health services.

Many who enrolled in Early Head Start during pregnancy were at high risk for poor outcomes.

Some women faced multiple social risks. Approximately a quarter of pregnant women had four to five demographic risk factors out of the five factors counted (teen parent, on welfare, no high school degree, unemployed, and single parent). It is important to note that this is similar to those who enroll after the child is born.

Other women experienced medical risks. Twenty-nine percent of women with fewer demographic risks (zero to two out of five counted) reported pregnancy complications, and 15% reported that their babies stayed in the hospital after birth due tomedical problems.

Early Head Start has a lot to offer expectant families beyond what is being provided in the community.

Twenty-five percent of women enrolled during pregnancy reported smoking cigarettes daily during pregnancy. The risks associated with smoking continued after birth. Findings show that 57% of Early Head Start children were exposed to household smoking. Children exposed to household smoking were more likely to have ear infections, asthma, or respiratory problems than children who were not exposed to household smoking.

Many women may not have been prepared for birth and parenting. They reported low use of prenatal education or support services prior to enrolling in Early Head Start. Twenty-three percent reported having participated in a support or educational group.

Many pregnant women reported emotional stress. Sixty-eight percent reported sufficient numbers of depressive symptoms to be considered depressed, 21% reported anxiety, 32% reported irritability, and 39% reported stress during pregnancy. Mothers who enrolled during pregnancy reported higher levels of emotional stress than mothers who enrolled after the child was born. This may reflect the general stress of pregnancy, the program staff's effort to reach out to those in most need, or a greater openness or desire for help.

What else do we know about these women?

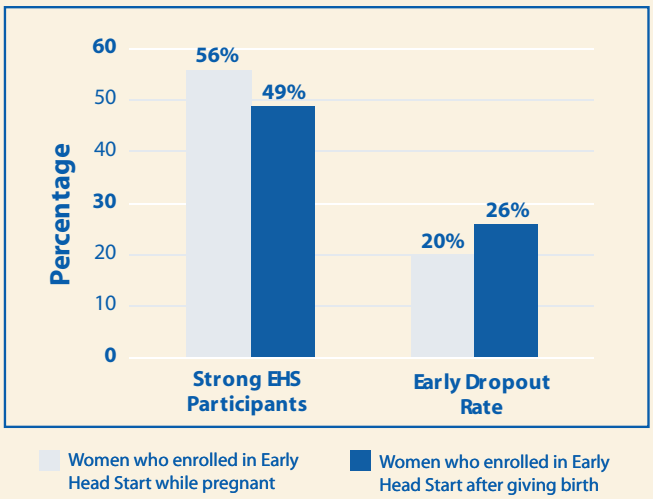
- They were mostly in the second (39%) and third trimester (54%) of pregnancy when they enrolled. Only 7% of women enrolled in the first trimester.
- Sixty percent were first time mothers.
- Finally, 40% of the women who enrolled during pregnancy were White, 37% were African American, and 18% were Hispanic. These are similar to the racial makeup of the entire sample.

Impacts on service. The Early Head Start programs participating in the research provided a range of prenatal services, including prenatal education in home visits or classes, referrals for prenatal care, home visits by nurses, and transportation to prenatal appointments. In this section we compare services received by Early Head Start families to those services received by families who were not in Early Head Start (the control group).

At the time of enrollment, nearly all pregnant women had received some prenatal care. In fact, there were **no impacts of Early Head Start on use of prenatal health services**—perhaps because programs were enrolling people already connected to systems linked with health services.

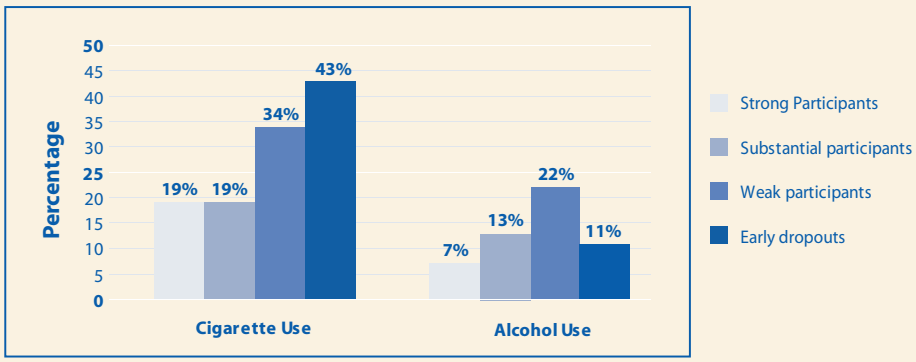
Impacts on service use (including core Early Head Start services such as home visits, parenting groups, center-based child care and case management) and intensity/frequency of services for those who enrolled during pregnancy were large, even larger than for those who enrolled after the child was born.

Pregnant women who enrolled during pregnancy were significantly more likely to be strong or substantial participants in Early Head Start than those who enrolled after their child was born. These women were also less likely to drop out early.



Women who reported risk behaviors during pregnancy (smoking and alcohol use) were harder to engage in program services. This suggests that these women be targeted for special retention efforts and special services to address issues around substance use.

Strong and substantial participants were significantly less likely to have smoked cigarettes during pregnancy prior to enrollment and weak participants were significantly more likely to have used alcohol during pregnancy prior to enrollment.



Implications for Programs

It is hard to serve pregnant women—in part because services must be tailored to meet needs that may change quickly and in unexpected ways. Once a pregnant woman is enrolled, the child is automatically enrolled in Early Head Start for up to 3 years, so a slot must be available once the child is born. In addition, that slot must be in a program option that the family wants. This should be planned in advance to meet the needs of the family. Not only do programs face administrative difficulties around transitioning from pregnancy to having slots for children, they also need to address different family needs at different stages of pregnancy and in different stages of family development (whether they are first-time parents or not). Furthermore, many families who begin Early Head Start during pregnancy are at high risk and may be difficult to engage in services.

There is a high rate of return for serving expectant families. However, when programs are able to reach these families and engage them in program services, the families benefit greatly.

Early Head Start has a lot to offer expectant families beyond what is being provided in the community. While many communities offer general services for families during pregnancy, some families may need more. Pregnant women may receive health services, but not other essential services, such as emotional support or specialized smoking cessation programs. Additionally, some families will need continued support after birth, thus establishing the relationship before the birth may be beneficial. Community collaboration is particularly important in serving pregnant women, because of the medical, health, and mental health needs. In addition, there are usually maternal child health services in a community that the family should access.

Reach out to mothers not already receiving medical care. Most program recruiting efforts find pregnant women who are receiving health care. Reaching out to pregnant women who are not receiving prenatal care may make an even

What are the impacts of Early Head Start on the children and families who enroll during pregnancy?

Early Head Start participants were more likely to breastfeed than non-Early Head Start women. Forty-four percent of Early Head Start mothers vs. 33% of non-Early Head Start mothers chose to breastfeed their babies. Although mothers at high social risk (four to five risk factors out of five) were less likely to breastfeed than other mothers, the impact of Early Head Start was particularly strong for this group (30% of Early Head Start mothers vs. 17% of non-Early Head Start mothers).

When children were 36 months old, Early Head Start had important patterns of impacts for expectant families who enrolled (and for those who enrolled after the child was born). For some outcomes (children's cognitive and social-emotional development, as well as parenting behaviors) impacts were stronger for the group that enrolled during pregnancy:

- Impacts on children's cognitive and social-emotional development were strong. The effect size for the increase in Bayley MDI scores was .20, while effect sizes for favorable impacts on child behavior during play with their mother ranged from .26 to .52.[1]

- Impacts on parenting were significant. Early Head Start parents were more likely to provide a stimulating home environment, although impacts were similar among parents who enrolled during pregnancy and those who enrolled later. Impacts on observed emotionally supportive parenting and reduction in spanking, however, were stronger for those who enrolled during pregnancy (effects sizes ranged from .29 to .41).

- When children were 36 months old, Early Head Start mothers who enrolled during pregnancy reported more symptoms of depression than the control group, 8.9 vs. 7.5 (unfavorable impact on symptoms of depression). This pattern was not observed when children were 24 months old, leading to speculation that the 36-month finding could reflect distress at leaving the program after a long enrollment. Many of these families had been enrolled for 3 1/2 years.

[1] Effect size is a standardized way of talking about the size or practical importance of impacts.

greater difference for children in disadvantaged families.

Identify the risks faced by expectant families. Many families who enroll during pregnancy will be at social, emotional, or medical risk. Services need to be individualized to meet the myriad of needs faced by these families. A thorough risk evaluation will help to identify those needs.

Particular attention needs to be paid to smoking and substance use. Given the detrimental effects of cigarette smoking during pregnancy, programs should identify needs for smoking cessation services as early as possible. The Early Head Start Research and Evaluation Project found that pregnant women who reported substance use or cigarette smoking when they enrolled were more likely to be weak participants or early dropouts. This suggests that this group could be targeted for special retention efforts and special services to address issues around substance use.

Continue to support preparation for breastfeeding, both before and after the child's birth. This is a strength for Early Head Start programs, which have a unique opportunity to prepare mothers for this important support to infant health.

Center-based programs face administrative challenges around serving expectant families. Below are two models:

Group—One urban center provides weekly expectant family group sessions for a period of 6-8 weeks. The pregnancy program is organized and supported by an in-house mental health professional, who also conducts a first home visit to check on the newborn and mother. Topics for the meetings include breastfeeding, labor and delivery, postpartum depression, and nutrition. Nutrition is modeled during the group sessions (healthy snacks) and time is spent on teaching how to prepare baby food from fresh foods at home. Social support is also a major goal of the program. Fathers and significant others are invited to meetings. Program Staff also links participants with formal and informal community supports.

Home Visiting—Another more rural center-based program has teachers start regular home visits to families during pregnancy to help the teacher and parent get to know one another and provide support to the mother during pregnancy. In this way, the program was able to establish strong working relationships with families before the children began attending the center, which facilitated the family's smooth transition into center-based care.

The Study

The Early Head Start Research and Evaluation Project included studies of the implementation and impacts of Early Head Start. The research was conducted in 17 sites representing diverse program models, racial/ethnic makeup, auspice, and region. In 1996, 3,001 children and families in these sites were randomly assigned to receive Early Head Start services or to be in a control group who could utilize any community services except Early Head Start. Children, families, and children's child care arrangements were assessed when children were 14, 24, and 36 months old, and families were interviewed about services at 7, 16, and 28 months after random assignment. Child assessments included a wide array of child cognitive, language, and social-emotional measures using direct assessment and parent report. Parent assessments included observation (videotaped and by interviewers) and self-report. Families in the program and control groups were demographically comparable at baseline and assessment points. Several research briefs have been published based on findings from this study. A prekindergarten followup was completed and a 5th grade followup is currently underway.

References

Administration for Children and Families (2000). *Giving children the earliest start: Developing an individualized approach to quality services for pregnant women.* (Technical Assistance Paper No. 3). Washington, DC: EHS NRC @ Zero to Three. From http://ehsnrc.org/pdffiles/TANo3.pdf

Administration for Children and Families (2004). *Should EHS programs enroll pregnant women/expectant families?* (Early Head Start Tip Sheet No. 15). Washington, DC U.S.: Department of Health and Human Services. From http://www.headstartinfo.org/infocenter/ehs_tipsheet/tip15.htm

Olds, D., Henderson, C., Jr., Chamberlin, R., & Tatelbaum, R. (1986). Preventing child abuse and neglect: A randomized trial of nurse visitation. *Pediatrics, 78(1)*, 65-78.