

# THE NATIVE ORAL HEALTH PROJECT



## BASELINE SURVEY DATA FROM A STUDY OF CALIFORNIA AMERICAN INDIAN AND ALASKA NATIVE MOTHERS

### Study Sample

Fifty-three American Indian/Alaska Native (AIAN) mothers ages 18 to 51 (median age = 29 years old) from three tribes in Northern California were recruited into the Native Oral Health Project (NOHP) study and completed a baseline survey about oral health knowledge, beliefs, behaviors, and barriers to oral health care. A total of 40% of mothers in the study reported completing less than or equivalent to a 12<sup>th</sup> grade education or completing a General Education Diploma (GED). Another 59% of mothers reported completing at least some college, received a college degree, or obtained a graduate/advanced degree. A total of 40% of mothers in the study were employed full or part-time, while 55% reported they were unemployed, including full or part-time students, homemakers, or disabled individuals. More than half of mothers (59%) reported they were married or living with a partner, and 36% reported that their relationship status was divorced, separated, or never married. The median annual household income for the sample was approximately \$20,000. The maximum income reported fell in the \$60,000 - \$70,000 range.

### Survey Instrument

Using a paper-administered survey, NOHP study staff assessed the average number of correct answers that AIAN mothers gave in response to 25 questions about childhood oral health knowledge and beliefs; 10 questions about children's current oral health behaviors; and 7 questions about barriers to children's oral health care, including whether the AIAN mothers and their children have access to oral health care (i.e., dental insurance) and transportation to attend appointments.

### Results

#### Knowledge and Beliefs about Childhood Oral Health

- ❖ On average, AIAN mothers in the study answered 22 of 25 survey items (88%) about childhood oral health knowledge and beliefs correctly, with scores ranging from 10 of 25 questions answered correctly to 25 of 25 questions answered correctly (40-100%).



- ❖ AIAN mothers in the study provided the highest percentage of correct responses to knowledge and belief questions about the importance of baby teeth and the negative effect of soda/pop on children’s oral health. A total of 96% of mothers provided correct responses to each question.
- ❖ AIAN mothers in the study provided the lowest percentage of correct responses to knowledge and belief questions about fluoride varnish applications and the role of maternal oral health practices in children’s oral health care. A total of 47% of mothers in the study reported knowing that fluoride varnish should be applied to children’s teeth two or more times per year and 60% of mothers reported knowing that maternal oral health practices influence children’s oral health.

### Children’s Oral Health Behaviors

On average, AIAN mothers in the study reported that their children engage in 4 of the 10 positive oral health behaviors (40%) assessed by the survey, with responses ranging from 1 to 7 currently practiced positive oral health behaviors (10-70%). Mothers in the study most frequently reported that children attend routine dental checkups or cleanings (64% of the sample).

### Barriers to Children’s Oral Health Care

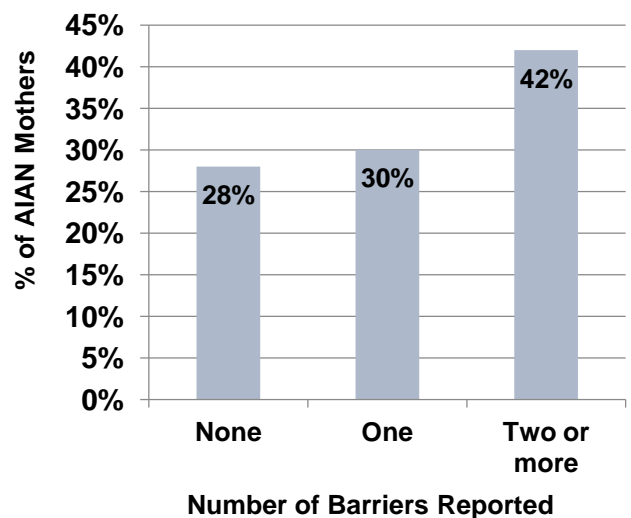
AIAN mothers in the NOHP study most frequently mentioned barriers to children’s oral health care that related to time, with 36% of mothers traveling more than 30 minutes to get to children’s appointments and 36% of mothers reporting that dental appointments lasted longer than 30 minutes.

Other barriers to children’s oral health care:

- ❖ A total of 6% of mothers in the study reported not having access to dental insurance for themselves or their children.
- ❖ A total of 13% of mothers in the study reported that they had to use public transportation or be driven by another person to attend children’s dental appointments.
- ❖ A total of 21% of mothers in the study reported missing work one or more times in the past year to attend children’s dental appointments.
- ❖ A total of 11% of mothers in the study reported that they could not get oral health care for their child when they needed it.

Overall, 72% of mothers in the study reported experiencing one or more barrier to children’s oral health care.

**Figure 1. Number of Barriers to Children’s Oral Health Care**





## Correlations between Demographic and Oral Health Indicators

Correlation analyses were conducted to identify associations between maternal demographic indicators (education status, employment status, relationship status) and AIAN mothers' knowledge and beliefs about childhood oral health, children's current oral health behaviors, and barriers to children's oral health care. Findings revealed a **positive correlation** between several demographic and oral health indicators for AIAN mothers in the NOHP study:

- **Higher maternal education** was associated with higher maternal oral health knowledge and children's positive oral health behaviors.
- **Maternal employment** was associated with children's positive oral health behaviors.
- **Higher levels of maternal oral health knowledge and beliefs** were associated with children's positive oral health behaviors.

**Table 1: Correlations between Demographic and Oral Health Indicators**

|                              | Oral Health Knowledge and Beliefs | Oral Health Behaviors | Barriers to Oral Health Care | Education Status | Employment Status |
|------------------------------|-----------------------------------|-----------------------|------------------------------|------------------|-------------------|
| Oral Health Behaviors        | <b>0.325*</b>                     | 1                     |                              |                  |                   |
| Barriers to Oral Health Care | -0.002                            | 0.111                 | 1                            |                  |                   |
| Education Status             | <b>0.296*</b>                     | <b>0.299*</b>         | -0.168                       | 1                |                   |
| Employment Status            | 0.240                             | <b>0.278*</b>         | 0.179                        | 0.249            | 1                 |
| Relationship Status          | 0.162                             | 0.267                 | -0.136                       | <b>0.336*</b>    | 0.214             |

Note. \* $p < .05$

## Conclusion

Results of the NOHP study demonstrate a need for AIAN-focused oral health promotion, intervention, research, and policy. Effective oral health promotion strategies involve providing culturally appropriate health education about childhood oral health care to AIAN mothers. Strategic health policies are needed to support childhood oral health intervention and research initiatives and to coordinate childhood oral health care between primary care physicians, dentists, and other early childhood education and healthcare providers in AIAN communities.



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