ARKANSAS PRAMS NOTES

Pregnancy Risk Assessment Monitoring System

ARKANSAS DEPARTMENT OF Health
Keeping Your Hometown Healthy

July 2010

Birth defects are one of the leading causes of infant death in Arkansas and the U.S.

Taking folic acid can reduce the risk of birth defects.

Folate can be found in foods like legumes, grains, green vegetables, liver, and some breakfast cereals.

Folic acid is the synthetic form of folate and is found multivitamins and fortified breakfast cereals.

The Pregnancy Risk Assessment Monitoring System (PRAMS) is an on-going, population-based surveillance system sponsored by the Centers for Disease Control and Prevention (CDC). The PRAMS survey asks mothers who recently had a live birth about maternal behaviors and experiences that occur before, during, and after pregnancy that might affect their health and the health their babies.

MOTHERS' KNOWLEDGE AND USE OF FOLIC ACID IN ARKANSAS, 2006-2008

Folate is a B vitamin found in foods like legumes, grains, green vegetables, citrus fruits, and liver. Folic acid is the synthetic form of folate and is found in multivitamins and fortified food. Because most women do not eat enough of the foods containing natural folate, taking a multivitamin or a folic acid supplement with at least .4 mg (400 mcg) of folic acid is recommended.

Folic acid can reduce the chance of an infant being born with neutral tube defects by 50% to 70%. Neural tube defects are very severe birth defects of the brain and spine.

Anencephaly and spina bifida are the most common neural tube defects. Anencephaly is a fatal condition in which an infant is born with a severely underdeveloped brain and skull. Spina bifida, also referred to as "open spine," affects the spine and spinal cord. Severe forms of the condition can cause paralysis, bladder and bowel problems, and neurologic and developmental problems.

Taking folic acid can significantly improve infant health by reducing the risk of birth defects, one of the leading causes of infant mortality in the U.S. and Arkansas. Research has also indicated that folic acid can improve infant health by decreasing the risk of problems such as premature birth, heart defects, orofacial clefts (e.g., cleft palate), and abnormal development of the limbs.

Birth defects begin in the first month of pregnancy, before many women know they are pregnant. Because about one half of all pregnancies are unplanned, it is important that women of childbearing age have an adequate amount of folic acid in their system before they become pregnant. They should also take folic acid during early pregnancy.

The purpose of this newsletter is to give a summary of the characteristics of mothers in the PRAMS survey who knew about the benefits of folic acid and took a multivitamin before becoming pregnant.

MOTHERS' KNOWLEDGE OF THE BENEFITS OF FOLIC ACID

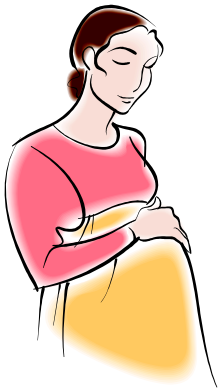
Mothers in the survey were asked the following question: "*Have you ever heard or read that taking the vitamin folic acid can help prevent some birth defects?"*

- Overall, 78% of Arkansas mothers had heard about the benefits of taking folic acid (Figure 1, next page).

Mothers most likely to have heard about the benefits of folic acid were White or Hispanic, 20 years of age or older, had 12 or more years of education, had a pregnancy that was intended, and were not on Medicaid.

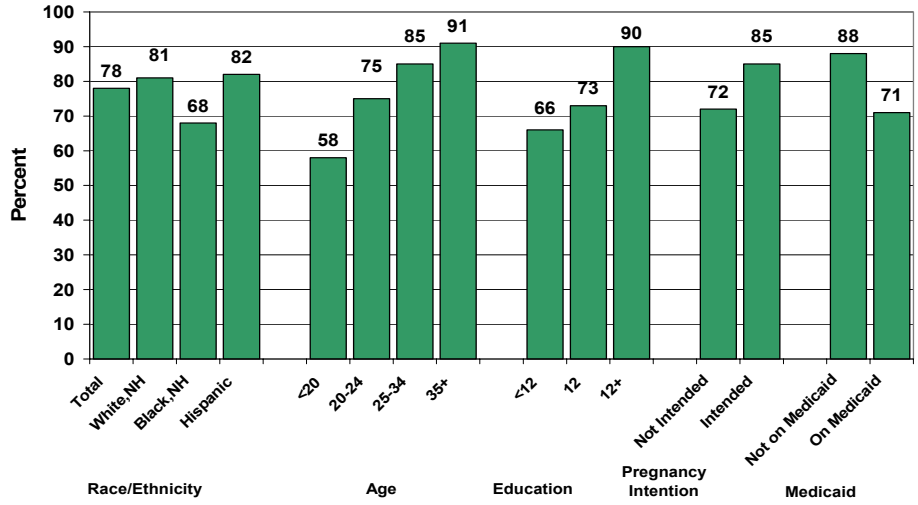
Mothers most likely to have taken a multivitamin a month before getting pregnant were White, 35 years of age or older, had 12 years of more of education, had a pregnancy that was intended, and was not on Medicaid.

Health care personnel were the most frequent source of information about folic acid.



- Mothers most likely to have heard about the benefits of folic acid were White or Hispanic, 20 years of age or older, had 12 or more years of education, had a pregnancy that was intended, and were not on Medicaid (Figure 1).

Figure 1. Percentage of Mothers Who Knew About Benefits of Folic Acid, by Selected Characteristics: Arkansas, 2006-2008

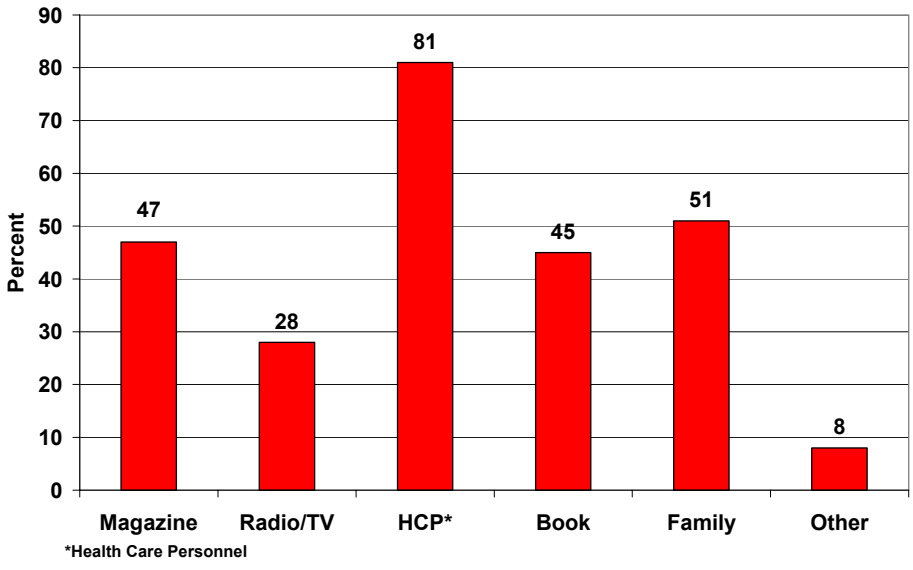


HOW MOTHERS HEARD ABOUT FOLIC ACID

Mothers in the survey were given a list of sources that provide information about folic acid and were asked to check all that applied to them.

- Health care personnel (HCP) such as doctors, nurses, and other health care workers were the most frequent source of information about folic acid (Figure 2).
- The Internet, school, the Health Department, and the WIC office were the most common responses under the "Other" category.

Figure 2. How Mothers Heard About Folic Acid: Arkansas, 2006-2008



WHAT MOTHERS TOLD US ABOUT TAKING FOLIC ACID (SEE NOTE):

"I delivered my baby at 36 weeks. She lived 1 hour and 20 minutes. At our 20 week ultrasound we found out that she had an encephaly. I know that taking extra folic acid would have for sure made a difference in this severe type of neural tube defect, but I would love for doctors and health care professionals to strongly encourage any women who have the possibility of having a baby (even if they aren't planning on it we weren't trying at the time) to take high doses of folic acid."

"I did not take prenatal vitamins because I always gain too much weight when I get pregnant. I also did not take folic acid because I was not planning on getting pregnant."

"I know a lot of females who don't know what folic acid is."

RECOMMENDATIONS

The Centers for Disease Control and Prevention (CDC) encourages women of childbearing age to take a 400 microgram (mcg) supplement of folic acid daily.

Women should start taking folic acid at least one month before getting pregnant and during early pregnancy.

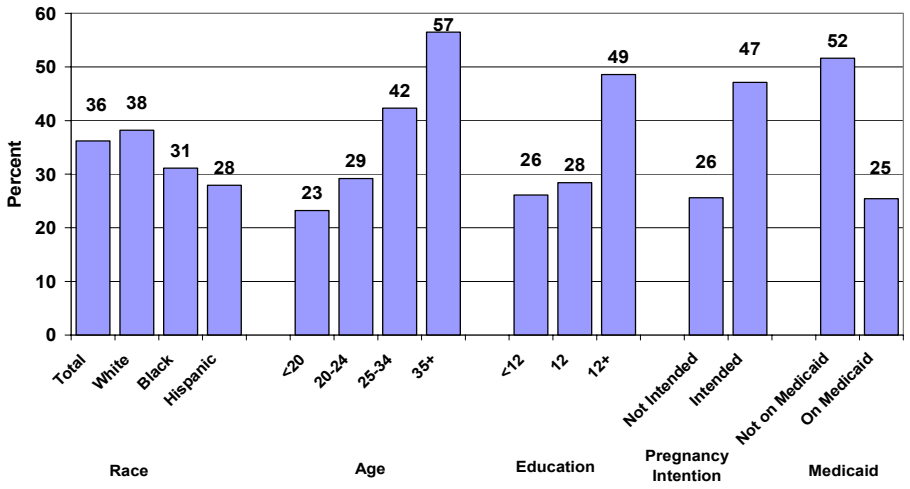
Note: CDC requires that mothers' comments be used without corrections for grammar, punctuation, etc.

WHICH MOTHERS TOOK FOLIC ACID?

Mothers were asked the following question: *"During the month before you got pregnant with your new baby, how many times a week did you take a multivitamin or a prenatal vitamin?"*

- Only 36% of mothers took a multivitamin the month before their pregnancy (Figure 3).
- Mothers most likely to have taken a multivitamin a month before getting pregnant were White, 35 years of age or older, had 12 years of more of education, had a pregnancy that was intended, and was not on Medicaid.

Figure 3. Percentage of Mothers Who Took a Multivitamin One Month Before Pregnancy, by Selected Characteristics: Arkansas, 2006-2008



Public Health Region

The Central Public Health Region had the highest percentage (40%) of mothers who took a multivitamin a month before getting pregnant (Figure 4). The Southeast Region had the lowest percentage (26%)

Figure 4. Percentage of Mothers Taking A Multivitamin One *Month Before* Getting Pregnant by Public Health Region: Arkansas, 2006-2008