# ORAL HEALTH FOR PREGNANT WOMEN AND CHILDREN

#### **Public Health Issue**

Preventive dental care practices such as regular dental visits and cleanings during pregnancy are important for the health of mothers and their infants. Poor oral health, such as periodontal disease, in pregnant women has been associated with premature births and low birth weight infants [1-3]. Periodontal disease during pregnancy is most prevalent among women who are African American, cigarette smokers, and users of public assistance programs. Blood-borne gram negative anaerobic bacteria or inflammatory mediators, such as lipopolysaccharides and cytokines, may be transported to the placental tissue as well as to the uterus and cervix. This results in increased inflammatory modulators that may precipitate preterm labor, particularly noted in African Americans [4, 5].

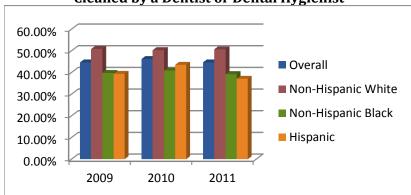
Tooth decay is one of the most preventable common chronic diseases in children, yet many children do not receive the preventive dental services, early diagnosis and interventions to halt the disease process. Access to dental care remains the greatest barrier contributing to unmet dental needs for low income children who are twice as likely to develop cavities as their middle class and wealthy classmates [1]. Tooth decay can cause pain and infection and contribute to poor eating, speaking, socializing, and overall poor health.

# **Magnitude and Trend**

Approximately 40% of pregnant women have some form of periodontal disease [7]. In addition, pregnant women who have periodontal disease may be seven times more likely to have a baby that is born too early (premature) or too small (low birth weight) [8].

In 2007-2009, 35% of U.S. women reported they did not have a dental visit within the past year and 56% of women did not visit a dentist

Figure 1. Percentage of Pregnant Women having their Teeth Cleaned by a Dentist or Dental Hygienist



Source: Florida Department of Health PRAMS Data 2009, 2010, & 2011

during pregnancy [4]. In 2009, 44.6% of recent mothers in Florida reported having their teeth cleaned during pregnancy by a dentist or dental hygienist [9]. This estimate remained relatively constant from 2009-2011 (Figure 1).

A statewide surveillance study conducted for third graders in 2013 revealed that approximately 37% (33.3%, 40.5% CI) of third graders in Florida presented with dental sealants on their molar teeth [10]. No Florida data on dental cavities/toothaches in children <6 years of age, overall or stratified by race/ethnicity, are readily available.

#### **National and State Goals**

The Healthy People 2020 has an objective of increasing the proportion of children, adolescents, and adults who use the oral health care system in the past year from 44.5% at baseline in 2007 to 49.0% by the year 2020 [11]. The Florida Department of Health (FDOH) Public Health Dental

Program (PHDP) has an oral health objective related to improving access to care for adult dental services in the State Health Improvement Plan (SHIP). Objective AC4.2.2 states: By December 31, 2015, reduce the percentage of adults who report having permanent teeth removed because of tooth decay or gum disease from 49.8% to 47% [12].

In 2010, the federal Centers for Medicare and Medicaid Services (CMS) announced goals for increasing the number of children enrolled in Medicaid. The national goal to spur states to action calls for an increase in the rate of children ages 1-20 enrolled in Medicaid for at least 90 continuous days who receive any preventive dental service, by 10 percentage points over 2010 totals, by 2015. Florida is ranked 50th among the 50 states for meeting the national goal of increasing the number of children receiving preventive dental services by 2015[7]. The SHIP objectives for Florida for increasing preventive services for children under age 6 years are:

- 1. AC4.2.4: By December 31, 2015, increase the percentage of Medicaid children receiving dental services from 23.4% (2010) to 25.9% [12].
- 2. AC4.4.1: By December 31, 2015, increase the number of local health departments (LHDs), Federally Qualified Health Centers (FQHCs), or other local entities participating in school health or other types of community-based sealant programs from 11 in 2010 to 35[12].

# **Current State Programs and Initiatives**

In state fiscal year 2012/2013, funding was allocated to 44 LHDs dental clinics for the WIC/Healthy Start Dental Project. The PHDP, in partnership with the Maternal and Child Health program, provided Title V funding to support primary dental care services, including preventive, restorative, surgical care, or other needed treatment, for uninsured or underinsured pregnant or postpartum women at or below 200% of the federal poverty level who were referred by WIC or Healthy Start. The program also provided oral health education to promote optimal well-being for both mother and child, especially as it relates to improving birth outcomes and preventing early childhood caries. A total of 3,933 visits (encounters) were provided to qualifying clients, totaling \$443,172.38 allocated for achieving better outcomes for pregnant women and newborns.

Currently, FDOH PHDP has several initiatives intended for increasing the number of children who receive dental services through the LHDs. The FDOH supports the expansion of services provided by LHDs as school-based programs with an emphasis on increasing the number of dental sealant programs in Title I elementary schools throughout the state. In addition, the PHDP has a school-based dental sealant pilot program using a dental hygienist service delivery model for providing dental sealants to second, third and fifth graders in Title I schools throughout five counties experiencing access to care barriers and limited dental services. The PHDP continues to seek additional funding sources to support the expansion of school-based oral disease prevention programs for all Title I elementary schools in Florida.

The FQHCs and local community coalitions offer school-based prevention programs in three counties in the state. Services through non-FDOH programs are provided in Collier, Hillsborough, and Okaloosa counties.

## **Public Health Strategies and Practices**

Access to dental care for pregnant women is a multifactorial issue. In order to address this, the U.S. Department of Health and Human Services partnered with the federal CMS to encourage everyone to "think teeth." Messaging campaigns and materials for distribution are provided on



their website: insurekidsnow.gov. The intent of the campaign is to connect families seeking health insurance coverage to dental providers, and function as a resource for organizations interested in getting involved in the Connecting Kids to Coverage National Campaign, a national outreach and enrollment initiative funded under the Children's Health Insurance Program Reauthorization Act (CHIPRA) and the Affordable Care Act (ACA) [13].

The federal CMS is working with states to provide Medicaid dental coverage to increase dental care utilization rates for uninsured children. The Medicaid benefit of Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) ensures that children receive health services, including dental care, when they need it. Federal guidelines emphasize preventive services such as dental sealants and fluoride to spare children the consequences of tooth decay and provide cost-effective measures for improving the oral health of children [14]. The PHDP is implementing several projects to provide preventive dental services to high risk children in schools and Head Start Centers. Based on a statewide surveillance study of unmet dental needs for third graders in Florida, the PHDP identified priority areas of the state with minimal dental providers and services for children, and developed a strategic plan for expanding dental sealant programs in Title I schools in counties of high need.

The Centers of Disease Control (CDC) and the federal CMS have proposed numerous strategies for promoting oral health for children. The strategies include the following: increase the number of fluoride varnish applications for children between 6 months and 3 years of age; maximize provider participation for providing preventive services for children by increasing reimbursement rates, reduce administrative burdens by making the credentialing process easier and simplifying reporting of information to the state through electronic submission [14]. The FDOH is working with the Agency for Health Care Administration to address streamlining the credentialing process with managed care plans and is collaborating with partnering agencies to expand prevention services provided through school-based programs. In 2015, the PHDP will implement a surveillance study to assess the unmet dental needs of Head Start children. Preventive services including screenings, oral health education, and fluoride varnish programs will be provided at Head Start centers identified as having children at "high risk" for early childhood caries. A second initiative will focus on preventive education seminars for parents and families.

## **DOH Capacity**

Currently, the Title V Maternal and Child Health Block grant provides funding to LHDs for supporting special projects based on high priority needs identified at the community level. Approximately 25 LHDs have identified funding to be allocated for providing specific dental services for children and their families. Multiple county programs are focusing on the unmet dental needs of pregnant women.

The PHDP provided \$210,000 for a pilot program across a five county area to utilize a dental hygienist delivery model for providing a school-based sealant program in Title I schools during the 2014-15 school year. The PHDP continues to search for funding sources to expand dental sealant programs throughout all 67 counties in Florida. Currently, 33 counties receive school-based or school-linked dental services provided by LHDs. No statute changes are required for expansion of programs; however, changes in managed care reimbursement policies and reduction of the administrative burdens for Medicaid providers could greatly enhance the expansion of prevention services and positively impact the oral health status of children throughout Florida.



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