OKLAHOMA
PRAMS -*GRAM*
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A COMPARISON OF PRENATAL CHARACTERISTICS BETWEEN NATIVE AMERICAN AND WHITE WOMEN IN OKLAHOMA

IN OKLAHOMA:

- The majority of Native American women receive prenatal care services (62.9%) and financing of care (70.7%) through the Indian Health Service (IHS).
- Native American women are less likely than white women to obtain medical confirmation of pregnancy in the first trimester.
- Native American women are less likely than white women to enter prenatal care in the first trimester (74.2% and 83.7%, respectively).
- Among women who did not receive prenatal care as early as they wanted, Native American women are more likely than white women to report **late recognition of pregnancy**, **lack of transportation**, and **lack of child care** as barriers to receiving care.
- Native American women are more likely to report that their pregnancy was unintended (50.4% vs. 41.5%) than white women.
- Native American women are less likely to consume alcohol in the last three months of pregnancy than white women.
- Native American women are 2.3 times more likely than white women to experience a violent event in the 12 months prior to delivery.

Early entry into prenatal care has been shown to benefit perinatal outcome and has been recommended as an overall strategy to improve birth outcome.[1] Prenatal care may improve perinatal outcome by providing an opportunity for intervention related to a woman's behaviors (e.g. drinking) or other lifestyle factors that pose risks during the prenatal period. The Healthy People Year 2000 objective calls for 90 percent of pregnant women to enter prenatal care in the first trimester.[2]

Prenatal characteristics (e.g. prenatal care utilization) may be influenced by race.[1] The racial disparity in prenatal characteristics has been examined primarily comparing black and white women. There is relatively little known regarding the prenatal characteristics of Native American or Hispanic women. This information is critical to the development of programs and policies to improve the maternal and infant health of these populations.

In this report, data from the Oklahoma Pregnancy Risk Assessment Monitoring System (PRAMS) are used to compare the prenatal experiences of white and Native American women in Oklahoma. Maternal, demographic, socioeconomic, and behavioral characteristics are examined.

PRAMS is a population-based survey of Oklahoma women who have recently delivered a live birth. A stratified sampling approach is used to select approximately 200 new mothers each month from the state's live birth registry. Up to three mailed questionnaires are used to solicit a response. Telephone interviews are attempted for non-respondents. Data for this report reflect live births occurring between April 1988 and March 1993. The overall response rate was 70%. Analysis weights were applied to adjust for selection probability and non-response. All data represent state estimates.

Prenatal care utilization and barriers are also explored. Data-based recommendations related to the provision of prenatal care to the Native American population in Oklahoma are highlighted.

Methods

For this study, women who indicated they were Native American or white were included in the analysis. Among 1,078 Native American and 8,644 white women sampled, 65.7% and 75.7%, respectively, responded to the survey. No data are currently available regarding tribal affiliation or the quantum of Indian blood among the self-reported Native American women.

Characteristics of Native American and White Women

As shown in Table 1, one-half of Native American women giving birth in Oklahoma (50.1%) live at less than 100% of the Federal Poverty Level (FPL) compared to 28.5% of white women. Three-fourths (75.1%) of Native American women reside in rural areas with a population of less than 10,000.

One-fourth of Native American women (24.4%) have less than a high school education compared to 16.7% of white women. In addition, they are half as likely as white women to graduate from college (10.1% vs. 20.4%).

Nearly one in five (19.8%) Native American births are to women less than 20 years old. This proportion is 1.5 times that of white women. In addition, Native Americans tend to begin childbearing at an earlier age. Nearly one fourth (23.2%) of Native American women with previous births had their first child prior to age 18 compared to 15.2% of white women.

Native American women are less likely to be married at the time of conception than white women (56.8% vs. 72.8%).

Native American women are less likely than white women to obtain medical confirmation of pregnancy during the first trimester. Although over 40% for both groups, Native American women reported a higher prevalence of unintended pregnancy than white women (50.4% vs. 41.5%).

Native American women are less likely to consume alcohol both before and during pregnancy than white women. Almost all (99%) of white and Native American women who drink in the last trimester consume less than seven drinks per week (data not shown).

Native American women are 2.3 times more likely to be involved in a physical fight and/or be physically hurt by a husband or partner in the 12 months prior to delivery than white women.

Table 1

Characteristics of Native American and White Women

Characteristic	Native Am (95% CI)	White (95% CI)
Family Income[1]		
<100% FPL	50.1 (43.5-56.7)	28.5 (26.5-30.5)
100-184% FPL	29.9 (23.9-35.9)	27.7 (25.8-29.6)
185+%FPL	20.0 (14.9-25.1)	43.8 (41.7-45.9)
Residence		
Urban	24.9 (19.9-29.9)	57.4 (55.5-59.3)
Rural	75.1 (70.1-80.1)	42.6 (40.7-44.5)
Education[2]		
<12 yrs	24.4 (18.7-30.3)	16.7 (14.8-18.6)
12 yrs	47.5 (41.2-53.8)	40.9 (38.7-43.1)
13-15 yrs	18.0 (13.4-22.6)	22.0 (20.2-23.8)
16+ yrs	10.1 (6.3-13.9)	20.4 (18.7-22.3)
Age		
<20	19.8 (14.3-25.3)	12.9 (11.3-14.3)
20-24	39.6 (33.1-46.1)	30.2 (26.2-32.2)
25-29	24.9 (19.3-30.5)	31.7 (29.7-33.7)
30-34	9.1 (5.6-12.6)	19.3 (17.6-21.0)
35+	6.6 (3.3-10.1)	5.9 (4.9-6.9)
Age At First Birth[3]		
<18	23.2 (18.1-29.9)	15.2 (10.2-17.2)
18-19	27.3 (20.5-34.1)	20.3 (18.2-22.4)
20+	49.5 (41.7-57.3)	64.5 (62.1-67.0)
Marital Status[4]		
Unmarried	43.2 (36.4-50.0)	27.2 (25.3-29.3)
Married	56.8 (50.0-63.8)	72.8 (70.8-74.8)
Confirmation of Preg.[5]		
1st Trimester	88.7 (84.3-92.9)	94.3 (93.3-95.3)
2nd/3rd Trimester	11.3 (7.1-15.5)	5.7 (4.7-6.7)
Intention of Preg.		
Intended	49.6 (43.3-55.9)	58.5 (56.5-60.5)
Unintended	50.4 (44.1-56.7)	41.5 (39.5-43.5)
Drinking		
Prior to Preg.[6]	35.7 (29.7-41.7)	44.5 (42.5-46.5)
During Preg.[7]	5.7 (2.7-8.7)	8.4 (7.3-9.5)
Violence[8]	19.6 (14.6-24.6)	8.4 (7.2-9.6)

[1] 1994 Federal Poverty Level (FPL) for a family of 4: 100%=$14,800, 185%=$27,380

[2] Women less than 18 years were excluded

[3] Women with at least one previous live birth

[4] Marital status at conception

[5] Pregnancy confirmation is positive medical test for pregnancy

[6] During the 3 months prior to pregnancy

[7] During the 3 months prior to delivery

[8] Involvement in a physical fight and/or being physically hurt by husband or partner in 12 months prior to delivery

Prenatal Care Utilization

The majority of Native American women receive prenatal services (62.9%) and financing of care (70.7%) through the Indian Health Service (IHS) (Table 2).

Native American women are less likely to report entry into prenatal care during the first trimester than white women (74.2% and 83.7%, respectively).

Table 2

Prenatal Care Utilization
Among Native American and White Women

Characteristic	Native Am (95% CI)	White (95% CI)
Location of PNC		
Hospital	11.5 (7.4-15.6)	14.4 (13.0-16.0)
Health Dept	3.8 (1.3-6.3)	9.3 (8.1-10.5)
Private MD/HMO	21.8 (16.7-26.9)	73.7 (71.9-75.5)
IHS	62.9 (56.9-68.9)	2.6 (2.0-3.3)
Payment for PNC		
Personal Income	2.2 (0.4-4.0)	11.4 (10.2-12.6)
Insurance[1]	11.7 (8.0-15.4)	55.3 (53.4-57.4)
IHS	70.7 (65.2-76.2)	2.9 (2.2-3.6)
Medicaid	15.4 (11.0-20.0)	30.4 (28.5-32.3)
PNC Entry		
1st Trimester	74.2 (68.7-79.5)	83.7 (82.2-95.3)
2nd/3rd Trim/No Care	25.8 (20.5-31.3)	16.3 (14.8-17.8)

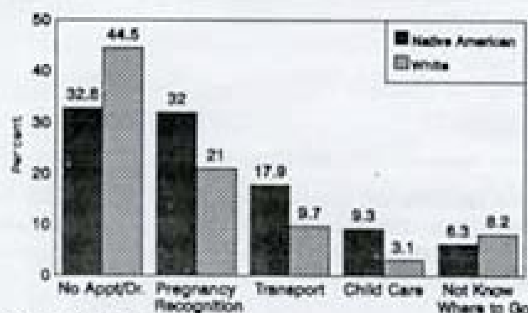
[1]Insurance may be group or private.

Barriers To Prenatal Care

Native American women are 1.3 times more likely than white women to report that they didn't begin prenatal care as early as they wanted (25% vs. 19.9% - data not shown).

Figure 1

Barriers to Entering PNC as Early as Wanted Among White and Native American Women*



Oklahoma PRAMS 1988-1993
*Only includes those not entering care as early as wanted

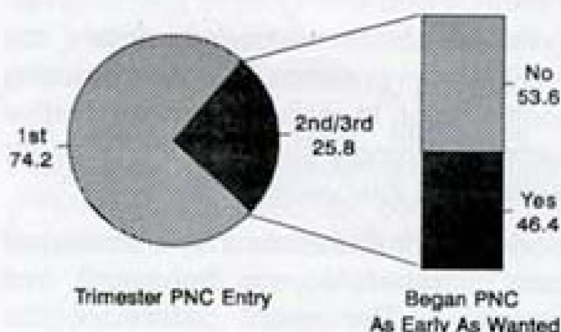
The top five barriers to early prenatal care entry reported by Native American women are 1) inability to get an appointment; 2) late recognition of pregnancy; 3) lack of transportation; 4) lack of child care; and 5) not knowing where to go for care (Fig. 1). Of these barriers, *late pregnancy recognition*, *lack of transportation*, and *lack of child care* were reported more frequently by Native American than white women.

Other factors potentially influencing early entry into prenatal care include intention of pregnancy and women's attitudes or beliefs about care.[3] As previously shown in this report, one half (50.4%) of Native American women and 41.5% of white women reported that their pregnancy was unintended.

Further, as shown in Figure 2, approximately one-half (46.4%) of Native American women who enter prenatal care after the first trimester report that they began care as early as they wanted.

Figure Two

Attitude Regarding Prenatal Care Entry Among Native American Women Entering Prenatal Care After the First Trimester



Summary

The prenatal characteristics of Native American women in Oklahoma are unique and important in the development of both program and policy initiatives targeted for this population. These data suggest that prenatal utilization, access, behaviors, and lifestyle indicators among this population are somewhat different from those of white women.

Native American women are more likely to enter prenatal care after the first trimester than white women. This delayed entry into care may be

influenced by several factors including late confirmation of pregnancy, unintended pregnancy, and beliefs about obtaining prenatal care. Both family planning and maternity services provide opportunities for interventions aimed at reducing factors of particular risk for Native American women. Additional or enhanced strategies designed to decrease the rate of unintended pregnancy and to educate women on both the early signs of pregnancy and the importance of early prenatal care are needed.

Additional barriers to early prenatal care entry reported more frequently by Native American women include lack of transportation and lack of child care. Lack of transportation may be influenced by both residence (i.e. urban or rural) and location of prenatal care. Native American women receiving care through IHS, for example, may reside in counties without an available IHS facility. Although a percentage of the population in each of Oklahoma's 77 counties is Native American, only 33 counties have an IHS clinic or hospital.[4] These system-related barriers may be addressed through alternative methods of delivering care, improved or enhanced modes of transportation, and provision of child care services.

In addition to the above mentioned barriers, the comparatively high prevalence of violence during the 12 months prior to delivery among Native American women strongly suggests the need for both prevention and intervention efforts.

Finally, socioeconomic factors may also impact prenatal care utilization, access, behaviors, and lifestyle factors.[1] The exact nature of the relationship among system-related, attitudinal, and socioeconomic barriers to prenatal care among Native American women in Oklahoma warrants further examination.

RECOMMENDATIONS

- Identify and evaluate opportunities in current health services provided to Native American women to impact the rate of unintended pregnancy.
- Explore alternative systems of care delivery and enhanced transportation services to prenatal care for Native American women.
- Develop culturally sensitive educational programs on the importance of early signs of pregnancy and the need for obtaining early and continuous prenatal care for Native American women.
- Provide child care at prenatal clinics that serve Native American women.
- Educate prenatal care providers about appropriate assessment and intervention with women who have experienced violence or are currently experiencing violence.

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