South Dakota Tribal PRAMS: Select prenatal experiences & postpartum infant health practices

Jennifer S. Irving, MPH

SD Governor’s Task Force on Infant Mortality
June 20, 2011
Background data, 2007
Racial Disparities

- AI 19% of birth population
- IMR higher than national AI/AN rates
- 52% AI infant deaths in post neonatal period
CDC PRAMS
Pregnancy Risk Assessment Monitoring System

• CDC initiative to reduce infant mortality and low birth weight
• Population-based surveillance system
• Monitor selected maternal experiences, attitudes and behaviors before, during and after pregnancy
• Supplements vital records data
• Supports analysis and translation of data into action
South Dakota Tribal (SDT) PRAMS: A Statewide, American Indian, Point-in-Time Project
SDT PRAMS Collaboration

- Aberdeen Area Indian Health Service, Aberdeen, SD
- North Dakota DOH, Bismarck, ND
- South Dakota DOH, Pierre, SD
- Northern Plains Tribal Epidemiology Center, Rapid City, SD
- Aberdeen Area Indian Health Service, Aberdeen, SD
- Sioux Falls, SD
- Vital Records & Epi Support

Key entities:
- Project Management
- Vital Records
- Grant Recipient

Map notes:
- Reservation land
- Other key entities (approximation)
- 380 miles
SDT PRAMS Data Collection

• June – December 2007
• Point in Time, not on-going
• Included Moms of AI residing in SD at birth, 
  – Rez and Non-rez
• CDC weighted data
SDT PRAMS Data Collection Operations

• Mixed-mode data collection
  – Multi-step mail phase (plus adapted steps unique to SDT PRAMS)
    • WIC Hand delivery to WIC participants
    • Hand delivered/pick-up to reservation residents
  – Up to 3 questionnaires delivered
  – Telephone follow up for non-responders to mail phase
SDT PRAMS Results

• Total Sample 1299
• # of Respondants 948
• Response Rate 72.9%
Sample Socio-Demographics

Race
- 92% AI mother
- 61% AI father

Age
- 23% < 20 years
- 71% 20 - 34 years
- 6% 35 - 44 years

Education
- 36% < 12 years

Marital status
- 77% not married

HH Income
- 56% < $10,000
Pregnancy intention, SDT PRAMS, 2007

- Intended (then/sooner): 44.2%
- Mistimed (later): 37.6%
- Unwanted (not then or future): 18.3%
- Unintended (unwanted or mistimed): 55.8%
## Barriers to Prenatal Care (PNC)

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Had too many other things going on</td>
<td>14.9%</td>
</tr>
<tr>
<td>Lacked transportation</td>
<td>14.5%</td>
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<tr>
<td>Didn’t want anyone to know she was pregnant</td>
<td>13.7%</td>
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<tr>
<td>Couldn’t get an appointment</td>
<td>13.4%</td>
</tr>
<tr>
<td>Experienced racism in receiving health care before or during pregnancy</td>
<td>9.5%</td>
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<tr>
<td>Lack childcare</td>
<td>9.1%</td>
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</tbody>
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Topics most discussed at PNC

<table>
<thead>
<tr>
<th>Topic</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breastfeeding</td>
<td>90.8%</td>
</tr>
<tr>
<td>Postpartum birth control</td>
<td>86.7%</td>
</tr>
<tr>
<td>Smoking</td>
<td>86.2%</td>
</tr>
<tr>
<td>Drinking alcohol</td>
<td>85.4%</td>
</tr>
<tr>
<td>Safe medicines during pregnancy</td>
<td>85.3%</td>
</tr>
<tr>
<td>HIV Testing</td>
<td>82.3%</td>
</tr>
<tr>
<td>Illegal Drugs</td>
<td>82.1%</td>
</tr>
</tbody>
</table>
Least discussed at PNC

- Physical Abuse
- Selt belt usage
- Early Labor
- Testing for birth defects

Photo provided by Healthy Native Babies
Depression and abuse, SDT PRAMS, 2007

Post-partum depressive symptoms

- Depressive symptoms: 27.6%

Abuse by partner/husband or ex before and during pregnancy

- Physical, before: 22.4%
- Emotional, during: 19.0%
- Physical, during: 13.3%
- Sexual, during: 4.8%
Breastfeeding intentions

- Knew she would breastfeed: 50.1%
- Unsure whether to BF: 29.1%
- Knew she would NOT BF: 20.8%
Breastfeeding practices

• 66.9% breastfed or pumped breast milk at any point after delivery

• 37.9% breastfed or pumped milk for at least 2 months
Maternal Tobacco Use

- 52.5% reported any smoking before pregnancy
- 31.4% reported any smoking during last 3 months of pregnancy
- 45.1% reported smoking after pregnancy
Among women who smoked before pregnancy...

- Smoked during pregnancy and after delivery (56.8%)
- Smoked during pregnancy, but quit after delivery (3.1%)
- Did not smoke during pregnancy, but smoked after delivery (27.5%)
- Did not smoke during pregnancy or after delivery (12.6%)
Exposure to environmental tobacco smoke (ETS)

- 53.1% of women were exposed to ETS during pregnancy
- 7.7% of women report infants were exposed to ETS
- 84.2% report that “no one was allowed to smoke anywhere inside their home” after baby was born
Infant sleeping practices

How often does your new baby sleep in the same bed with you or anyone else?

- Always or often: 51.2%
- Sometimes or rarely: 35.6%
- Never: 13.3%

Legend:
- Always or often
- Sometimes or rarely
- Never
Infant sleeping practices

85.2% of moms report placing baby on his/her back to sleep

Photo provided by Healthy Native Babies
Conclusions

• High response rates indicate that Tribal and State program partnership is central at all levels in research

• The high rates of participant smoking and co-sleeping practices offer opportunities for providers to educate and inform women
Conclusions

- Increase access to mental health/counseling services for depression and abuse resources
- Partnerships with community-based and tribally-run programs to develop preconception care services/resources
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North Dakota Department of Health
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