



# Educating Residents About Prenatal Oral Health: 2012 versus 2017

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## Background:

- Poor oral health, particularly periodontal disease, is a risk factor for adverse pregnancy outcomes such as preterm birth and low birth weight.
- Most infants and young children acquire caries-causing bacteria from their mother through saliva (vertical transmission).
- Prenatal oral health is under-addressed in clinical practice; only 50% of women who report an oral health problem in pregnancy receive care.
- While obstetricians report oral health is important in pregnancy, many are uncomfortable referring or treating during pregnancy.
- In 2012 ACOG and the ADA served on the workgroup that produced the Oral Health Care During Pregnancy: A National Consensus Statement and ACOG and in 2013 ACOG published the Committee Opinion: Oral Health Care During Pregnancy and Through the Lifespan.

## Objective:

- To assess the status of oral health residency training in 2012 and in 2017 before and after the National Consensus Statement/Committee Opinion.

## Methods:

- 2012: Online and hard copy surveys were sent to 240 OB/Gyn residency program directors.
- 2017: Online surveys were sent to 256 OB/Gyn program directors.
- Surveys included questions on program characteristics, details of oral health curriculum (e.g., hours and topics covered), awareness and use of resources, barriers to training, and potential areas to focus future efforts to increase prenatal oral health care delivery to patients.

**Table 1. National Survey Findings 2012 vs. 2017**

	2012 N (%)	2017 N (%)	Test of Proportions Z score (p value)
<b># OH education hours</b>			
0 Hours	41 (58)	28 (72)	-1.458 (0.144)
1-2 hours	24 (34)	9 (23)	1.174 (0.242)
3-4 hours	6 (9)	1 (3)	1.210 (0.226)
5 or more hours	0 (0)	1 (3)	-1.355 (0.174)
<b>It is important for OBGYN residents to address basic OH care issues</b>			
Strongly Disagree/Disagree/Neutral	17 (25)	13 (37)	-1.330 (0.184)
Strongly Agree/Agree	52 (75)	22 (63)	1.330 (0.184)
<b>I am satisfied with the level of competence that my residents achieve in OH by graduation</b>			
Strongly Disagree/Disagree/Neutral	47 (68)	29 (80)	-1.277 (0.201)
Strongly Agree/Agree	22 (32)	7 (20)	1.277 (0.201)
<b>Perceived Barriers</b>			
Competing priorities/lack of time	58 (85)	25 (64)	<b>2.529 (0.011)</b>
Lack of faculty expertise	51 (74)	21 (54)	<b>2.125 (0.034)</b>
Lack of faculty interest	46 (67)	7 (18)	<b>4.865 (&lt;0.001)</b>
<b>Evaluation Methods</b>			
Do not assess	56 (79)	29 (74)	0.541 (0.589)
Direct observation in clinical setting	12 (17)	4 (10)	<b>2.041 (0.041)</b>
Written/computer testing	2 (3)	2 (5)	-0.445 (0.653)
Simulation experiences	1 (1)	1 (3)	-0.301 (0.764)

**Table 2. 2017 Survey Findings / Curriculum Topics**

Topics Covered in Descending Order of Frequency in the Curriculum	%
Pregnancy oral health issues	54.3
Medical conditions that impact overall health	40.0
Oral conditions that impact overall health	31.4
Adult oral lesions	29.4
Impact of medications on oral health	22.9
Urgent/emergent oral issues	22.9
Assessment of the impact of oral health on patient's quality of life	14.3
Oral disease prevention/Anticipatory guidance	14.3
Interprofessional Education with oral health component	14.3
Caries/cavity risks and causes	14.3
Disparities in oral health/social determinants of health	14.3
Oral cancer	8.6
Adult/adolescent oral screening exam	8.6
Fluoride risks, benefits, and promotion	2.9
Oral anatomy	0.0

## Results:

- 97 OB/Gyn programs (40%) responded in 2012 and 40 programs (16%) responded in 2017.
- Respondents in each year represented programs throughout the US.
- More than one-half of programs in both cohort years reported that they have 0 hours of oral health in their curriculum.
- The top 3 barriers preventing program directors from teaching more oral health topics, in both cohorts, included: lack of time/competing priorities, lack of faculty expertise, and lack of faculty interest. For all 3 barriers, they were reported significantly less often in 2017 compared to 2012.
- While the percent of program reporting that (1) they agreed that it is important for OB/Gyn residents to address basic oral health issues, and that (2) they were satisfied with the level of oral health competence OB/Gyn residents achieve by graduation decreased from 2012 to 2017, these were not statistically significant differences.

## Conclusions and Future Directions:

- Less than half of OB/Gyn residencies in our survey include prenatal oral health in their curriculum.
- Future efforts should focus on formal policy from the ACOG; distribution of evidence-based guidelines and existing curricula to educators; and creation of faculty oral health champions possibly coordinated in conjunction with CREOG.

## Acknowledgements:

- This project was supported by Health Resource and Services Administration (HRSA) of the US Department of Health and Human Services (HHS) under grant number UH1HP29962, titled Academic Units for Primary Care Training and Enhancement and the recently formed Center for Integration of Primary Care and Oral Health (CIPCOH), a joint endeavor of the Harvard Schools of Medicine and Dental Medicine and the University of Massachusetts Medical School's Department of Family Medicine and Community Health. The content and conclusions are those of the authors and should not be construed as the official policy or position of HRSA, HHS, or the US government, nor should any endorsement be inferred.
- The study was reviewed by the Institutional Review Board at the University of Massachusetts Medical School and determined to be exempt.