

Oral Health Advocates in Public Housing: Addressing Oral Health Disparities Where People Live

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NIDCR - U54 DE019275

National Advisory Dental and Craniofacial Research Council

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Vulnerable Populations and Health Disparities



- Elders: frail and functionally dependent
- Racial/ethnic minorities
- Rural/urban dwelling poor



Center for Research to Evaluate and Eliminate Dental Disparities



www.bu.edu/creedd

NIDCR - DE019275

2008 Centers for Research to Reduce Oral Health Disparities



NIDCR Early Childhood Caries Collaborating Centers (EC4)

NIDCR Cooperative Agreements with:

- University of California, San Francisco
Center to Address Disparities in Children's Oral Health (CAN DO) and Data Coordinating Center (DCC)
 - Stuart Gansky, PI, Steve Gregorich, DCC Director U54 DE019285
www.ucsf.edu/cando
- Boston University Goldman School of Dental Medicine
Northeast Center for Research to Evaluate and Eliminate Dental Disparities (CREEDD)
 - Raul Garcia and Michelle Henshaw, Co-PIs U54 DE019275
www.bu.edu/creedd
- University of Colorado Denver
Center for Native Oral Health Research (CNOHR)
 - Judith Albino, PI U54DE019259
<http://aianp.uchsc.edu/cnohr/index.html>





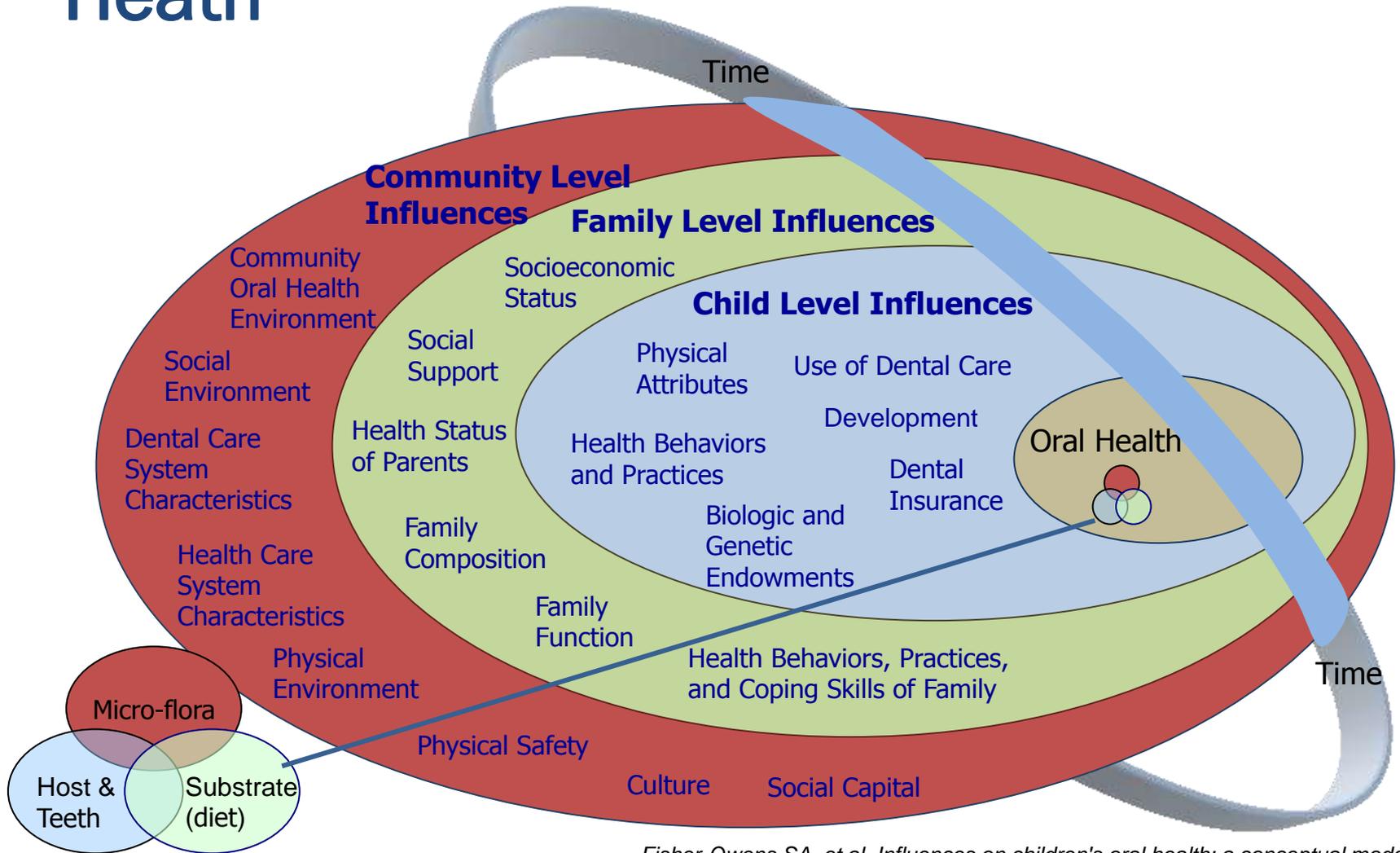
CREEDD 'Themes'

Oral health promotion & disease prevention

- In “non-dental care” settings
 - The ‘well-child’ medical care visit, in community health clinics
 - Public housing developments

- Delivered by “non-dental care” providers
 - Medical care providers (MD/NP/RN/PA)
 - Public housing residents

Conceptual Model of Children's Oral Health



Fisher-Owens SA, et al. Influences on children's oral health: a conceptual model. *Pediatrics*. 2007 Sep;120(3):e510-20.



CREEDD Components

Center Co-PI's

Raul Garcia, DMD, and Michelle Henshaw, DDS, MPH

Major Projects and Co-PI's

“Partnering with Community Health Centers to Prevent Early Childhood Caries”

Judith Bernstein, PhD, and Paul Geltman, MD, MPH

Boston University Schools of Medicine and Public Health

Norman Tinanoff, DDS, University of Maryland Dental School

“Oral Health Advocates in Public Housing”

Michelle Henshaw, DDS, MPH, Boston University, and

Belinda Borrelli, PhD, Brown University School of Medicine

The OHAPH Partnership

- Boston Housing Authority
- Partners in Health and Housing-Prevention Research Center (CDC U48 DP00058)
 - Resident Health Advocate (RHA) Program
- Community Committee for Health Promotion (CCHP)
- CREEDD



Public Housing

- Subsidized housing to low and moderate income individuals and families managed by the state or non-profit organizations
- **7.9 million individuals** live in public housing
- Average annual household income is **\$13,543**.
 - Federal poverty line is \$15,130 for a household of 2, and \$19,090 for a household of three according to the 2012 United States Health and Human Services Poverty Guideline



Boston Housing Authority (BHA)

- Largest landlord in Boston, Massachusetts
 - The BHA has 63 (37 elderly/disabled; 26 family) developments in almost every neighborhood in the City of Boston.
 - The BHA currently owns approximately 14,000 units of housing in Boston and houses about 27,000 people under the public housing program.
- Community health centers
- Tenant task forces
- Resource and development centers
- Central administration and financing by a public or private housing management company
- Child care centers
- Recreation centers

Oral Health Disparities

What we know:

- Oral Health Disparities:
 - Racial and ethnic minority groups and individuals living in poverty are disproportionately affected by dental disease

- Boston Public Housing:
 - Median household income is typically well below the national poverty line
 - The annual household income of 57.9% of Boston families living in public housing is less than \$20,000.
 - Of families with young children, 54% are Hispanic, 33% are Black, Non-Hispanic and 6.7% are White, Non-Hispanic

Oral Health and Public Housing

What we have observed:

- **Healthy Baby/Healthy Child Oral Health Study**
 - Clients primarily public housing residents
 - 36% of children aged 0-3 had signs of ECC
 - 73% of mothers with untreated decay
- **Boston modified Behavioral Risk Factor Surveillance System (BRFSS):**
 - Residents have poorer health status for virtually all measures compared with non-residents, after controlling for SES
 - Residents more than twice as likely as non-residents to not have had a preventive dental visit

Project Design: Community Input

Presentations to and open forums with the CCHP and Resident Health Advocate Program

- Research design
 - Importance of peer interventionists
- Site selection
 - Selection of community research personnel
- Recruitment materials
- Sub-committee for review of research instruments
- Community member involvement

Oral Health Advocates in Public Housing



Clinicaltrials.gov NCT01205971



Oral Health Advocates in Public Housing

Research question:

Does a behavioral intervention (Motivational Interviewing), delivered by public housing residents ('oral health advocates') to their peers, reduce incidence of early childhood caries over a two-year period?



Oral Health Advocates in Public Housing

Study design:

- Stratified group randomized trial

Primary outcome assessment:

- 2 year caries incidence

Site eligibility criteria:

- Designated family housing development
- Minimum of 40 families with children ages 0-5
- Community room or development center

Stratification factors:

- Number of families with children ages 0-5
- Age and race distribution of children



Intervention Fidelity

- Audio recording of all MI sessions
- MITI scoring of 20-50% of audiotapes
- Weekly supervision
- Review of audiotapes for dental and protocol accuracy and verification of intervention check list
- Review of Client Satisfaction Questionnaire
- Counselor completion of Intervention Check Lists



Oral Health Advocates in Public Housing

Enrollment target:

- 1,860 caregivers and their children between the ages of 0 and 5 years from 26 public housing developments

Progress to date:

- Enrolled 1120 caregivers and a total of 1435 children between the ages of 0 and 5 years from 26 public housing developments

Challenges

- **Project development:**
 - Partnership development requires long term commitment and resources prior to grant support
 - Community partners often do not have an IRB or FWA number
- **Implementation:**
 - Unreliable/unstable communication methods (e.g. disconnected phone numbers/limited calling plan)
 - Residents' reluctance to be 'study subjects'

Successes

Early Childhood Caries Collaborating Centers (EC4) Products:

- Standardized caries assessment protocol and manual
- Standardized gold standard examiner training and calibration in partnership with U Iowa
- Clinical trials management system adapted for behavioral interventions
- Common Basic Research Factors Questionnaire
- Recruitment and Retention Working Group
 - Finalizing first paper
- Software development for caries assessment, calibration analysis, and macro for ClinicalTrials.gov

Successes

CREEDD/Oral Health Advocates in Public Housing (OHAPH)

- Developed model for training lay persons to deliver Motivational Interviewing (MI) focusing on early childhood caries
 - Successfully trained interventionists and maintained high level of fidelity
- Protocols for conducting a rigorous high-quality RCT in a community setting
- Community engagement
 - Build effective partnerships – capacity building for future research
 - Identify and utilize all access points into your community
 - Recognize appropriate oversight for research activities
- Recruitment and retention strategies effective in public housing settings
- Training and Career Development

Thank You!

