Prenatal dental care & subsequent preventive oral health care in urban American Indian/Alaska Native (AI/AN) children

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Oral Health Disparities
American Indian / Alaska Natives (AI/AN)

- 79% ages 2-5 have untreated dental caries
- 60% have severe dental caries
Severe dental caries
Research study proposed questions:

- Is prenatal dental care associated with a child having preventive dental care?
- Is prenatal medical care associated with a child having preventive dental care?
- Is prenatal medical care associated with prenatal dental care?
Methods

- Retrospective cohort
- Inclusion criteria based on mother
  - AI/AN
  - At least 1 pre-natal visit during the calendar years 2003-2005
  - Patient of record at the SIHB
Study Setting

- Urban Indian Health Organization (UIHO)
- Seattle Indian Health Board (SIHB)
  - Co-located Medical and Dental
  - Federally Qualified Health Center
Data source

- Claims data
- Matched mother child data set
Variables

- DOB
- LMP
- Gestation length
- Adequate prenatal care
- # Medical visits
- # Dental visits
- Type dental using CDT codes
Analysis

- Descriptive
- Bivariate analysis
  - Chi-square test
- Multivariable logistic regression
**Mothers**

- N = 153
- 26.8% premature birth < 37 weeks
- 71% adequate prenatal care defined using the modified Kessner index
- 30% any dental
Kids

N = 153

Mean age 2.6 years
  - Feb 9, 2007 (1.1 - 4.1 years)

Any Medical 73%

Any Dental 23%
Kids Dental Care

- Age first dental visit
  - 7 months - 2.7 years

- 23% Preventive dental visit

- 1.3% had a visit by 1 year of age, AAPD recommended first dental visit
Child preventive care and mother preventive dental care

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<th>Child Preventive Dental Care</th>
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RR = 2.23  CI (1.26, 3.94)
P = .008
## Results secondary question

### Preventive dental care and adequacy of prenatal care for mother

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<thead>
<tr>
<th>Adequacy of prenatal care</th>
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RR = 5.45 CI (1.35, 21.94)  
P = .004
30% women received dental care
23% children had a preventive dental visit
Higher likelihood of preventive dental visit for child if mother had a preventive dental visit
19.6% went by age 2
Adequate prenatal medical care significantly
  likelihood of child with preventive dental visit
Limitations

- Did those that didn’t get medical go somewhere else?
- Claims data
- Restricted # variables
- Cause and effect?
- Characteristics of Mom
Discussion

Explanation

- Effect of prenatal dental visit
- Prevention mind set
Acknowledgments

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Thank you