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This is to certify that the thesis prepared by Rhea DelCastillo Davis, B.S., D.D.S. entitled, Infant Oral Health Care: A Survey of General Dentists, Pediatric Dentists, and Pediatricians in Virginia, has been approved by her committee as satisfactory completion of the thesis requirement for the degree of Master of Science.

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## Infant Oral Health Care: A Survey of General Dentists, Pediatric Dentists, and Pediatricians in Virginia

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Science at Virginia Commonwealth University.

by

Rhea DelCastillo Davis, B.A. University of Virginia, May, 1997 D.D.S., Virginia Commonwealth University, May, 2002

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#### ABSTRACT

#### INFANT ORAL HEALTH CARE: A SURVEY OF GENERAL DENTISTS, PEDIATRIC DENTISTS, AND PEDIATRICIANS IN VIRGINIA

By Rhea DelCastillo Davis D.D.S.

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Science at Virginia Commonwealth University.

Virginia Commonwealth University, 2004

Thesis Director: Arthur P. Mourino, D.D.S., M.S.D. Department of Pediatric Dentistry

**Purpose:** The purpose of this study was to examine the knowledge, attitudes, and experiences related to infant oral health for both dental and medical providers.

**Methods:** A survey of infant oral health care was sent to 300 randomly selected general dentists, 300 randomly selected pediatricians, and all pediatric dentists in Virginia. The survey contained questions regarding the providers' routine infant oral health care regimen. In addition demographic data from the provider was collected. Responses to the questionnaire were tabulated and percent frequency distributions for responses to

each item computed. Percents for all items were based on the total number of respondents in each of the three practitioner groups.

**Results:** The response rate of the survey was 48%. While 100% of pediatricians treat the infant population, only 5% refer for the first dental visit by age one. In addition compared to dentists fewer pediatricians examine for dental decay or give oral hygiene instructions. Less than half of General dentists surveyed treat the infant population and only 12% refer for the first dental visit by age one. Compared to pediatricians and pediatric dentists general dentists were less likely to discuss the first dental visit or nutritional counseling. Amongst the three practitioner types, pediatric dentists provide the most thorough dental exam, however only 25% actually treat infants by one year of age. Access to dental care remains a significant factor in early childhood caries. Conclusion: Results from this research suggest that the majority of pediatricians and general dentists are not advising patients to see the dentist by one year of age. Concurrently the majority of dentists are not treating patients at one year of age, resulting in a critical problem with access to care. There is a need for increased infant oral health care education in the medical and dental communities to appropriately handle this infant population.

#### INTRODUCTION

Early childhood caries (ECC) has been reported by the Centers for Disease Control and Prevention to be the most prevalent infectious disease in our nation's children. Dental caries is 5 times more common than asthma and 7 times more common than hay fever in children (1). According to statistics by 5 years of age approximately 67% of children will have experienced dental decay (2). Decay of primary teeth can affect children's physical development, lead to malocclusion, and result in significant pain and potentially life threatening facial swellings. Unfortunately caries in children can progress very rapidly in only 6-12 months requiring intervention in a very short time span (3). The persistent problem of ECC has spurred the dental profession to adopt the concept of the dental home. The idea is to establish an early relationship between a family and a dental practitioner where the family will receive preventive instruction, dental care, counseling, and anticipatory guidance (15). The establishment of a dental home for children in their first year of life is an important factor to promote the early detection of high risk individuals and prevention of dental disease thereby decreasing the incidence of ECC.

The American Academy of Pediatric Dentistry (AAPD) and the American Dental Association (ADA) advocate that children should be seen by a dentist for dental screening as early as 6 months of age and no later than 6 months after the first tooth

erupts or 12 months of age (4,5). This first dental visit encourages parents to establish a dental home and allows the dentist to use anticipatory guidance to reduce the risk for caries and gingival disease. Anticipatory guidance is an interactive tool that incorporates developmental milestones and functional considerations into caries prevention. This allows the risk for oral conditions of each individual patient to be addressed and includes caregivers in the anticipatory guidance process (14-16). Typically the one year dental visit allows the dentist to examine the child and to educate parents about effective home care, diet, injury prevention, and fluoride needs. This first dental visit embraces the importance of early intervention with optimal preventive strategies.

Pediatricians have increased access to new mothers and children 6-12 months of age, by seeing them regularly for "well child" visits and have an opportunity to directly impact infant oral health care. The American Academy of Pediatrics (AAP) has realized the severe problem ECC poses and has recently changed its policies regarding the first dental visit. In 2002 the AAP revised its policy statement and lowered the age of the first dental visit from age 3 to age 1 for all children and as early as 6 months for children at high risk for dental disease. The AAP now advocates that all infants receive an oral health risk assessment by 6 months of age using the Caries Risk Assessment Tool developed by the AAPD (6). Their goal is to identify high-risk individuals and refer these individuals for immediate dental intervention.

Medical and dental communities, both separately and in combination are trying to prevent or at least reduce the effects of oral disease. The policy is extremely new. The literature shows that the majority of children, whether private or publicly insured, are not

seeing the dentist by 1 year of age. The Medical Expenditure Panel Survey of 1996 found that 68% of children 18 months and younger had never been seen by a dentist (7). It is important to understand factors related to the low level of dental utilization for children under the age of one. Most likely, neither group understands the scope of dental disease in infants i.e. pediatricians not referring early enough to dentists and dentists not accepting very young children as regular patients. Studies show that more than half of pediatricians (63%) do not recommend a dental visit until the third birthday (8). According to the AAPD nearly 20% of pediatric dentists do not perform infant evaluations (9). To ensure that children can access needed care there is an obligation for education and collaboration between the medical and dental community. The goal of this research is to examine the knowledge, attitudes, and experiences related to infant oral health for both dental and medical providers.

#### METHODS

A one-page survey was sent to 300 randomly selected general dentists, 300 randomly selected pediatricians, and all pediatric dentists in Virginia to assess their attitudes, experiences, and knowledge of infant oral health care. General dentists, pediatricians, and pediatric dentists were selected because each group has in their respective mission to provide care to the pediatric population. General dentists have expertise in oral health care, however the early intervention associated with infant oral health is still new to dentistry. Many dental practitioners are not comfortable with crying squirming toddlers and caregiver counseling. Pediatricians are most likely to interact with new caregivers and infants and are comfortable in the process of anticipatory guidance however they have little training in oral health. Pediatric dentists have varying amounts of infant oral health training and an increased comfort level working with children, but may not have access to those less than three years of age.

A list of general dentists was obtained from the Virginia Dental Association (VDA). The VDA randomly selected 300 practicing dentists from the list, thereby allowing general dentists from all regions of the state to be surveyed. Similarly, the American Academy of Pediatrics provided a list of pediatricians in Virginia. 300 pediatricians were randomly selected from the provided list. A list of the practicing 112 pediatric dentists in Virginia was obtained from the AAPD. The 712 surveys sent out

represent approximately 10% of all general dentists in the state, 12.5% of all pediatricians in the state, and 100% of all pediatric dentists at the time of the survey.

All practitioners received an explanation of the study and were given the opportunity to ask questions. If the practitioner agreed to participate in the study, the survey was completed and returned in the provided stamped addressed envelope. Any responses from doctors who were retired or were not general dentists, pediatricians, or pediatric dentists were not included in the survey. Any written comments or multiple answers to questions were not included in the results. Doctors were given 30 days to respond to the survey. After 30 days a second mass mailing was sent to all doctors with a note explaining the second mailing. Doctors were again given 30 days to respond to the survey. Any responses received after the total 2 months were excluded.

The survey presented a series of 17 questions, 7 multiple choice, and 10 yes or no questions (Fig. 1). The survey was field tested by a group of faculty members at Virginia Commonwealth University. The faculty members included pediatricians, pediatric dentists, general dentists, and a statistician to help identify problems or confusion in the survey. A final version of the survey was created from comments collected.

Participants were asked several yes/no questions regarding their routine infant oral health care protocol. In addition demographic data such as the practitioner's age, gender, and years of practice, were ascertained from the questionnaire. Responses to the questionnaire were tabulated and percent frequency distributions for responses to each item computed. Percents for all items were based on the total number of respondents in each of the three subgroups (general dentists, pediatricians, and pediatric dentists). The

percentage responding to each questionnaire item was compared using an exact chisquare test if cell frequencies were small or a Pearson chi-square test if the cell frequencies were adequate. Continuous variables, such as recommended and actual age, were analyzed using ANOVA. All tests were performed at alpha = .05.

#### RESULTS

Of the 712 surveys sent out, 379 surveys were returned for a return rate of 53.2%. The return rate was 128 (42.6%) for general dentists, 121 (40.3%) for pediatricians, and 93 (83%) for pediatric dentists. A total of 37 surveys were eliminated. 32 surveys were excluded because the practitioner indicated that they were specialists in an area other than general dentistry, pediatrics, or pediatric dentistry. Five surveys were excluded because the practitioner indicated that they were retired or no longer in clinical practice. The number of total usable surveys was 342 out of 712 for an overall return rate of 48%.

Survey responses were compared between the three practitioner types. Tabulated responses are listed in Table 1. Practitioners were first asked if they treat children aged 0-36 months in their office. 100% of all pediatricians and pediatric dentists (p-value < .0001) responded yes to this question. Only 57 (45%) of general dentists responded yes while 71 (55%) of general dentists do not treat this age group.

#### Examination

Practitioners who treated children aged 0-36 months in their office were asked what was included in a routine infant check up. General dentists (100%), pediatricians (99%), and pediatric dentists (100%) similarly reported providing evaluations of proper oral development. Likewise almost all general dentists (98%), pediatricians (98%) and pediatric dentists (100%) examine for oral pathology. There was some evidence that

fewer pediatricians examine for dental decay (95%) than general dentists (100%) or pediatric dentists (100%) (p-value < .03).

#### Education

Fewer pediatricians provide oral hygiene instructions (93%) than general dentists (98%) or pediatric dentists (100%). Fewer general dentists (84%) provide nutritional counseling than pediatricians (98%) or pediatric dentists (95%) (p-value < .004). All practitioners were found to evaluate fluoride needs equally (95-98%, p-value > .5). In addition all practitioners discuss risk of baby bottle decay equally (98-100%, p-value = 1). Fewer pediatricians (59%) provide parent education with regards to dental decay (p-value < .0001) than do general dentists (95%) or pediatric dentists (96%).

#### Dental Home

There was also a difference in the pattern of the frequency of talking to parents about an infant's first dental visit (p-value < .0001) as seen in Table 2. A pediatrician speaks to parents predominantly "all of the time" or "most of the time" (84 %) regarding the first dental visit. A pediatric dentist also talks to parents about an infant's first dental visit predominantly "all of the time" or "most of the time" (93 %). In comparison to the pediatricians and pediatric dentists, a smaller proportion of general dentists reported talking to parents about the first dental visit "all of the time" or "most of the time" (79 %).

There are clear differences in the practitioner types with regards to the recommended age for a child's first dental visit as shown in Table 3. 74% of pediatric dentists recommend that children be seen within the first year. Only 12 % of general dentists and

5% of pediatricians make this recommendation (p-value < .0001). In contrast 49% of general dentists and 69% of pediatricians recommend a child's first dental visit occur at 3 years of age. Using Tukey's Honestly Significant Difference test, there is no significant difference between the general dentist's average recommended age (2.64 yrs) and the pediatrician's recommended age (2.83 yrs). There is a significant difference between each of these two and the pediatric dentist's recommended age (1.29 yrs).

The actual age children are seen for their first visit is again clearly different between the three practitioner types (p-value < .0001). 100% of pediatricians report seeing children in the first year whereas fewer general dentists (2%) and pediatric dentists (25%) do. 72% of pediatric dentists report seeing children within the first two years however, 88% of general dentists do not see children until the age of 3 or later.

Practitioners were asked who was primarily responsible for infant oral health care (Table 4). The majority of practitioners (77% of general dentists, 75% of pediatricians, and 80% of pediatric dentists) responded that both dentists and pediatricians were responsible for infant oral health care. 17% of general dentists and 18% of pediatric dentists felt that only dentists were responsible. Correspondingly 23% of pediatricians felt that only pediatricians were responsible.

Survey responses for each of the practitioner types were then analyzed according to gender differences. There is a gender difference in the practitioner types with the majority of practitioners being male. 89% of general dentists were male, 67% of pediatric dentists male, and 52% of pediatricians male (p-value < .0001).

In evaluating the responses for the recommended age of the first dental visit multivariable logistic regression was used to test both practitioner type and gender simultaneously. The results of the logistic regression, shown in Table 5, indicate that there are differences between each of the practitioner types with regards to the recommended age of the first dental visit (p-value < .0001). There is no evidence of a gender effect for the recommended age of the first dental visit. (p-value = .5573). Logistic regression was also used to evaluate the effect practitioner type and gender had on the actual age a practitioner saw a child for the first dental visit. Again once the differences between general dentists, pediatricians, and pediatric dentists was taken into account there was no evidence of a gender effect in the actual age of a child's first visit (p-value = .0929).

Survey responses for each of the practitioner types were also analyzed by the number of years in practice. There is some evidence that the general dentist is older (mean = 21.1, SD = 11.1) than the pediatrician or pediatric dentist (mean = 18.8, SD = 10). In evaluating the responses to recommended and actual age for a child's first visit multivariable logistic regression was again used to test both practitioner type and years in practice simultaneously. The results of the logistic regression indicate that there are differences among the practitioner types (p-value < .0001) with regards to the recommended age and actual age. If years in practice is dichotomized to <25 years and >=25 years, then this split is significant (p-value = 0.0058). The summary statistics in the six groups formed by these two classification variables are shown in Table 6. Using Tukey's Honestly Significant Difference test, there is no significant difference between

the general practitioner average recommended age (2.66 yrs) and the pediatrician recommended age (2.88 years) but there was a significant difference between each of these two and the pediatric dentist (1.32 years). The difference between those with <25 years of practice experience (mean = 2.18 years) and those with >=25 years of practice experience (mean = 2.40 years) is not large in magnitude but remains significant. For the general dentist and pediatric dentist groups it appears that practitioners in practice fewer years or more recently trained are more likely to recommend the 1 year dental visit than dentists in practice longer (see Fig. 2). In the pediatrician group the number of years in practice does not result in a difference in recommendation.

#### DISCUSSION

Early childhood caries is a serious public health problem defined as "the presence of 1 or more decayed, missing, or filled tooth surfaces" in any primary tooth in a child 71 months of age or younger (4, 10). ECC does not only affect teeth, but consequences of the disease can lead to more widespread health issues impinging upon children's growth and development (11). By conservative estimates one in seven preschoolers suffers from the effects of ECC. The most tragic fact about the high prevalence of the disease is that it is preventable. The AAP, AAPD, and ADA all agree that the key to improving infant oral health care and preventing ECC is earlier dental screenings (4-7). However, current research shows that the majority of children are not seeing the dentist by one year of age (2, 7). Results from this research suggest that pediatricians and general dentists are not treating patients to see the dentist by one year of age and concurrently dentists are not treating patients at one year of age. With two thirds of the pediatric population suffering from dental caries by the age of five this presents a serious access to care issue for pediatric dental care (2,11).

The policy of the AAP is to establish a dental home for children by 1 year of age through the use of oral health risk assessments at 6 months of age and "referring a child for an oral health examination by a dentist who provides care for infants and young children 6 months after the first tooth erupts or by 12 months of age" (6). However, only

5% of pediatricians surveyed recommended a child visit the dentist by age 1. Over twothirds of pediatricians (69%) recommended children go for their first dental visit at age 3 and 9% tell parents to wait until their children are older than 3 years of age. If 100% of the pediatricians surveyed see patients at 0-12 months of age and 95% of pediatricians are not recommending the 1 year dental visit there is a significant gap in the awareness of caregivers about when to initiate dental care for their children.

Traditionally the AAP had recommended seeing a dentist by the age of 36 months, however, in the last two years the AAP has changed and expanded the oral health guidelines (17). Previously the AAP focused its oral health policies on fluoride usage and breastfeeding. Only recently are there any policy statements regarding oral hygiene, diet, visits to the dentist, and ECC. Furthermore, a study of pediatricians regarding pediatric preventive dental care concluded that respondents received two hours or less of preventive dental education during medical and specialty training (18). Given the newness of the policy changes and the lack of oral health education in medical setting, barriers still exist to educate both practicing pediatricians and those in training. There may be several reasons pediatricians do not follow the AAP guidelines, access to dental care is one that may pose a significant barrier. There were several written comments from pediatricians stating they do not refer infants to the dentist until the age of three because there are no dentists in their area willing to treat patients younger than three.

Similar issues are found on the dental side with only 12% of general dentists that follow the ADA guidelines and recommend patients go for their first dental visit by age 1. Furthermore, only 2% of general dentists actually see children by the age of 1.Over

half of the general dentists surveyed (62%) recommend children go for their first dental visit at the age of 3 or older. 89% of general dentists do not actually see patients in their office until the age of 3 or older. Results from the survey suggest that general dentists may not have received proper training or feel comfortable treating children. There are varying degrees of acceptance in teaching infant oral health in dental schools. The average dental school curricula spends 2 hours on infant oral health and only 50% of dental schools provide any clinical experience treating the infant population (21). One study showed that as the patient age decreased fewer general dentists were willing to provide treatment (20). The level of training received in dental school was significantly associated with their attitude to treating infants (20).

While pediatric dentists may be more educated about the problems of ECC and infant oral health care than general dentists they too are falling short of the recommended guidelines. According to this survey, 26% of pediatric dentists do not follow the AAPD guidelines and recommend a child go for their first dental visit at 2 years of age or older. Only 25% of pediatric dentists surveyed actually see children by 12 months of age. It is important that all pediatric dentists provide appropriate infant oral health care because access to specialty care is already limited by shortages and uneven distribution of pediatric dentists (19). Higher income and suburban areas have more dentists per capita than lower income or rural areas. These factors contribute to the geographic disparities in access to pediatric dental care.

Addressing the problem of ECC will involve an increase in dental education, access to care, and the coordination of both private and public health care. Increased dental

education in the medical and dental community is needed to educate providers and bring a comfort level to both pediatricians and general dentists in providing oral health care to this very young population. Dentists and pediatricians will require adequate training in oral health in medical/dental school, residency, and in continuing education courses. It may be beneficial to add a module on oral health and dental care to the medical school physical examination skills courses and an oral health rotation to pediatric residency curriculums. Having dental professionals provide such instruction would enhance acquisition of hands-on skills and could encourage future professional collaboration and cross-referrals. Similarly, clinical training with the infant population from pediatric dentists for dental students or general dentists would improve the general dentists' confidence, behavior management skills, and encourage cross-referrals. In order to decrease difficulties pediatricians face in making dental referrals changes in the availability of dental care will be necessary to make referrals more effective. The longterm approach is to increase the number of dental graduates with infant oral health care competency and pediatric dental specialists. This can be complemented in the shorter term by other approaches to increase access for preschool aged children with continuing education courses training general dentists to treat young children; and community organization activities to link families, physicians, dentists, and public programs such as Early Head Start and WIC.

The majority of practitioners (77% general dentists, 75% pediatricians, 80% pediatric dentists) agree that both the medical and dental communities are responsible for infant oral health care. The majority of children are not being seen by dentists by age 1 and

have greater access to pediatricians earlier in life. Pediatricians are the first and most frequent health care providers seen by infants and young children. They will see a well child perhaps 10 times before he or she is 3 years of age (14, 15). Pediatricians are in the position to make referrals to dentists as well as provide information about oral health care to parents. If properly educated it has been shown that pediatricians can educate parents and accurately identify patients in need of referral (12). Dental screenings can be incorporated into a busy primary care pediatrics practice and pediatric primary care providers can significantly contribute to the overall oral health of young children by the early identification of children who need to be seen by a dentist (12). Of course dentists, general and pediatric, need to be educated and understand the importance of assessing oral health and risk for dental disease in patients by 1 year of age and treat or refer appropriately if needed. The number of pediatric dentists are so small that it is important for the medical and dental community to work together to appropriately educate and train it's providers to be able to complete an oral health assessment, provide risk assessment and preventive oral health services such as education and appropriate fluoride regimens.

Among pediatricians there is a need for increased dental education and specific training on the provision of an oral assessment. General dentists need increased pediatric dental education with regards to infant oral health care. Together medicine and dentistry need to increase awareness in the public of the problem of ECC.

#### CONCLUSION

- The majority of pediatricians and general dentists are not advising patients to see the dentist by one year of age.
- The majority of dentists are not treating patients at one year of age, resulting in a critical problem with access to care.
- More recently trained dental practitioners were more likely to refer at one year for the first dental visit.
- There is a need for increased infant oral health care education in the medical and dental communities to appropriately handle this infant population.

### Figure 1. Infant Oral Health Care Survey

Please completely fill out the survey questions and return the form in the in the provided self addressed envelope. Your prompt response is greatly appreciated.

1.	Are you currently practicing clinical medicine or dentistry?	YES	NO
2.	Please check your occupation:         Pediatrician       General Dentist         Other (please specify)	ic Dentist	
3.	Do you treat children aged 0-36 months in your office?	YES	NO
* It	f you answered No to this question please skip Questions 4-1	1.	
In t For	the following questions please check/mark your answer in the this study an infant refers to children aged 0-36 months.	e appropriate	column.
A r	outine infant check up in your office includes:	YES	NO
4. 5. 6. 7. 8. 9. 10. 11.	Evaluation for proper oral development Examination for oral pathology Examination for dental decay Oral Hygiene Instructions Nutritional Counseling Evaluation of Fluoride Needs Discussion of Baby Bottle Decay Risk Parent education of dental decay process		
12.	How often do you talk to parents about the infant's first der	ntal visit?	
-	all of the timemost of the timesome of the time	enever	
13.	At what age do you recommend a child go for their first der	ntal visit?	
	1 year old or less2 years old3 years old	over 3 ye	ears old
14.	At what age do you actually see children for their first visit	?	
	0-12 months12-24 months24-36 months	over 36	months
15.	Who is responsible for infant oral health care?		
	PediatricianDentist	Both	
16.	How many years have you been in practice? Year	S	
17.	Sex:MaleFemale		

Figure 2: Relationship between years in practice and the proportion recommending 1 year dental visit, separately for each practitioner group.



Question	Response	General Dentist	Pediatrician	Pediatric Dentist	p-value
Do you treat children aged 0-36	Yes	45%	100%	100%	<.0001
months?	No	55%	0	0	
Do you evaluate proper oral	Yes	100%	99%	100%	1
development?	No	0	1%	0	
Do you examine for oral pathology?	Yes	56%	98%	100%	0.4425
	No	1%	2%	0	
Do you examine for dental decay?	Yes	100%	95%	100%	0.0253
	No	0	5%	0	
Do you give oral hygiene	Yes	98%	93%	100%	0.0136
instructions?	No	2%	7%	0	
Do you give nutritional counseling?	Yes	84%	98%	95%	0.0039
	No	16%	2%	5%	
Do you evaluate fluoride needs?	Yes	95%	97%	98%	0.5563
	No	5%	3%	2%	
Do you discuss baby bottle decay	Yes	100%	98%	99%	<.0001
risk?	No	0	2%	1%	
Do you educate parents about dental	Yes	95%	59%	96%	<.0001
decay?	No	5%	41%	4%	
Frequency of talking to parents	All	46%	37%	69%	<.0001
about the first dental visit	Most	33%	47%	24%	
	Some	20%	14%	8%	
	Never	1%	1%	0	
Recommended age a child go for	<u>&lt;</u> 1 yr	12%	5%	74%	<.0001
their first dental visit	2 yr	26%	17%	24%	
	3 yr	49%	69%	1%	
	> 3 yr	13%	9%	1%	
Actual Age you see children for	0-12 mo	2%	100%	25%	<.0001
their first visit	12-24 mo	10%	0	47%	
	24-36 mo	38%	0	27%	
	>36 mo	51%	0	1%	
Who is responsible for infant oral	Pediatri	6%	23%	2%	0.0064
health care?	Dentist	17%	2%	18%	
	Both	77%	75%	80%	
Number of Years in Practice	< 10 yrs	17%	27%	18%	0.0064
	10-20 yrs	25%	26%	27%	
	20-30 yrs	35%	27%	46%	
	> 30 yrs	25%	20%	9%	
Gender	Female	11%	48%	33%	<.0001
	Male	89%	52%	67%	1

 Table 1: Description of the Three Practitioners' Survey Responses

Response	General Dentist	Pediatrician	Pediatric Dentist
"All of the time"	46 %	37 %	69 %
"Most of the time"	33 %	47 %	24 %
"Some of the time"	20 %	13 %	8 %
"Never"	1 %	1 %	0

 Table 2: Practitioner Frequency of Talking to Parents about the First Dental Visit

Practitioner Type	n	Mean Age	SD
General Dentist	128	2.64	0.86
Pediatrician	121	2.83	0.65
Pediatric Dentist	92	1.29	0.55

 Table 3: Average Recommended Age for the "First Dental Visit" by Practice Type

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Response	<b>General Dentist</b>	Pediatrician	Pediatric Dentist	
Dentist	Dentist 17%		18%	
Pediatrician	6%	23%	2%	
Both	77%	75%	80%	

# Table 4: Comparison of Practitioner Types Response to Who is Responsible for Infant Oral Health Care

Occupation	Recomme Age	ended	Unadjusted OR		Adjusted		p- value
•	1 year(%)	other		OR	95%	CI	
Pediatric Dentist	68 (73.1)	24	(ref) 1	1.000			<.0001
General Dentist	15 (11.7)	113	0.047	0.041	0.018	0.087	
Pediatrician	6 (5.0)	115	0.018	0.016	0.005	0.039	
Years in Practice (per 10 years)				0.714	0.031	0.940	0.0468
Gender							
Female	28 (27.2)	75	(ref) 1	1.000			0.5313
Male	61 (25.6)	176	0.928	1.282	0.560	2.971	
Missing	0 (0.0)	1					

# Table 5: Logistic regression results comparing practitioner types (GD, PD,Ped), years in practice, and gender.

Practitioner	Years in	Recommended Age					
Group	Practice	n	Mean	SD	1 year	Percent	
General Dentist	<25 years	75	2.51	0.91	13	17%	
	≥25 years	51	2.84	0.76	2	4%	
Pediatrician	<25 years	87	2.82	0.60	4	5%	
	≥25 years	34	2.85	0.78	2	6%	
Pediatric Dentist	<25 years	58	1.19	0.40	47	81%	
	≥25 years	35	1.47	0.71	21	60%	

# Table 6: Comparison of Average Recommended Age for First Dental VisitBy Practice Years within Practitioner Group

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#### Vita

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