Oral Health and Pediatricians: Results of a National Survey

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Objective.—Pediatricians have regular opportunities to perform screening dental examinations on young children and to educate families on preventive oral health. We sought to assess pediatricians' current attitudes and practices related to oral health of children 0–3 years old.

Methods.—A Periodic Survey of Fellows, focused on oral health in pediatricians' office settings, was sent to 1618 postresidency fellows of the American Academy of Pediatrics.

Results.—The response rate was 68%. More than 90% of pediatricians said that they should examine their patients' teeth for caries and educate families about preventive oral health. However, in practice, only 54% of pediatricians reported examining the teeth of more than half of their 0–3-year-old patients. Four percent of pediatricians regularly apply fluoride varnish. The most common barrier to participation in oral health–related activities in their practices was lack of training, which was cited by 41%. Less than 25% of pediatricians had received oral health education in medical school, residency, or continuing education. Most pediatricians (74%) reported that availability of dentists who accept Medicaid posed a moderate to severe barrier for 0–3-year-old Medicaid-insured patients to obtain dental care.

Conclusions.—Pediatricians see it within their purview to educate families about preventive oral health and to assess for dental caries. However, many pediatricians reported barriers to fully implementing preventive oral health activities into their practices. Pediatricians and dentists need to work together to improve the quality of preventive oral health care available to all young children.

KEY WORDS: education; oral health; pediatrician; practice; medical practice

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Since publication of *Oral Health in America: A Report of the Surgeon General* in 2000,[1] there has been increasing emphasis on the integral nature of oral health to overall health. With that has come attention to medical providers' role in oral health. Pediatricians are well suited to incorporate oral health into their practice because they see young children regularly and often during the first 3 years of life. Oral health anticipatory guidance fits nicely with pediatricians' emphasis on prevention and early establishment of lifelong healthy habits. The pediatrician's role in oral health was formalized with the 2003 American Academy of Pediatrics (AAP) policy statement, *Oral Health Risk Assessment Timing and Establishment of the Dental Home*,[2] which recommended that pediatricians and other pediatric primary care providers incorporate preventive oral health education into their practices and that children undergo an oral health risk assessment by a pediatrician or pediatric primary care providers by 6 months of age. This role was further reinforced with the AAP Policy statement, *Preventive Oral Health Interventions for Pediatricians*, published in 2008.[3]

There are other reasons why pediatricians include oral health within their practice. As described in detail in this issue, children face obstacles to professional dental care, including a limited dental workforce to deliver preventive oral health services to young children, particularly those who are uninsured or publicly insured.[4,5] National data indicate that few general dentists treat children under 4 years of age.[6] This limitation in access to care is in part the result of inadequate dental school training in the care of infants and toddlers,[7] poor Medicaid reimbursement, and maldistribution of workforce, with the majority of dental practices located in metropolitan areas. Access to pediatric medical care is not as fraught with these same challenges; even children who cannot find a dentist almost always have access to pediatric well-child care.[8] Thus, pediatricians' involvement in oral health is also motivated by the possibility that young

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children may not have any other source of preventive dental attention.

We sought to better understand pediatricians' current attitudes and practices related to oral health of children 0–3 years old. With this in mind, the objectives of this study were to examine the extent of pediatricians' current oral health risk assessment and counseling, their perceived ability to perform these tasks, and their attitudes toward their role in oral health risk assessment and counseling. We also examined barriers to providing oral health care, including obstacles to young patients obtaining care from a dentist and the influence of receipt of oral health instruction.

METHODS

Data were collected via the AAP Periodic Survey of Fellows, which informs policy, developing initiatives, and modifying or evaluating existing projects.[9] In 2008, Periodic Survey #70 focused on oral health within pediatric practices. Survey items were developed by the AAP Division of Health Services Research in conjunction with experts from the AAP Partnership to Reduce Oral Health Disparities in Early Childhood Project Advisory Committee. The survey addressed pediatricians' practices and barriers to oral health assessment as well as counseling and referrals among patients from birth to 3 years of age.

The survey was an 8-page self-administered questionnaire sent to a random sample of 1618 nonretired, US posttraining members of the AAP. The original survey and 6 follow-up mailings to nonrespondents were sent from October 2007 to March 2008. A $2 bill was included in the first mailing. Subjects were asked how often and to what proportion of their patients they provided oral health screening. They were also asked to rate their ability to perform oral health screening and to counsel about preventive oral health. Finally, they were asked whether they believed physicians had a role in performing oral screening examinations and providing oral health anticipatory guidance. Barriers to their patients' receipt of dental care were assessed. Questions about pediatricians' practice characteristics included practice type and setting, and proportion of patients insured by Medicaid/State Children's Health Insurance Program (SCHIP) (≥37%, high, vs <37%, low).

Data were analyzed by SPSS statistical software, version 14.0 (SPSS, Chicago, Ill). The χ^2 analysis was used to examine the association of pediatricians' personal and practice characteristics with providing oral health risk assessment and counseling, as well as barriers to providing oral health assessment and counseling, and referral to a dentist.

RESULTS

Characteristics of Respondents

After 7 mailings, 1103 completed questionnaires were returned, a response rate of 68.2%. Analyses were limited to the 698 postresidency pediatricians (63% of all respondents) who provide health supervision. The average respondent was in his or her 40s and worked full-time in direct patient care (Table 1). Most practiced in suburban communities and in group practices.

Table 1. Characteristics of Posttraining Respondents Who Provide Health Supervision (N = 698)

Variable*	Response (%)
Mean age, y	46.6
Gender, % female	55.6
Practice location	
Rural	14.6
Suburban	48.3
Urban (not inner city)	21.7
Inner city	15.4
Practice setting	
Solo/2 physician	21.1
Group/HMO	58.2
Hospital/clinic	20.7
Estimated percentage of patients who are Medicaid/SCHIP insured	37.5
Average number of hours per week in direct patient care	38.5
Received formal education in oral health	
Any	35.8
During medical school	13.1
During residency	15.8
Post-residency	21.7

*HMO = health maintenance organization; SCHIP = State Children's Health Insurance Program.

Training in Oral Health Care

Approximately 36% of respondents reported previous oral health training: 13% had received at least some during medical school, 16% during residency and 22% after residency. The most common post-residency education took the form of journal articles (60%). About one-fourth of pediatricians said they were very interested in a continuing medical education course on pediatric oral health, while 41% were moderately interested, 29% were slightly interested, and 7% said they were not interested.

Perceptions of Oral Health Tasks in Primary Care

Most pediatricians (73%) reported that a quarter or less of their patients had experienced moderate to severe dental problems during the past year, while another 24% of pediatricians indicated that 25% to 50% of their patients had moderate to severe dental problems. About half of the pediatricians said that they examined the majority of their 0–3-year-old patients for dental caries, and a quarter assessed for plaque (Table 2). Nearly all pediatricians (91%) agreed that they should evaluate children for dental caries, and 65% agreed they should do so for visible plaque; however, only 41% and 23%, respectively, rated their ability to identify these conditions as very good or excellent. More than 80% of pediatricians were confident in their ability to deliver preventive oral health education about diet to parents, but only about half felt confident on instructing parents in toothbrushing. Only 4% of pediatricians indicated that they or their staff applied fluoride varnish to a majority of young patients; 19% said pediatricians should perform this task, but only 8% were confident in their ability to do so.