



Published in final edited form as:

J Am Dent Assoc. 2019 July ; 150(7): 565–566. doi:10.1016/j.adaj.2019.04.002.

Intergenerational Task: Helping Expectant Mothers Obtain Better Oral Health during Pregnancy

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Oral health care during pregnancy provides benefits to mothers and their young children^{1, 2}. First and foremost, pregnancy increases the risk of oral diseases in the mother (periodontal disease and dental caries) due to physiological, hormonal and dietary changes associated with pregnancy³. This often leads to mothers needing routine/urgent oral health services even more than when they are not pregnant. Second, poor maternal oral health is associated with increased risk for dental caries in children⁴. Given the profound influence of maternal oral health and behaviors on children's oral health, pregnancy presents as an important opportunity for educating future mothers about children's oral health. Nevertheless, the reality is, even though routine oral health care during pregnancy has been demonstrated to be safe^{5, 6}, and recommended by professionally established guidelines, 43% of US women have not had a dental checkup while 76% have admitted to suffering from oral health problems (orofacial pain, bleeding gums and oral infections) during pregnancy⁷. Furthermore, prenatal dental care utilization is even lower among African American women⁸, ethnic minorities⁹ and women with socioeconomic disadvantages¹⁰. Thus, oral health represents an important often-neglected health concern during pregnancy.

Various factors contribute to inadequate prenatal oral health care utilization. As dental professionals, we often first ascribe the unawareness of prenatal oral health importance on the community¹¹, and subsequently on inadequate collaboration between medical and dental providers. However, we postulate, based on our experience, that too few dentists in the community feel comfortable providing prenatal dental care. Related to this, while our team has been striving to work with medical providers, community partners and patient advocates to brainstorm strategies to improve prenatal oral health utilization, the conversations often get stuck on the anecdotal observation that a significant number of pregnant women have been denied dental care due to their pregnancy. This has been previously reported in the professional literature and in the *New York Times*^{12, 13}. An illustrative example concerns a desperate mother who participated in our recent qualitative study examining barriers to prenatal dental care utilization who described that “the worst of being pregnant is when you have toothache during the pregnancy, they (referring to dentists) will not do anything about it”. After denial of dental care by the first dentist, due to her pregnancy, this mother did not disclose her 13-week pregnancy to the second dentist in order to have one severely decayed tooth extracted.

So, are dentists fearful of treating pregnant woman? To gather information on the practices and attitudes toward prenatal oral care among dental practitioners, a quick poll entitled

“Pregnancy and Dentistry” was conducted among the practitioners who participate in the National Dental Practice Based Research Network (National Dental PBRN) in the fall of 2018. Quick polls, through electronic means, are routinely used in the National Dental PBRN. They are not scientific studies but provide rapid access to our member’s views on selected topics. The results of this quick poll, which had 526 respondents, highlights an unawareness of prenatal oral health care guidelines^{5, 6} and a reluctance to provide dental treatment to expectant mothers among dental practitioners. Overall, 72% of responding practitioners encountered pregnant women with dental emergencies (not including dental trauma) and approximately 10% of them reported that more than a quarter of their pregnant patients presented with dental emergencies. When asked about the types of prenatal oral care they provided, even though 74% of providers reported they would conduct a comprehensive oral health examination during pregnancy, fewer than half stated they would routinely provide emergency treatment to pregnant patients, including extractions, pulpotomy and other invasive procedures. Some practitioners indicated they required medical clearance from the patient’s medical care provider. Regarding radiographs, 18% of providers would not take radiographs for their pregnant patients at any time during the pregnancy, while 55%, 27% and 29% of providers would not take radiographs during the 1st, 2nd and 3rd trimesters, respectively. In a nutshell, this quick poll suggests a gap exists between pregnant patients’ prenatal oral health care needs and needed prenatal dental services provided by dental practitioners. Clearly, a detailed scientific study of the quick poll results is warranted, as practitioner respondents to the poll might not be representative of National Dental PBRN practitioners as a whole. However, these informal data suggest that the topic deserves more attention and that innovative strategies to include continuing education are needed to address health care provider practice in the provision of prenatal oral health.

Our view is that helping women to gain and maintain better oral health during pregnancy is an intergenerational task in the sense that if we can improve their oral health and oral health care then this will be important for their children. First, we are advocating for a culture change in prenatal oral health care practice among the dental and medical community that truly involves collaboration between dental and medical providers. Second, we also hope to see a culture change in weighing the importance of oral health in the community, where all mothers could transfer their improved prenatal oral health and improved oral health knowledge to their children, help their children to achieve better oral health care practices and ultimately reduce children’s oral diseases. Third, we are planning future studies to a) clarify the magnitude of medical/dental benefits from receiving prenatal oral health care which will help medical/dental providers to value more the importance of prenatal dental care; and b) to develop and test innovative continuing education modalities for medical/dental providers in the community. Lastly, we hope the collaborative work initiated from dental, medical and community partners will impact the development of health policies that prioritize prenatal oral health in the health care system, and together we can achieve our ultimate goal suggested by our slogan, “Healthy Smiles: Mom and Me”.

Acknowledgement:

The quick poll data on the dental practice and pregnancy was conducted with the support from the US National Dental PRBN and participation from 526 network practitioners. An Internet site devoted to details about the nation's network is located at <http://www.nationaldentalpbrn.org>.

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