

Problem

The perinatal period begins at conception and ends two months after delivery. It is a unique time during a woman's life and is characterized by complex physiological changes that may adversely affect oral health.¹ Several factors play a part in the oral health of women during this period including women's ability to access and utilize care; financing oral health care; women's knowledge, attitudes and behaviors; and workforce preparedness and willingness to serve this population of women.

Many women with low incomes face barriers to accessing and receiving quality, affordable oral health care during pregnancy and postpartum.²⁻⁴ State Medicaid programs are not required to provide any dental coverage for adults. As of September 2019, 47 states and Washington, DC, offer some dental coverage for adults enrolled in Medicaid, while only 35 states and Washington, DC, provide coverage beyond defined emergency dental situations (e.g., traumatic injury). Among those, just 19 states and Washington, DC, provide coverage for extensive oral health care.⁵ There is considerable variation among states in eligibility policies and scope of dental coverage for women with low incomes during the perinatal period. Although pregnant women enrolled in Medicaid are entitled to "pregnancy-related services," oral health care is not explicitly included as a pregnancy-related service.^{6,7}

Women's inability to access oral health care during and after pregnancy can contribute to negative outcomes for them and for their infants. For example, a mother with tooth decay can transmit tooth-decay-causing bacteria to her infant, which increases the infant's risk for tooth decay. Research shows that mothers receiving oral health care during the prenatal period may decrease the incidence of tooth decay by reducing or preventing early colonization of cariogenic bacteria in their children during early childhood.⁸ Despite heightened oral health needs and the benefits of receiving oral health care during the perinatal period, many women do not receive oral health care. Data from the Pregnancy Risk Assessment Monitoring System (PRAMS) indicate that in 2015, 72 percent of women had dental insurance during pregnancy.⁹ However, 56 percent of women had their teeth cleaned before pregnancy and only 48 percent of women had their teeth cleaned during pregnancy..

Pregnant women's oral health knowledge varies according to race or ethnicity, and their oral health beliefs vary according to their education levels.^{10,11} Racial and ethnic differences are evident in oral health behaviors and oral health care use among pregnant women.¹² Women from families with low incomes, those who are enrolled in Medicaid, or who belong to a racial or ethnic minority are half as likely to obtain oral health care when pregnant compared to women from families with higher incomes, those who are privately insured, or who are non-Hispanic white.¹¹

Nevertheless, lack of knowledge and understanding about perinatal oral health appears to cross demographic boundaries and is not limited to a single socioeconomic group. All women need to receive education about 1) oral health changes during pregnancy, 2) the importance and safety of receiving oral health care while pregnant, 3) how their oral health is connected to that of their child's, and 4) oral health care coverage available in their state. They can also benefit from information about how eating healthy

foods, practicing good oral hygiene, and practicing other healthy behaviors helps them and their infants stay healthy.¹³ Women may also need help to overcome their fears about receiving oral health care in general as well as their concerns about the safety of receiving oral health care during pregnancy.

Despite the benefits of oral health care during pregnancy, oral health professionals historically have been hesitant to provide care, and often postpone it until after delivery. The American Dental Education Association's patient-care competencies for general dentists do not include a separate competency for care of pregnant women.¹⁴ In follow-up to the release of *Oral Health Care During Pregnancy: A National Consensus Statement*, the American Dental Association's (ADA) Council on Advocacy for Access and Prevention has fostered efforts to make the profession aware of the importance and safety of providing oral health care throughout pregnancy. For example, the Council submitted two resolutions to the 2014 ADA House of Delegates, which were approved. These resolutions are now ADA policy, and read as follows:¹⁵

- Resolved, that the ADA urges all pregnant women and women of child-bearing age to have a regular dental examination.
- Resolved, that the ADA acknowledges that preventive, diagnostic and restorative dental treatment is safe throughout pregnancy and is effective in improving and maintaining the oral health of the mother and her child.

Despite these resolutions, many dentists still are unwilling to treat pregnant women, which is compounded by inadequate numbers of dentists enrolled as Medicaid providers.¹⁶ Only 33 percent of all dentists in the United States accept Medicaid.³ Lack of participation in education and training on how to meet the oral health needs of vulnerable populations, including pregnant women, is a continuing challenge.¹⁶

Data from 2013 indicates that approximately 60 percent of primary care physicians (PCPs) included oral health in prenatal care counseling.¹⁷ While most PCPs agreed that preventive oral health care is important, only a small proportion of PCPs recalled receiving oral health training during medical school or in a residency, which suggests that most are not well prepared to address oral health issues with pregnant women.¹⁷

In recent years there has been some improvement in access to oral healthcare, through safety net clinics that provide oral health services such as academic dental institutions and community health centers.¹⁸ Due to differing policies and clinic capacity, however, pregnant women may find it challenging to receive the specific services they need in a timely manner.

Methods

The following strategic framework for improving perinatal oral health is based on core public health activities set forth in the *Ten Essential Public Health Services*¹⁹ and the *Essential Public Health Services to Promote Oral Health in the United States*.²⁰ Public health agencies can use the framework to build support for monitoring health status, providing education, promoting partnerships, developing policies and plans, promoting quality care, ensuring an adequate work force, and supporting and promoting research. The strategic framework, including the examples listed below, appears in ASTDD's *Best Practice Approach: Perinatal Oral Health*.²¹

1. Monitor Perinatal Oral Health Status

Collecting, analyzing and reporting data on perinatal oral health at the state, local and individual program levels are essential for monitoring perinatal oral health status, disseminating findings in a timely manner, launching new and effective perinatal oral health programs and evaluating existing perinatal oral health programs. The examples that follow are from the final report of the Perinatal and Infant Oral Health Quality Improvement (PIOHQI) initiative funded by the Health Resources and Services Administration's Maternal and Child Health Bureau from September 2013 through July 2019.²²

Example: The Wisconsin PIOHQI initiative project integrated oral health education, preventive care and structured dental referral into prenatal-care-coordination programs and WIC (Special Supplemental Nutrition Program for Women, Infants, and Children). Process-level data collected from six implementation sites were analyzed to identify strategies to increase utilization of oral health care and key educational messages that resonated with the target population. Two models emerged: closed-loop referral for dental appointments and integrated preventive oral health services. Information about the project was compiled in the *Healthy Smiles for Mom and Baby Implementation Guide*, which will be disseminated statewide to organizations looking to develop oral health programs for the target population.

2. Educate and Engage Women of Reproductive Age, Prenatal Health Professionals, and Community Providers

To make perinatal oral health a priority and to reduce oral health disparities, women of reproductive age and their families, prenatal health professionals and community health providers need to be aware of and understand the importance of oral health during the perinatal period and across the lifespan. Targeted interventions, such as education and counseling during prenatal visits, can increase women's knowledge about the importance and safety of receiving oral health care during pregnancy, maintaining oral health and encouraging them to seek care.

Example: The New York PIOHQI project worked with one maternal and infant community health collaborative (MICHC) site to improve health outcomes of mothers and infants by integrating oral health screening, education and referrals into primary care. The team developed a manual and toolkit and provided trainings to MICHC staff and community partners. Oral health screenings, education and referrals are now a standard of practice at the 23 MICHC sites.

3. Promote Partnerships

The perinatal period offers women opportunities to access oral health care unavailable to them during other periods of their lives. Promoting partnerships between oral health professionals and service and advocacy organizations, as well as perinatal health professionals and community service providers, is necessary to take advantage of these opportunities.

Example: The Prenatal Oral Health Program (pOHP) at the University of North Carolina at Chapel Hill provides education to third-year medical students about the preventive oral health needs of pregnant women. The program promotes collaborative care including oral health screening, counseling and referral to a dental home. The program has significantly influenced medical students' behaviors, attitudes, and confidence in providing oral health counseling to pregnant women.²³

4. Develop Policies and Plans

Policies that prioritize the importance of oral health during the perinatal period are a foundation for seeking adequate funding to provide women with oral health care during this important time.

Example: The Arizona PIOHQI project analyzed Medicaid (Arizona Health Care Cost Containment System) 2016 and 2017 dental claims data to understand the state's oral health workforce capacity and its impact on access to and utilization of oral health care. After completing the analysis, project staff developed charts, graphs and heat maps to help partners advocate for legislative change. The resulting change included the addition of an adult emergency dental benefit passed in 2018, and of a pregnant women's benefit, reintroduced in 2019.

5. Promote Quality Care

Promoting quality oral health care during the perinatal period is critical to ensure that every woman and her child can achieve the best possible oral health during and after pregnancy.

Example: The Maryland PIOHQI project, with assistance from an interprofessional steering committee, produced *Oral Health Care During Pregnancy: Practice Guidance for Maryland's Prenatal and Dental Providers*. Selected content was adapted from *Oral Health Care During Pregnancy: A National Consensus Statement*. The document provides guidance and education for prenatal care professionals and oral health professionals to increase access to and utilization of oral health care and improve the oral health of pregnant women and infants throughout the state.

6. Ensure a Competent and Adequate Oral Health Workforce

A competent and adequate oral health workforce is essential to facilitate positive oral health behaviors in women during the perinatal period. Collaborative efforts by academic institutions, professional health organizations and state agencies are necessary to educate health professionals about how to provide the best perinatal oral health care.

Example: The South Carolina PIOHQI project partnered with community systems directors (CSDs) in four public health regions to expand the state's regional oral health networks. Using network analysis, the department measured a three-fold increase in the size of the networks, which suggests an increase in the capacity of CSDs in regional offices to identify local oral health, medical and social services professionals for collaboration.

7. Support, Conduct, and Promote Research

Data from research improves health professionals' education about how to deliver effective oral health care, promote oral health, and coordinate referrals and consultations during the perinatal period. Research focused on perinatal oral health is important to ensure that evidence-based and evidence-informed science is available to health professionals providing care to women during this period.

The Massachusetts PIOHQI project delivered oral health training to oral health professionals and medical professionals at three community health centers (CHCs). Each CHC participated in workflow-mapping sessions and received data-collection technical assistance and training to develop a referral process between oral health professionals and medical professionals. Project staff formulated a plan for collecting data to develop a sustainable and replicable referral system.

Because pregnant women may be receptive to changing health behaviors to ultimately assure the oral health of their infants, pregnancy is an opportune time for oral health promotion and interventions. To improve the oral health of women and children, oral health professionals and medical professionals should provide women considering pregnancy and pregnant women with timely and appropriate education and oral health care including preventive, diagnostic and restorative treatment.

Concluding Statement

The Association of State and Territorial Dental Directors fully supports and endorses a strategic framework for promoting best practices for state and community oral health programs to optimize the oral health of pregnant women, new mothers, and their infants. State and territorial oral health programs and their partners should address the following seven essential public health services for improving perinatal oral health: 1) monitor perinatal oral health status; 2) educate and engage women of reproductive age, prenatal health professionals and community providers; 3) promote partnerships; 4) develop policies and plans; 5) promote quality care; 6) ensure a competent and adequate workforce; and 7) support, conduct and promote research.

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Note: links in the following references were correct at the time of publication. If a link does not work, the website location or document name may have changed. Searching for the document by name may be an alternative way to find it.

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