Summary

Physical and nutritional changes that occur during pregnancy often lead to an increased risk of dental and gum problems from increased inflammatory response, loosened ligaments, and increased acidity in the mouth\(^1,2\).

In addition, several studies and national guidelines by professional organizations have found a link between gum infection and poor birth outcomes like pre-term deliveries, lower birth weight, and high blood pressure that can lead to complicated deliveries\(^2\).

However, dental care usage during pregnancy continues to remain low due to lack of insurance, gaps in knowledge about recommended oral health practices, and unfounded concerns over safety of dental procedures during pregnancy\(^1\). Low income women disproportionately experience symptoms of poor oral health during pregnancy due to their lack of access to dental care\(^1,3\).

Providing Medicaid coverage for perinatal dental care during pregnancy can help improve the oral health of mothers, lower the risk of complications related to dental infections, and delay the onset of cavities in children. Dental coverage during pregnancy also provides a teachable moment to adopt oral health best practices for both the mother and the preborn child that can have a long-lasting protective effect.

Overview

Between 2007 and 2009, 56% of pregnant women did not visit a dentist during pregnancy while only 35% of the overall U.S. women population did not have a visit in the prior year\(^1\). Several studies conducted between 2000-2006 report that dental care use during pregnancy ranged from 23%-50%, while the overall utilization rates by women in the U.S. in 2000 was around 67\(^%\)^4-10.

In recent years, perinatal dental usage is increasing among Americans with insurance while low income and minority women continue to experience access issues. Delta Dental, which serves 64 million Americans with dental insurance conducted a survey in 2016 which reported that 63% of pregnant women visited a dentist during pregnancy, a 7% increase from 2015\(^11,12\).

According to the American College of Obstetricians and Gynecologists (ACOG), access to dental care is correlated with income levels – and lower income women were less likely to receive dental care\(^1\). Additionally, African American and Hispanic women were also less likely than white non-Hispanic women to have their teeth cleaned during pregnancy\(^1\). American Indians aged 35-49 have twice the rate of untreated tooth decay compared to the U.S. general population\(^13\). Women living in rural areas are also at a higher risk for poor oral health due to shortage of dental health professionals\(^13\).

Several studies and national guidelines by professional organizations have reported an association between periodontitis and adverse pregnancy outcomes including pre-term deliveries, lower birth weight, and preeclampsia (high blood pressure leading to fatal complications).
Low dental care use among pregnant women may be attributable to several factors including lack of awareness, financial constraints, lack of insurance coverage, provider shortage, poor referral rates from obstetricians and safety concerns over dental procedures and medications during pregnancy\(^1\).

### Arizona Dental Coverage

In comparison to other states, Arizona ranks relatively low for dental use among women. Only 61% of women (95% CI: 59.3%-62.9%) visited the dentist or dental clinic for any reason in the past year in 2014\(^{14}\).

**Percentage of women who visited the dentist or dental clinic within the past year for any reason (2014)**

According to the American Dental Association’s Health Policy Institute, 1 in 4 low income adults say that their mouth and teeth are in poor condition in Arizona and 48% of low income adults avoid smiling due to the condition of their mouth and teeth\(^3\). A majority (66%) of Arizonans who did not visit the dentist in the past 12 months cite cost as the primary reason – this percentage increases to 78% for low income households (compared to 37% of high income households)\(^3\). The institute's index for the overall oral health status ranked Arizona as the state with the widest gap between high-income (7.1 index) and low-income adults (5.0 index) in 2015, with California having the narrowest gap\(^{15}\).

### Risks for Mother and Baby from Poor Oral Health

Pregnant women are susceptible to several dental infections including gingivitis (redness and swelling of gums), periodontitis (serious gum infection), pregnancy granuloma (tumor-like growths), loss of surface enamel (due to severe vomiting), and increased dental caries (resulting in tooth decay/cavities)\(^2,4\). According to ACOG, around 40% of pregnant women have some form of periodontal disease and it is most common among African Americans, cigarette smokers, and users of public assistance programs\(^1\).

Several studies and national guidelines by professional organizations have reported an association between gum infection and adverse pregnancy outcomes including pre-term deliveries, lower birth weight, and preeclampsia (high blood pressure leading to fatal complications)\(^2\). However, there is mixed evidence on whether treatment of periodontitis during pregnancy can minimize adverse outcomes.

Pregnant women and mothers with poor oral health are more likely to have high levels of oral bacteria which could be passed on to infants or toddlers at a very early age through practices such as spoon sharing and pacifiers\(^2\). Adequate dental health during pregnancy and post-delivery can help delay transmission from the mother to baby and the colonization of oral bacteria in children.
Various professional organizations have provided guidelines regarding dental health for pregnant women.

The American Dental Association recommends semi-annual dental examinations and cleanings as well as daily brushing and flossing¹.

The American Academy of Pediatric Dentistry (AAPD) recommends that every pregnant woman should have an oral evaluation, be counseled on proper oral hygiene, and be referred to preventive and therapeutic oral health care². The AAPD recommends that the safest time to perform dental treatment is the 2nd trimester or 14-20 weeks.

The American College of Obstetricians and Gynecologists (ACOG) recommend that practitioners conduct an oral health assessment during the first prenatal visit, reassure patients on the safety of dental procedures during pregnancy, inform parents about conditions that require immediate treatment, develop a working relationship with local dentist and actively advocate for broader oral health coverage³.

Arizona Dental Coverage

Currently, Arizona Health Care Cost Containment System (AHCCCS), the state’s Medicaid program does not provide dental coverage to adults with the exception of limited dental service under the Arizona Long Term Care System (ALTCS) for seniors and individuals living with disabilities¹⁶. While limited coverage was provided to all adults (including pregnant women) prior to 2010, these benefits were eliminated as part of the budgetary cuts during the recession.

As part of their FY 2018 budget request to the Governor, AHCCCS requested reinstatement of emergency dental services for all adult Medicaid members at an estimated cost of $1.90 per member per month¹⁶. If approved, this change would benefit pregnant women seeking emergency dental benefits through AHCCCS, although preventive services such as routine examinations, cleanings, periodontal treatment and restorative work (fillings) would remain uncovered.

Outside of AHCCCS, various grants and state-funded programs help promote perinatal oral health, although little data is available on the sustainability and reach of these programs.

- The Arizona Department of Health Services (ADHS) Office of Oral Health included oral health training for home visitors in fall 2015 as part of its ongoing home visiting program to provide counselling for families on the importance of oral health during pregnancy and early childhood¹⁷. The home visiting program conducted over 30,167 home visits to 4,394 parents in fiscal year 2015¹⁸.

- A 2009-2012 ADHS grant extension allowed tele-dentistry to be piloted and implemented in the obstetric group practices of several counties including Apache, Navajo, Coconino and Yavapai counties¹⁷.

- First Things First (Arizona Early Childhood Development & Health Board) helps provide oral screenings for pregnant women in partnership with local agencies such as the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) clinics¹⁷. During the fiscal year 2015, FTF provided 1,504 screenings on expectant mothers, of which 1,403 resulted in a referral to a dental provider.

Reinstating AHCCCS budget for dental services during pregnancy can help improve access to routine dental care such as comprehensive dental examinations and oral health counseling. It can also help improve treatment rates for infections such as periodontitis and reduce the need for emergency services.
What’s next?

Several initiatives can be undertaken to ensure oral health during pregnancy and early childhood of the baby.

Reinstating AHCCCS budget for dental services during pregnancy can help improve access to routine dental care such as comprehensive dental examinations, cleanings, periodontal treatment and restorative work. It can also help improve treatment rates for infections such as periodontitis and reduce the need for emergency services.

Based on recommendations from ACOG and AAPD, pregnancy can be used as a teachable moment to reduce the incidence of early childhood dental caries1,2. Cavities (dental caries) are the most common chronic disease affecting children, and early childhood dental caries in infants, toddlers and preschool children can result in serious health issues19. Providing counseling on caries-preventing regimen and preventive practices for to-be parents can help delay the colonization of caries-causing bacteria in children20. Education should include benefits of semi-annual dental examination, establishing a dental home for infants by 12 months of age, twice-daily brushing, balanced nutrition, restricted nocturnal bottle and breastfeeding after eruption of the child’s first tooth, drinking from a cup after 1 year of age instead of a bottle, and minimizing saliva-sharing activities (e.g. shared bottles)21-23.

AAPD recommends that training and education be provided to all primary healthcare professionals who serve pregnant women to communicate the importance of oral health2. Training should also be provided to dentists on the safety of dental procedures during pregnancy. According to ACOG, many dentists were concerned about the safety of dental procedures during pregnancy even though obstetricians were comfortable with their patients undergoing dental procedures during pregnancy1.

However, 94% of obstetricians did not refer their patients to dentists despite acknowledging the need for oral healthcare during pregnancy1.

Customized training programs for various healthcare professionals who are likely to be in contact with pregnant women can help overcome these barriers. Primary care professionals, obstetricians, and community health workers can also serve as an important source of education and oral health screening in areas with dental professional shortages.

References


