

Strengthen the Evidence Base for Maternal and Child Health Programs

NPM 13A: Oral Health in Pregnancy

Oral Health is one of fifteen MCH National Performance Measures (NPMs) for the State Title V Block Grant program. The goal is to increase the percentage of women with a dental visit during pregnancy. Oral health during pregnancy is an essential public health issue, as physiological changes during pregnancy and poor oral health practices can adversely affect health outcomes for mothers and their children. Dental visits can address oral health needs and promote optimal oral hygiene.^{1,2} This brief summarizes the literature on evidence-based and evidence-informed strategies to promote the receipt of dental visits by pregnant women.

This review was conducted as part of Strengthen the Evidence Base for Maternal and Child Health Programs, a Health Resources and Services Administration-funded initiative that aims to support states in their development and implementation of strategies to promote the health and well-being of MCH populations in the United States. The full review may be found at <http://semch.org/evidence-reviews.html>.

BACKGROUND

In 2012, the American College of Obstetricians and Gynecologists (ACOG) and the American Dental Association (ADA) and other organizations issued a national consensus statement on oral health during pregnancy.³ The statement included guidance for oral health professionals and information to share with pregnant women. In 2013, ACOG emphasized that dental care during pregnancy is safe and that poor oral health has been linked to adverse birth outcomes.⁴ ACOG's recommendations for providers included counseling pregnant women about good oral health practices, conducting an oral health evaluation in the initial prenatal appointment, and developing a network of local dentists for referrals.

The Patient Protection and Affordable Care Act and *Healthy People 2020* have increased awareness of the importance of oral health during pregnancy and the importance of public insurance in promoting access to services.⁵

Based on the Pregnancy Risk Assessment Monitoring System data from 28 states in 2013, 59% of women had their teeth cleaned during the prior 12 months; 51% of women had their teeth cleaned during pregnancy; and 74% had dental insurance during pregnancy.⁶ The percentage of women with dental visits during the most recent pregnancy has increased over time, rising from 38% in 2000 to 49% in 2011.⁷

METHODS & RESULTS

Peer-reviewed studies were identified by searching three online databases. Three studies which evaluated the effectiveness of interventions aimed at increasing the percentage of pregnant women with a dental visit were included. In addition, five gray literature sources were included: 1) *Oral Health Care During Pregnancy and Through the Lifespan* published by ACOG with representation from the ADA, HRSA, and the National Maternal and Child Oral Health Resource Center⁴; 2) *Guideline on Perinatal and Infant Oral Health Care* published by the American Academy of Pediatric Dentistry⁸; 3) *Access to Oral Health Care During the Perinatal Period* published by the National Maternal and Child Oral Health Resource Center⁹; 4) *Improving the Oral Health of Pregnant Women and Young Children: Opportunities for Policymakers* published by the National Maternal and Child Oral Health Policy Center¹⁰; and 5) *Improving Access to Perinatal Oral Health Care: Strategies & Considerations for Health Plans* published by the National Institute for Health Care Management and the Children’s Dental Health Project.¹¹

Studies were categorized into two groups by target audience: “Patients” and “States.” Examples of each type of intervention are shown below. Given the limited number of studies meeting the inclusion criteria, the level of evidence was not rated.

Intervention Category	Example	Evidence Rating
Patients	Oral health education or counseling	--
States	Medicaid managed care expansion	--

— indicates insufficient number of studies to assign evidence rating

KEY FINDINGS

- There is limited rigorous evidence about effective interventions to increase dental visits during pregnancy.
- Two studies evaluating education or counseling interventions targeting pregnant women lack sufficient evidence to assess effectiveness in increasing the receipt of dental visits.
- Due to identifying only one study related to state policy regarding the receipt of dental visits by pregnant women, conclusions cannot be drawn regarding the effectiveness of Medicaid interventions.

IMPLICATIONS

- Rigorous evaluations of the effectiveness of interventions to increase the receipt of dental visits during pregnancy are needed.
- Although experts have recommended interventions targeting patients, providers, and communities or states, systematic research is needed to assess both implementation and outcomes.

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References

1. Steinberg BJ, Hilton IV, Iida H, Samelson R. Oral health and dental care during pregnancy. *Dent Clin North Am.* 2013;57(2):195-210.
2. Mills LW, Moses DT. Oral health during pregnancy. *MCN Am J Matern Child Nurs.* 2002;27(5):275-281.
3. Oral Health Care During Pregnancy Expert Workgroup. Oral health Care During Pregnancy: A National Consensus Statement - Summary of an Expert Workgroup Meeting. Washington, DC: National Maternal and Child Oral Health Resources Center. 2012.
4. Oral Health Care During Pregnancy and Through the Lifespan. American College of Obstetricians and Gynecologists Committee Opinion No. 569. *Obstet Gynecol.* 2013;122:417-22.
5. Mandal M, Edelstein BL, Ma S, Minkovitz CS. Changes in state policies related to oral health in the United States, 2002-2009. *J Public Health Dent.* 2015;74(4):266-275.
6. Prevalence of selected maternal and child health indicators, 2012 and 2013. Atlanta, GA: Centers for Disease Control and Prevention website. https://www.cdc.gov/prams/pramstat/pdfs/home/prams-all-sites_508tag.pdf. Accessed 18, 2017.
7. Explore PRAMS data by topic. Centers for Disease Control and Prevention website. <https://www.cdc.gov/>. Accessed April 18, 2017.
8. Council on Clinical Affairs. Guideline on Perinatal and Infant Oral Health Care. Clinical Practice Guidelines Reference Manual. Vol. 38(6). Chicago, IL: American Academy of Pediatric Dentistry. 2016.
9. Brown A. Access to Oral Health Care During the Perinatal Period: A Policy Brief. Washington, DC: National Maternal and Child Oral Health Resource Center, Georgetown University. 2008.
10. Improving the Oral Health of Pregnant Women and Young Children: Opportunities for Policymakers. Washington, DC: National Maternal and Child Oral Health Policy Center, Georgetown University. 2012.
11. Buerlien J, Peabody H, Santoro K. Improving Access to Perinatal Oral Health Care: Strategies & Considerations for Health Plans. Washington, DC: The National Institute for Health Care Management Research and Educational Foundation. 2010.



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