CENTER FOR NATIVE ORAL HEALTH RESEARCH

A Collaborating Research Center to Reduce Oral Health Disparities supported by the National Institute of Dental and Craniofacial Research (NIH/NIDCR U54 DE 019259)

2010 National Oral Health Conference Judith E. Albino, PhD, PI

CENTER FOR NATIVE ORAL HEALTH RESEARCH (CNOHR)

VISION

To become the premier national center working with American Indian and Alaska Native (AI/AN) communities to generate and sustain research, training, information dissemination, and technical assistance needed to address AI/AN oral health disparities.

MISSION

To work with AI/AN communities to conduct, facilitate, and disseminate the next generation of AI/AN oral health intervention research, with an initial focus on oral infections and their complications.

Center for Native Oral Health Research (CNOHR) Conceptual Framework



About American Indians and Alaska Natives

- Census 2000 4.1 million AI/AN (1.5% of the US population)
- AI/AN live predominantly in the West (43%) and South (31%)
- 560 AI/AN tribes recognized by US Government
- Tribes are independent, sovereign nations
- Variation and cultural diversity, with differences in language, culture and customs

About American Indians and Alaska Natives

American Indians and Alaska Natives	VS Population
Median age = 29	Median age = 35
Approximately 33% under age 18	Approximately 26% under age 18
6% of AI/ANs are 65 or older	12% are 65 or older
71% have a high school education 11% have a bachelor's degree	80% have a high school education 24% have a bachelors degree
2006 Poverty rate = 26%	2006 Poverty rate = 12%

About American Indians and Alaska Natives

- Life expectancy is 6 years less than the overall US population
- Infant mortality rate is 21% higher
- Injuries 3.4 times higher
- Tuberculosis 4.4 time higher
- Alcoholism 7.5 times higher
- Diabetes almost 4 times higher
- Cancer is the third leading cause of death

Oral Health of American Indians and Alaska Natives



Data from U.S. Department of Health and Human Services Indian Health Service. The 1999 Oral Health Survey of American Indian and Alaskan Native Dental Patients: USDHHS;2002.

EARLY CHILDHOOD CARIES (ECC)

- Profound oral health disparities exist in American Indian/ Alaskan Native (AI/AN) communities
- Results from IHS Oral Health Surveys show ECC in AI/AN continues to increase 1999–2002²
- Compared to other children ages 2–5, AI/AN children have more than 3 times the amount of untreated caries (19% vs. 68%).³

¹U.S. Department of Health and Human Service. The Oral Health of Native Americans: A Chart Book of Recent Findings. Trends in Regional Differences: USDHHS;1991.

³Vargas CM, Ronzio CR. Disparities in early childhood caries. BMC Oral Health. 2006;6.

²U.S. Department of Health and Human Services Indian Health Service. The 1999 Oral Health Survey of American Indian and Alaskan Native Dental Patients: USDHHS;2002.

RESEARCH COMPONENT -1 Promoting Behavioral Change for Oral Health in American Indian Mothers and Children ~ Motivational Interviewing Terry Batliner, DDS Project Director

- Research component 1 (RC1) is a Phase III, randomized controlled trial.
- 600 consenting pregnant women/mothers of newborns will be enrolled from a Northern Plains Tribe
- The mothers will be randomized to one of two groups:

 The enhanced community services group will receive: toothbrushes, toothpaste, brochures, and public service announcements focusing on the important risk factors for ECC.
 - -Motivational Interviewing (MI) group will receive: these services plus MI.
 - 4 MI home visits; one shortly after birth; 6, 12, and 18 months

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Hypothesis:

Enhanced community services plus an MI intervention will reduce the dmfs measures of children at ages 1, 2, and 3, compared to enhanced community services alone. MI sessions will improve the mother's dental knowledge, attitudes, and behaviors about oral health care.

Specific aims:

- 1. To collaborate with AI community service providers to develop culturally appropriate educational and health promotional materials to emphasize the value of family oral health from birth;
- 2. To create a manual for an MI intervention on oral health, focusing on AI mothers and their newborn children;
- 3. To determine the effectiveness of this intervention in a randomized trial designed to assess its impact on the prevention of ECC.

RESEARCH COMPONENT -2 Preventing Caries in Preschoolers: Testing a Unique Service Delivery Model in AI Head Start Centers David Quissell, PhD Project Director

- Focuses on developing a culturally appropriate manualized intervention for caries prevention to be delivered by trained community members, called Community Oral Health Specialists (COHS)
- COHS will deliver a program of ongoing oral health education and fluoride varnish (4 times per year) in Head Start Centers serving a Southwestern Tribe.

RESEARCH COMPONENT -2 Preventing Caries in Preschoolers: Testing a Unique Service Delivery Model in AI Head Start Centers David Quissell, PhD Project Director

- 52 Head Start centers (approximately 1040 children and families) will be randomized into one of two groups:
 - Group 1: Children will receive quarterly fluoride varnish applications and ongoing oral health promotion activities provided by COHS for 2 years
 - Group 2: Fluoride varnish made available at IHS clinics, quarterly for 2 years.

Hypothesis:

A community based oral health program can be developed and delivered in Head Start Centers to effectively reduce the dmfs measures of children ages 3–5. Parents and caregivers will show improved knowledge, attitudes, and behaviors about oral health care.

OUTCOME MEASURES

- dmfs decayed missing and filled primary tooth surfaces
- Social and Behavioral Changes
 Oral health knowledge, beliefs and behaviors
 Dental care and access behaviors
 Costs associated with obtaining dental care
- Costs and cost-effectiveness of interventions for Research Components 1 & 2

Center for Native Oral Health Research (CNOHR)

Research Program Administrative Core

- Judith Albino, PhD, Director
- Spero Manson, PhD
- Judy Sandoval

Research Component 1

- Terry Batliner, DDS
- Karen Fehringer, PhD
- Dallas Daniels, RDH, BS
- CeCe Big Crow, BA
- Stormie Clifford, BA

Statistics Core

- William Henderson, PhD
- Angela Brega, PhD
- Joan O'Connell, PhD
- Rhonda Dick, MA
- Greg Schaffer, MA

Research Component 2

- David Quissell, PhD
- Patty Braun, MD
- Terry Batliner, DDS
- Valerie Orlando, RDH, MEd
- Diana Cudeii, RDH

For more information please visit our website:

www.aianp.uchsc.edu/cnohr



Center for Native Oral Health Research

