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Commentary

Improving Oral Health During Pregnancy: A Call to Action

Judith Haber[1], PhD, APRN, Maria C. Dolce[2], PhD, RN, Erin Hartnett[1], DNP, PPCNP-BC, CPNP, Susan Altman[1], CNM, DNP, Hugh Silk[3], MD, MPH

INTRODUCTION

Improving the health and wellness of all children begins with comprehensive prenatal care and optimal oral health during pregnancy.[1] Associations between oral health, pregnancy outcomes, and children's oral health are compelling. Evidence supports the standpoint that the parent's oral health status is a predictor of their child's oral health.[2] Furthermore, poor oral health in childhood can lead to poor educational and social outcomes for the child, as well as long-term overall health effects into adulthood.[3] Poor oral health during pregnancy is also associated with more immediate negative birth outcomes including low birth weight and prematurity.[3] Equally important, people deserve to have their oral health preserved, as poor oral health can lead to pain, loss of employment, poor quality of life, and worsening of chronic health conditions such as diabetes and heart disease. Common oral health conditions affected by hormonal changes especially during pregnancy include gingivitis, oral lesions, loose teeth, tooth erosion, periodontitis, and dental caries.[3] With these important health issues at stake for parent and child, increased attention to oral health is warranted throughout the life span and particularly during the prenatal period.[4]

The purpose of this commentary is to inform clinicians, educators, and policy makers about the imperative for expanded dental benefit coverage during pregnancy and about the role midwives can play to improve oral health care access for pregnant individuals, particularly for people of color and those who are poor and/or underserved.

PROBLEM STATEMENT

In 2000, the Surgeon General's report, *Oral Health in America*, highlighted the relationship of oral health to pregnancy outcomes and recommended the provision of dental health benefits for all Americans.[1] Two decades later, pregnant individuals continue to face barriers that prevent access to oral health care despite evidence supporting the importance of optimal oral health during pregnancy.[3] For example, according to data from 2017, only 46% of women in the United States report having an oral health prophylaxis (tooth cleaning) during pregnancy; these numbers are even lower for women of color.[3] A major barrier is the cost and affordability of dental care.[5] Moreover, Medicaid oral health coverage during pregnancy is significantly lacking in many states (Tables 1,2).[5] States are required to provide dental benefits to children covered by Medicaid and the Children's Health Insurance Program (CHIP). However, states can decide whether or not to provide dental benefits for adults, and there are no minimum requirements for adult dental coverage.

BACKGROUND

The importance of oral health during pregnancy has gained increased global attention and recognition during the past decade on the part of educators, clinicians, policy makers, and national organizations that address whole-person care needs.[2,6–8] Oral health and its links to overall health are regarded as key factors that contribute to the health of pregnant parents, their infants, and young children.[9,10] In 2012, a landmark report, *Oral Health During Pregnancy: A National Consensus Statement*, identified the importance of integrating oral health into prenatal care including oral health literacy coaching.[2] In 2020, the Oral Health Section of the American Public Health Association (APHA), approved a new oral health policy statement, *Improving Access to Dental Care for Pregnant Women Through Education, Integration of Health Services, Insurance Coverage, and Appropriate Dental Workforce, and Research*.[3] The APHA report validates the importance of this longstanding public health issue and encourages key stakeholders to advocate for improved access to dental care during pregnancy to improve racial and health equity through legislation, interprofessional education, and integrated community-based practice models.[3]

Even though research findings validate the importance of access to dental care to protect the pregnant parent and their child, data suggest that disparities in access exist. Socioeconomic status plays a key role in a child's oral health.[1] Data from the 2011-to-2016 National Health and Nutrition Examination Survey revealed that 17% of poor children aged 2 to 5 years had untreated dental caries.[11] The prevalence of untreated tooth decay was about 1 to 2 times higher among Mexican American, non-Hispanic Black, and poor children than their non-Hispanic white and more well-off counterparts. The incidence of early childhood caries (cavities) in young children aged 1 to 3 years increases when the parent has untreated tooth decay.

Pregnant adults with dental health benefits are twice as likely to visit the dentist compared with uninsured adults.[3] Dental care is not deemed an adult essential health service offered by the Patient Protection and Affordable Care Act. Table 2 presents the latest data from the 2019 national survey

[1]Rory Meyers College of Nursing, New York University, New York, New York
[2]College of Nursing and Health Sciences, University of Massachusetts Dartmouth, North Dartmouth, Massachusetts
[3]Department of Family Medicine and Community Health, University of Massachusetts Medical School, Worcester, Massachusetts

Correspondence Judith Haber, PhD, APRN. Email: jh33@nyu.edu

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Table 1. State Medicaid Expansion[18]

States with ACA Medicaid Expansion	States Without ACA Medicaid Expansion
38 states and District of Columbia: AK, AZ, AR, CA, CO, CT, DC, DE, HI, ID, IL, IN, IA, KY, LA, ME, MD, MA, MI, MN, MO, MT, NE, NV, NH, NJ, NM, NY, ND, OH, OK, OR, PA, RI, UT, VT, VA, WA, WV	12 states: AL, FL, GA, KS, MS, NC, SC, SD, TN, TX, WI, WY

Abbreviation: ACA, Patient Protection and Affordable Care Act.

Table 2. Medicaid State Dental Benefits[17]

Benefit Level	Adult Benefit	Pediatric Benefit	Additional Pregnancy Benefit
None	3 states: AL, TN, TX,	0	0 states
Emergency only[a]	7 states: GA, HI, LA, NH, OK, UT, WV	0	2 states: GA, UT
Limited[b]	21 states: AR, AZ, FL, ID, IL, IN, KS,[c] KY, ME, MD,[c] MI, MO, MS, NC, NM, NV, VA, VT,[c] SC, WA, WY	0	5 states: IL, MD, MO, NV, VA
Extensive[d]	19 states and District of Columbia: AK, CA, CO, CT, DE,[c] DC, IA,[c] MA, MN, MT, NE, NJ, NY, ND, OH, OR, PA, RI, SD, WI	50 states and District of Columbia: AL, AR, AZ, AK, CA, CO, CT, DC, DE, FL, GA, HI, ID, IN, IL, IA,[c] KY, LA, ME, MI, MO, MS, MD, MA, MN, MT, NC, NM, NV, NH, NE, NJ, NY, ND, OH, OR, PA, RI, SC, SD, OK, KS, TN, TX, UT, VA, VT,[c] WV, WA, WY, WI	2 states: MN, OH

[a] Emergency only: Relief of pain under defined emergency situations.
[b] Limited: Fewer than 18 diagnostic, preventive, and minor restorative procedures listed on https://www.msdanationalprofile.com/, or per-person annual expenditure cap is $1000 or less as listed on state sites.
[c] As of May 2021, information updated from other sites after publication of the 2019 survey by the Medicaid/Medicare/CHIP Services Dental Association.
[d] Extensive: A comprehensive mix of services including more than 18 diagnostic, preventive, and minor and major restorative procedures listed on https://www.msdanationalprofile.com/.

by the Medicaid/Medicare/CHIP Services Dental Association of current dental programs, policies, practices, and benefits in all 50 states and the District of Columbia.[12] Currently, all but 3 states have adult dental benefits, which vary by state, and 8 states offer additional dental benefits during pregnancy. Furthermore, the duration of Medicaid dental coverage for postpartum individuals varies greatly from discontinuation at birth to continuation to 30 to 60 days postpartum or up to one year postpartum.[12] In contrast, all 50 states and the District of Columbia provide extensive Medicaid dental benefits for children.[12]

Another barrier to optimal oral health during pregnancy has been the reluctance of dentists to treat pregnant patients. Dentists prefer to postpone treatment of pregnant individuals because of fear of anesthetics, radiographs, antibiotics, and analgesics causing harm to the fetus, all unfounded concerns.[13] In one study, over one-third of dental school deans were unaware of national prenatal oral health guidelines.[14] To address the lack of evidence-based information and concerns, the *National Consensus Statement* provided guidance to dispel fears and myths by providing clear guidance for dental care providers, obstetricians, and midwives to meet the oral health needs of pregnant individuals.[2]

In 2013, the American College of Obstetricians and Gynecologists developed a committee opinion, reaffirmed in 2017, stating that dental care during pregnancy is not only safe but recommended.[9] In 2014, the Health Resources and Services Administration of the US Department of Health and Human Services delineated a set of core clinical oral health competencies for primary care providers, including midwives.[8] In 2019, the Center for Integration of Primary Care and Oral Health group also developed a set of Entrustable Professional Activities in oral health for primary care providers based on a scoping review that included obstetric and nurse practitioner literature.[15] In 2020, the American College of Nurse-Midwives asserted that a core competency component of midwifery

practice includes using advanced health assessment skills to identify abnormal findings in the oral cavity and performing an oral health history.[6]

The World Health Assembly designated 2020 and 2021 as the Year of the Nurse and the Midwife; the majority of midwives in the United States are nurses. Over 13,000 certified nurse-midwives/certified midwives (CNMs/CMs) practice across all 50 states; of these, over 42% provide primary care and attend almost 10% of overall births (K. Jefferson, CM, American College of Nurse-Midwives, personal communication, June 9, 2021).[16,17] Midwives provide pregnancy and primary care for a racially and ethnically diverse population, thereby promoting health and health care equity. Communities of color, especially those most affected by the social determinants of health, bear a disproportionate burden of oral disease across the life span, especially evident for pregnant individuals and children.[18,19]

The potential impact of midwifery on improving the oral health and overall health of parents and young children in our nation is significant. Midwives are well-positioned to play a pivotal clinical practice advocacy role in improving oral health and overall health, particularly for low-income and underserved families. However, there are still important issues to address in this realm.

In 2019 a cross-sectional survey of CNM/CM midwifery programs was conducted to assess oral health curriculum integration in those programs.[18] A total of 33 midwifery program directors (N = 39, 85%) representing all US regions responded to the survey; 100% of respondents indicated that programs were integrating oral health education into their midwifery curricula including providing oral health assessments, integrating oral health in histories, and making dental care referrals during pregnancy.[18] Significant factors influencing the integration of oral health content included instruction by a dental professional and a formal relationship with a dental school, dental residency, or dental hygiene program. The majority of programs (74%) were aware of *Smiles for Life: A National Oral Health Curriculum*, an education resource developed by the Oral Health Group of the Society of Teachers of Family Medicine (http://www.smilesforlifeoralhealth.org). With adequate oral health education, midwives are ideally positioned to integrate oral health into their perinatal care, thereby expanding access for pregnant and postpartum individuals, especially among vulnerable and underserved populations. Parents are recognized as the gatekeepers of health for families; midwives are prepared to engage parents across the life span from adolescence to advanced age to improve their health and the health of their families. For this to truly be comprehensive care, these efforts must include oral health screening and risk assessments, anticipatory guidance, triage and management of oral health problems within scope of practice, and referrals to dental colleagues.

Midwifery programs are already doing an impressive job teaching their students about oral health. The proposed recommendations would provide these health professionals with the tools they need to assist individuals during prenatal and postpartum care to achieve their full potential for health and wellness. In the short term, there is a need to strengthen the building blocks for vital oral health education, prevention, and referrals for all individuals and especially for those most vulnerable. Concomitantly, the dental workforce must have the requisite knowledge, skills, and attitudes to address the specific oral health needs of pregnant individuals and their newborns.

The coronavirus disease 2019 (COVID-19) pandemic has revealed the untapped opportunity in telehealth to increase access to health and oral health care during pregnancy and across the life span. Dental professionals and midwives can leverage technologies to provide virtual access to oral health care, preventive services, education, and counseling during pregnancy in rural or urban care settings. Telehealth technologies and strategies can be used to support a team-based approach to prenatal care and facilitate an effective referral system.

Integrating oral health, as an integral component of overall health before, during, and following pregnancy, is a strategic population health best practice that has the potential to improve oral health access for all parents and children across the life span.

RECOMMENDATIONS

The uncovering of racial and health disparities during the COVID-19 pandemic has accelerated national momentum to address targeted population health inequities related to maternal-perinatal and child health. Currently the midwifery workforce reflects a dearth of racial and ethnic diversity. Approximately, 85% of midwives are white, which is not representative of individuals who receive pregnancy, gynecologic, and primary care from midwives.[16] The midwifery education pipeline needs to create more robust innovations to recruit and retain a more diverse workforce. Our proposed recommendations are the following:

1. Advocate on behalf of the national agenda to advance important legislative and policy initiatives to improve oral health access for perinatal individuals and that address racial and health equity for low-income pregnant and postpartum persons and their children.
2. Support increases in Title VIII funding to maintain and expand education opportunities for supporting a more diverse midwifery workforce with competency in promoting the oral health of parents and children.
3. Support the use of Title VII funds for midwifery and interprofessional demonstration projects that enhance oral health education to address clinical care of pregnant individuals and infants in underserved communities.
4. Promote the use of telemedicine and teledentistry under state Medicaid programs to increase access to oral health during and after pregnancy care.
5. Expand and monitor oral health education in 100% of midwifery programs in a comprehensive manner to include screening, advising, triaging, early management, referrals and documentation of oral health promotion, and disease prevention and management.
6. Provide opportunities for continuing education in oral health to practicing midwives through midwifery and state organizations.

CONCLUSION

Midwives are called on to advocate for increased oral health care access during pregnancy and across the life span, advocate for better dental coverage, improve the future health of children, and close the oral health equity gap for Indigenous families, families of color, and individuals who are disadvantaged. We call on Congress to make oral health care a mandatory component of pregnancy-related health benefits in Medicaid.

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CONFLICT OF INTEREST

The authors have no conflicts of interest to disclose.

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