The Perinatal Health of Rural Women: Data from the 2001 Oregon PRAMS Survey

What is Oregon PRAMS?

Oregon PRAMS (Pregnancy Risk Assessment Monitoring System) is an ongoing, population-based survey of postpartum women by the Office of Family Health. It asks women about their experiences before, during and after pregnancy. About 2000 women per year are surveyed each year. In order to provide a large sample of women from racial and ethnic minority groups, we oversample women who are Hispanic, American Indian, African-American, and Asian/Pacific Islander.
Definition of Rural
The survey participants are randomly selected from Oregon birth certificates. We therefore know the home address of each woman at the time she gave birth. This report is based on categorizing women as living in either rural or urban settings according to their county of residence at the time they gave birth. Rural in this report is defined as residence in any county with less than 60 people per square mile in 2001. All other counties are treated as urban. [Starting with 2002 births, we will be able to assign address to a specific census tract and therefore use the U.S. Census Bureau’s definitions of urban and rural.]


URBAN COUNTIES (10): Benton, Clackamas, Columbia, Jackson, Lane, Marion, Multnomah, Polk, Washington, Yamhill.

Weighted Data
Because the PRAMS survey participants are randomly selected from birth certificates, we know some characteristics of the non-respondents, including maternal age, education and race/ethnicity. After the data has been collected, the data is weighted for the sampling design and for non-response. So each data table lists the actual number of women with a particular response (the unweighted number of respondents) and the weighted percentage of respondents.

SUMMARY OF FINDINGS
Compared to women living in urban counties, women living in rural counties were more likely to have been enrolled in WIC during their pregnancy.

Health advantages of rural women (compared to urban women):
Less likely to have drunk alcohol in the 3 months before pregnancy
More likely to have gotten counseling:
- Prenatal care provider talked about how secondhand smoke could affect baby
- Postpartum provider talked about how secondhand smoke could affect baby
- Had a dentist talk with her during pregnancy about the care of her teeth and gums

Health disadvantages of rural women (compared to urban women):
More families with annual income less than $30,000
More intimate partner violence during pregnancy
Less safety
- Less likely for infant to always be in infant car seat
- Less likely to have a working smoke alarm
- More firearms in the home
  - But firearms more likely to be locked
  - And ammunition more likely to be stored separately
Less likely (before and after pregnancy) to have insurance cover birth control
Less effective birth control: more women used birth control when got pregnant
At newborn discharge, more likely to get a discharge pack containing infant formula
## RESULTS

<table>
<thead>
<tr>
<th></th>
<th>RURAL (Number (%))</th>
<th>URBAN (Number (%))</th>
<th>p-value (chi-sq)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>362 (22.6%)</td>
<td>1433 (77.4%)</td>
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### Health advantages of rural women (compared to urban women):

- **Enrolled in WIC during pregnancy**
  - 202 (51.9%)
  - 598 (34.3%)
  - 0.00

- **Drank alcohol in the 3 months before pregnancy**
  - 148 (43.0%)
  - 571 (53.2%)
  - 0.04

- **Had a prenatal care provider talk with her about how secondhand smoke could affect their baby**
  - 254 (72.0%)
  - 962 (62.6%)
  - 0.049

- **Had a health care worker talk to her (after the baby was born) about how secondhand smoke could affect their baby**
  - 241 (69.2%)
  - 857 (54.9%)
  - 0.00

- **Had a dentist talk with her during pregnancy about the care of her teeth and gums**
  - 124 (47.9%)
  - 460 (38.0%)
  - 0.04

### Health disadvantages of rural women (compared to urban women):

- **Annual family income <$30,000**
  - 234 (60.4%)
  - 773 (50.4%)
  - 0.048

- **Husband or partner physically abused her during pregnancy [intimate partner violence]**
  - 15 (5.2%)
  - 21 (1.6%)
  - 0.04

- **Infant always rode in an infant car seat**
  - 339 (98.5%)
  - 1378 (99.7%)
  - 0.02

- **Had a working smoke alarm in the home that had been tested in the last year**
  - 307 (90.1%)
  - 1289 (95.3%)
  - 0.02

- **Firearms kept in or around the home**
  - 113 (42.3%)
  - 248 (26.2%)
  - 0.00

- **All firearms in home are stored in a locked place**
  - 66 (26.2%)
  - 158 (16.5%)
  - 0.02

- **All of the ammunition stored separately from the firearms**
  - 94 (37.8%)
  - 202 (22.7%)
  - 0.00

- **Had health insurance that covered the cost of birth control before pregnancy**
  - 131 (54.6%)
  - 572 (72.4%)
  - 0.00

- **Had health insurance that covered the cost of birth control after birth**
  - 167 (63.1%)
  - 697 (73.5%)
  - 0.049

- **Using any kind of birth control when got pregnant**
  - 86 (25.7%)
  - 323 (17.7%)
  - 0.038

- **Given a discharge gift pack containing formula at newborn hospital discharge**
  - 264 (79.3%)
  - 976 (64.9%)
  - 0.00

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*Number: unweighted number of women*

*%: weighted percent*
DISCUSSION

Provider counseling was better for rural women than urban women on certain types of perinatal education.

Rural women were more likely to have been victims of domestic violence during pregnancy. Providers should be observant and inquisitive. (See CD Summary, May 18, 2004; http://www.healthoregon.org/cdsummary/2004/ohd5310.pdf.)

Rural women used less effective birth control than urban women. Providers might help women move toward more effective forms of birth control.

Rural women were more likely to receive a newborn discharge pack containing infant formula at the time of newborn discharge. These “free samples” of formula are intended to encourage women to switch from breastfeeding to formula feeding. Many women interpret the “free samples” as provider endorsement of formula feeding. A recent review (Donnelly A, et al. Commercial hospital discharge packs for breastfeeding women. Cochrane Database Syst Rev. 2000;(2):CD002075) found that these discharge packs decrease breastfeeding. Providers can work with hospitals to provide discharge packs that do not include formula for mothers who intend to breastfeed.

All 2001 Oregon PRAMS variables have been analyzed for rural/urban differences. This booklet only cites the differences that are statistically significant. A full set of 2001 rural/urban differences for all the variables is available.

In addition, a full list of Oregon PRAMS 2001 questions is listed at the Oregon PRAMS web site, http://www.dhs.state.or.us/publichealth/pch/prams/index.cfm, according to topic categories.

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