

# PRAMS PERSPECTIVES

A Pregnancy Risk Assessment Monitoring System Quarterly Report V.3 No.1

## Prenatal Education in Utah

### Background

Prenatal care includes many components. Comprehensive care for the pregnant woman includes risk assessment, counseling on risk reduction, treatment for health conditions and education. Although it is widely accepted that prenatal care decreases the risk of adverse outcomes, no studies have established which aspect of prenatal care makes it effective in doing so. Many argue that providing education is one of the most important elements of prenatal care. The U.S. Preventive Services Task Force in its *Guide to Clinical Preventive Services* recommended that preventive health care involves addressing

### What is PRAMS?

Data in this newsletter were provided by the Utah Pregnancy Risk Assessment Monitoring System (PRAMS). PRAMS is an ongoing, population-based risk factor surveillance system designed to identify and monitor selected maternal experiences that occur before and during pregnancy and experiences of the child's early infancy. Each month, a sample of approximately 200 women, two to four months postpartum, is selected. The sample is stratified based upon race and birth weight so that inferences and comparisons about these groups can be determined. The results are weighted for sample design and non-response.

PRAMS is intended to help answer questions that birth certificate data alone cannot answer. Data will be used to provide important information that can guide policy and other efforts to improve care and outcomes for pregnant women and infants in Utah. Women were asked questions about prenatal care, breastfeeding, smoking and alcohol use, physical abuse, and early infant care.

The PRAMS data reported here represent all live births to Utah residents in 1999. A total of 2140 mothers were selected to participate in the project and 1540 mothers responded for a response rate of 72%. Survey results were weighted for non-response so that analyses could be generalized to the entire population of Utah women delivering live births.

patients' health practices and that practitioners should provide preventive health services. "Preventive healthcare counseling during prenatal care is particularly important, as it promotes health for both the mother and the developing fetus." <sup>1</sup> Pregnancy is an optimal time to deliver such health messages as women are seen often and are motivated to make behavior changes.

The American Academy of Pediatrics (AAP) and the American College of Obstetricians and Gynecologists (ACOG) in their publication *Guidelines for Perinatal Care* provide a plan for topics that should be discussed during the antepartum period. "A comprehensive antepartum care program involves a coordinated approach to medical care and psychosocial support that optimally begins before conception and extends throughout the antepartum period. Care should include an assessment of the parents' attitudes toward the pregnancy, the support systems available, and the need for parenting education." <sup>2</sup>

In a recent article "Preventive Counseling During Prenatal Care", Peterson examined the prevalence of preventive counseling during prenatal care using PRAMS data from 14 states. The author found that the reporting of counseling was less than 75% for partner violence, seat belt use, illegal drug use, and HIV risk. <sup>3</sup>

## Methodology

This report examines the prenatal education of pregnant women in Utah. Utah PRAMS and birth certificate data from 1999 were used to determine the prevalence of preventive counseling during prenatal care visits. PRAMS respondents were asked the following two questions regarding prenatal care counseling and asked to check “yes” or “no”:

“During any of your prenatal care visits, did a doctor, nurse, or other health care worker talk with you about any of the things listed below?”

- a. What you should eat during your pregnancy?
- b. How smoking during pregnancy could affect your baby?
- c. Breast-feeding your baby?
- d. How drinking during pregnancy could affect your baby?
- e. Using a seat belt during your pregnancy?
- f. Birth control methods to use after your pregnancy?
- g. The kinds of medicines that were safe to take during your pregnancy?
- h. How using illegal drugs could affect your baby?
- i. How your baby grows and develops during your pregnancy?
- j. What to do if your labor starts early?
- k. How to keep from getting HIV (the virus that causes AIDS)?
- l. Getting your blood tested for HIV (the virus that causes AIDS)?
- m. Physical abuse to women by their husbands or partners?”

“At any time during your prenatal care, did a doctor, nurse, or other health care worker ask you or talk with you about any of the things listed below?”

- a. Diseases or birth defects that could run in your family?
- b. Doing tests to see if your baby had a birth defect or genetic disease?
- c. How much weight you should gain during your pregnancy?
- d. If you were smoking?
- e. If you were drinking alcoholic beverages (beer, wine, wine cooler or liquor)?”

It is important to note that because the PRAMS survey is completed postpartum, there may be some recall bias from mothers when answering these questions.

## Prevalence of Preventive Counseling

Figure 1 shows the proportion of women who responded “yes” to each question. The percentage of positive answers ranged from a high of 87.9% (safe medications during pregnancy) to a low of 20.1% (physical abuse).

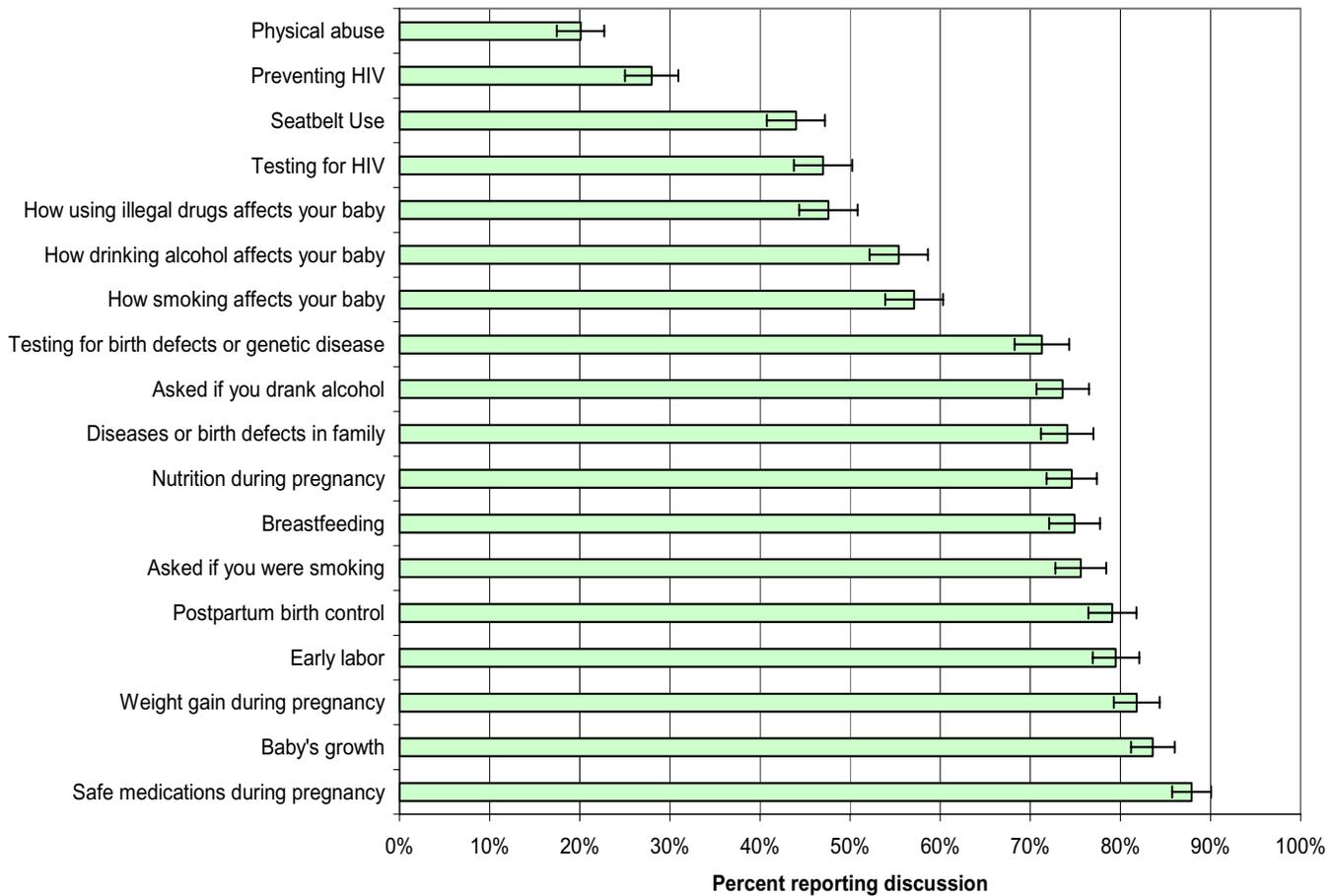
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**Figure 1. Prevalance of Counseling During Prenatal Care By Topic, 1999 Utah PRAMS Data**



For this newsletter, we address in more detail those topics that less than 70% of women reported a health care provider discussing with them. Those topics include physical abuse (20.1%), preventing HIV (27.9%), seatbelt use (44.0%), testing for HIV (47.0%), the effects of illegal drugs on pregnancy (47.6%), drinking alcohol (55.4%), and the effects of smoking on pregnancy (57.1%).

Discussion of seatbelt use appears to be evenly distributed among women and various maternal characteristics. For each of the other six topics, discussions followed patterns across maternal characteristics. Women who were least likely to report having their provider discuss these topics with them:

- Were of higher income
- Were non-Hispanic
- Were older
- Were married
- Had a high school education or higher
- Had private or no/other insurance

This finding may be indicative of profiling certain women for high-risk behaviors rather than universal screening for these behaviors.

For these seven topics, it appears that women who received their prenatal care at a hospital or health department clinic reported the highest rates of counseling and those who received their prenatal care from a private doctor's office reported the lowest rates of counseling. Table 1 shows the distribution of yes responses by provider type and discussion point.

**Table 1. Topic Discussion by Question and Provider Type, 1999 PRAMS data.**

Topic	Overall	Hospital	Health	Private	Community	Other
		Clinic	Dept. Clinic	Doctor's Office	Health Clinic	
Physical Abuse	20.1%	31.3%	35.4%	17.0%	23.2%	32.6%
HIV prevention	27.9%	48.2%	37.2%	23.1%	40.1%	38.8%
HIV testing	47.0%	67.0%	66.6%	40.5%	67.0%	48.6%
Seatbelt use	44.0%	52.7%	48.6%	42.4%	44.9%	53.2%
Illegal drugs	47.6%	60.9%	60.4%	44.2%	53.1%	62.6%
Alcohol use	55.4%	71.5%	77.1%	50.9%	60.1%	70.0%
Tobacco use	57.1%	70.1%	62.9%	53.3%	67.3%	67.7%

## Discussion

### Domestic Violence

The issue of domestic violence during pregnancy in Utah will be addressed in-depth in a future PRAMS Perspectives. In short, domestic violence can result in miscarriage, trauma to the fetus, low birth weight, placental abruption, and post-partum depression. In addition, women who are abused may be at greater risk for increased substance use.<sup>4</sup>

ACOG confirms that domestic violence is a major public health problem. The bulletin states “Being female is a significant enough risk factor to warrant screening every patient at periodic intervals”.<sup>5</sup> Of the Utah PRAMS respondents who reported physical abuse during their pregnancy, only 28% indicated that their provider discussed physical abuse with them during their prenatal care visits. In Peterson’s paper, the lowest counseling rate was 25% for physical abuse<sup>3</sup>; yet Utah’s rate was lower than Peterson’s finding at 20.1%.

Several questionnaire models can be used to detect domestic violence, many of which contain five or fewer questions (Partner Violence Screen,<sup>6</sup> Abuse Assessment Screen<sup>7</sup>). Pregnancy offers a unique opportunity for providers to screen for domestic violence. ACOG recommends screening women at the first prenatal visit, once per trimester, and at the postpartum checkup, because women may not disclose abuse the first time they are asked.

### HIV

In Utah during 1999, ten HIV positive women delivered infants. The percentage of HIV cases among females increased from 9% of all HIV/AIDS cases in 1992-1993 to 14% in 1998-1999.<sup>8</sup> Given the risk of vertical transmission of HIV from an infected mother to her fetus/infant, prenatal screening needs to include all pregnant women. Screening all women is especially vital since available perinatal treatment can reduce the risk of perinatal transmission by as much as two-thirds.

ACOG and AAP, in support of the Institute of Medicine’s (IOM) report “Reducing the Odds: Preventing Perinatal Transmission of HIV in the U.S.”, have issued a joint statement of policy on HIV screening of pregnant women recommending the U.S. adopt a policy of universal testing for HIV, with patient notification, as a routine component of prenatal care.<sup>9</sup>

ACOG states “OB/GYNs have a special obligation to impart important educational information about modes of transmission of the virus, means of protection from infection, and the role of testing. OB/GYNs should offer voluntary and confidential HIV testing to all women.

A patient information tear off sheet, “Important News for Pregnant Women”, and a patient education pamphlet, “HIV Testing and Pregnancy” (English and Spanish), are available through ACOG. A video, “HIV and Pregnancy: What Every Woman Should Know”, is also available. These materials can be ordered online at [www.acog.org](http://www.acog.org).

### **Seatbelt Use**

Motor vehicle accidents are the leading cause of death and disability in pregnant women.<sup>14</sup> In a survey conducted in California obstetrical clinics between May 1997 and January 1998, women were asked about their use and knowledge of restraint use. Of the 807 women who completed the survey, 86% reported using seat belts but only 52% used restraints properly; only 21% reported being educated on proper seatbelt use during pregnancy.<sup>14</sup>

ACOG states that “Pregnant women should be encouraged to wear properly positioned restraints throughout pregnancy while riding in automobiles” and that office counseling has been effective in increasing seatbelt use by pregnant women. ACOG recommends that women wear the lap belt under their abdomen and across the upper thighs with the shoulder strap fitting snugly between the breasts.<sup>15</sup>

The Utah Department of Highway Safety publishes information on seat belt use during pregnancy. Call 801-293-2480 for more information.

### **Alcohol, Tobacco, and Other Drug Use in Pregnancy**

The use of illicit drugs by pregnant women remains one of the most frequently missed diagnoses in perinatal medicine.<sup>11</sup> Abuse of alcohol, tobacco, or illicit drugs can lead to adverse pregnancy outcomes such as low birth weight and preterm delivery and can lead to long term developmental issues in the exposed child. ACOG states “A thorough substance abuse history should be taken from all patients as part of the medical and obstetric history.”<sup>12</sup>

Although providers may be uncomfortable asking women about substance use, a personal inquiry from the health care provider implies that the matter is important, especially during pregnancy, and that the provider cares about them.<sup>13</sup> The provider does not need to be a substance abusing patient’s ultimate resource, but a working knowledge of substance abuse cessation therapy is helpful in providing emotional support and referral.<sup>13</sup> Information about substance abuse programs in your area can be found by calling the Utah Department of Human Services/Division of Substance Abuse and Mental Health at 801-538-3939 or 1-800-825-1992.

### **Comments/Recommendations**

In the publication “Caring for Our Future: The Content of Prenatal Care” the U.S. Department of Health and Human Services recommends that prenatal care consist of three components; health promotion, risk assessment, and intervention. The report states “Health promotion consists of education and counseling activities to maintain and enhance health, support healthful behaviors, increase knowledge about pregnancy and parenting, and encourage the woman and her family to participate in the decisions needed during prenatal care.”<sup>16</sup> The report acknowledges that the current prenatal care delivery system might hinder practitioners from providing comprehensive prenatal education. The panel suggests that the prenatal care schedule be reduced for low-risk pregnancies and that fewer visits would allow for more comprehensive care. The authors of this newsletter agree that the current prenatal care system makes it difficult for practitioners to deliver comprehensive education. The authors suggest that other models of education that address the health needs of pregnant women, regardless of risk status, such as PEHP’s WeeCare prenatal program ([www.health.utah.gov/rhp/weecare](http://www.health.utah.gov/rhp/weecare)), may be effective in assisting providers with patient education.

Practitioners are not required or expected to be experts in all areas of counseling and education, but they should know where to refer women when a need arises. Perhaps the need for medical interventions could be reduced if more efforts were placed in prevention.

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