

Making the Connection:

Pregnancy and Oral Health

Recent research indicates that efforts to support oral health can begin even before birth; just as a pregnant woman's overall health can affect the health of her pregnancy and baby, her oral health can play a role in the occurrence of early childhood caries in her children. The condition of a woman's mouth can also contribute to pregnancy-related problems and influence birth outcomes. These relationships are complex and multidirectional (CDHP and NIHCM Foundation 2010):

- *Women's oral health and pregnancy* – Poor oral health in adults has been associated with cardiovascular disease, diabetes, and respiratory diseases. Each of these may in turn have an effect on women's health during pregnancy by increasing the risk of complications. In addition, about one-third of pregnant women experience pregnancy gingivitis, a mild inflammation of the gums. Tooth erosion from pregnancy-related nausea and vomiting may also occur.
- *Mothers' oral health and infants' health* – An association has been found between periodontal disease in pregnant women and adverse birth outcomes, including low birth weight, preterm birth, preeclampsia, and gestational diabetes. In fact, 18 percent of low-birth weight and preterm births may be attributable to periodontal disease.
- *Mothers' oral health and children's oral health* – The majority of children acquire dental caries (the most chronic childhood disease in the United States) through mother-to-child transmission of bacteria via saliva. Children of mothers with high levels of oral bacteria and poor oral health are more likely to develop dental caries at an early age than children

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of mothers with lower levels of oral bacteria and better oral health. Childhood dental caries and other dental diseases can lead to developmental disturbances, pain, problems eating and speaking, low self-esteem, school absenteeism, expensive dental treatment, and poor oral health during adulthood.

These connections illustrate the importance of oral health

for women, yet many women do not obtain dental care on a regular basis and most do not receive dental care at all during pregnancy. Reasons include a lack of insurance coverage, difficulty finding a provider willing to accept public insurance, and the misconception that dental treatments during pregnancy are unsafe (CDHP and NIHCM Foundation 2010). Although little research has been done in this area, one study found women who do not receive care are more likely to be of lower socioeconomic status, non-English speakers, people of color, and less likely to have a usual source of care or private insurance coverage (CDA Foundation 2010a).

THE TIME IS RIGHT

The months of pregnancy create a unique opportunity to connect with women; as they focus on their health and its related impact on their future child, they may be more receptive to oral health care and education. In addition to improving the health of mother and child, better care can save money by reducing costs associated with poor birth outcomes and early childhood caries.

However, despite the growing evidence base, oral health is not routinely included in prenatal health care (CDA Foundation 2010b). In response, some foundations are seeking to fill this gap.

SUPPORTING GUIDELINES

In the past few years, many professional organizations have released guidelines to support oral health care during pregnancy. One example is the California Dental Association Foundation (CDA Foundation), which, in collaboration

with the American College of Obstetricians and Gynecologists, District IX, convened a panel of oral health professionals to review current research. Based on this work, and with support from

foundations, including the California HealthCare Foundation, Sierra Health Foundation, and Anthem Blue Cross and Blue Shield Foundation, the panel released *Oral Health During Pregnancy and Early Childhood: Evidence-Based Guidelines for Health Professionals* (2010). The following consensus statement is included in the guidelines:

Prevention, diagnosis, and treatment of oral diseases,

including needed dental radiographs and use of local anesthesia, are highly beneficial and can be undertaken during pregnancy with no additional fetal or maternal risk when compared to the risk of not providing care. Good oral health and control of oral disease protect a woman's health and quality of life and have the potential to reduce the transmission of pathogenic bacteria from mothers to their children.

TRAINING PROVIDERS

Last year, the Washington Dental Service Foundation launched a five-year, projected \$1.4 million prenatal initiative to improve pregnant women's oral health so that they will be in the best position to prevent cavities during their baby's early years. Long-term strategies include:

- engaging dentists in routinely delivering care to pregnant women,
- motivating pregnant women to demand services, and
- engaging prenatal medical care providers in addressing oral health (Riter 2011).

As a step toward the first strategy, the foundation conducted focus groups with private and community health center dentists. Findings included concerns among dentists about liability, a desire for more training in this area, and the sense that patients do not want treatment because it could cause harm.

The foundation took these results into consideration as it developed a curriculum in partnership with the University of Washington School of Dentistry. The new curriculum is targeted to practicing dental providers and focuses on pregnancy and its oral health implications. The curriculum includes evidence-based clinical guidelines for delivering care (based on the previously mentioned CDA Foundation guidelines) and oral health tips for pregnant patients. The curriculum was recently pilot tested at an oral health symposium for dentists and physicians.

Next steps include broader rollout of the curriculum and encouraging pregnant women to seek dental care and prenatal care providers to address oral health (Riter 2011).

LINKING WOMEN WITH CARE

In late 2010, the Connecticut Health Foundation announced a new strategy to "improve the oral health of children from low-income families by supporting the incorporation of oral health at every point where children and their families intersect with health care, human service, and education systems" (Connecticut Health Foundation 2010a). As a first step, the foundation is targeting pregnant women and children aged zero to five years from low-income families to decrease oral disease among future generations of children.

In 2010, two related requests for proposals (RFPs) were issued. The first offered funds and technical assistance to promote oral health among low-income pregnant women and women contemplating pregnancy by developing integrated systems of care that address pregnant women's oral health. The systems will be put into practice to help pregnant women recognize the importance of oral health, adopt healthy oral health behaviors, and connect with a dental home (Connecticut Health Foundation 2010a). The second RFP offered funds to research factors affecting oral health care use among low-income pregnant women and to identify the most promising strategies and programs that could be used to promote oral health for this population (Connecticut Health Foundation 2010b).

CONCLUSION

As the previous examples illustrate, this work is just beginning, but these investments have the potential for long-term impact. As the connections between women's oral health, pregnancy, and infant and child health become more widely understood, additional foundation involvement can further promote women's access to, and utilization of, oral health care – before, during, and after pregnancy.

SOURCES

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