Scientific Article

Pediatric dentists' attitudes regarding parental presence during dental procedures

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Abstract

A controversial aspect of pediatric dentistry today is parental presence. A number of authors report an increase in the number of parents who wish to accompany their children throughout the dental appointment. Dentists historically have excluded parents from the treatment area, while pediatricians routinely keep the parent and child together. The purpose of this survey was to determine the frequency that Florida pediatric dentists permit parental presence during children's dental visits and to relate the influence of patient age, dentist's years in practice, procedure type, and practitioner attitudes on parental presence. A high return rate (98.9%) was obtained, and results indicated a significant increase in parental presence in the dental operatory and that further increases in parental presence are expected. Younger children were more likely to be accompanied by a parent for each procedure. Parental presence for examination was more likely than for restorative or extraction. Analysis of variance (ANOVA) indicated that the most frequent attitudes influencing the pediatric dentist's choice to exclude parents were that their presence: wastes time ($P < 0.001$); disrupts the child ($P < 0.05$); and makes the dentist uncomfortable ($P < 0.05$). (Pediatr Dent 17:432–36, 1995)

One of the most controversial issues in pediatric dentistry today is parental presence in the dental operatory. This is an area of concern for the parents, the dentist, the office staff, and the patient. Historically, parents have been excluded from the operatory during a child's dental visit[1,2] because they may increase management problems, disrupt dental procedures, delay treatment, and interfere with the dentist's ability to establish a good relationship with the patient.

Wright et al.[3] reported a correlation between maternal anxiety, child anxiety, and negative behavior in the dental office, which indicated a disruptive influence caused by an anxious mother. However, those who advocated parental presence suggested a positive influence of the parent—increased security and coping of the young child.[4] Frankl et al.[5] investigated the effect of parental presence for the initial examination and treatment visits. They concluded that child cooperation increased with the mother present during both exam and treatment appointments. Several other authors have reported that parental presence does not have a negative effect.[6–8] Lewis and Law[6] found no difference in behavior whether the mother was present or absent for dental prophylaxis. Venham[7] reported that the parent and child did not want to be separated, but that behavior did not change significantly in either situation. In a study by Pfefferle et al.,[8] no significant difference was noted between the behavior of children treated with a parent present and the behavior displayed by children treated alone.

The pediatric medical literature also is contradictory with regard to parental presence. In a study by Shaw and Routh,[9] 18-month-old and 5-year-old children received immunizations with and without the mother present. Comparisons of both age groups indicated that behavior was worse in both age groups when the mother was present. The children cried longer and complained more when the mother was in the treatment room. These findings suggest that children under stress may suppress protest if mother is absent. Hannallah and Rosales[10] concluded that for some preschool children, allowing parents to be present during general anesthesia induction can be effective in reducing anxiety and minimizing the need for premedication.

Recent studies indicate that parents often feel very strongly about staying with their children during dental and medical visits. In a survey of parents of pediatric dental patients at a U.S. Army base dental clinic, Kamp[11] found that 66% of parents wanted to be present for their child's dental appointment. Certo and Bernat[12] surveyed the parents of patients at a Buffalo, New York, hospital dental clinic and found 75% desired to accompany their children during dental visits. Based on a survey of parents who brought their children to a Boston hospital emergency department, Bouchner et al.[13] concluded that 78% wanted to watch their children have venipuncture

or intravenous catheter placement. These parents reported that they and their child would feel better and that their presence would help the doctor.

The dentist's attitude toward parental presence during dental visits has, in general, been demonstrated to be negative, especially when treatment other than examinations is being rendered. Roder et al.[1] reported that 69% of dentists in Washington preferred the mother to be absent from the operatory while the child received dental care. In a survey of dentists in Minnesota, Glasrud[14] reported that 75% of respondents viewed parents as a hindrance in managing preschoolers' behavior. In 1985, Cipes and Miraglia[15] surveyed pediatric dentists in Connecticut concerning parental presence during examination and treatment. Seventy-one percent allowed parents to be present for exams and only 55% allowed parental presence during the same children's treatment visits. Dentists who had been practicing longer were more likely to exclude parents during both exam and treatment appointments. Based on a 1989 national survey of pediatric dentists, Nathan[16] reported that 60% of respondents either generally disagreed or strongly disagreed with the statement, "I do not allow parents in the operatory during initial exam." Conversely, 51% strongly agreed or generally agreed with the statement, "I do not allow parents in the operatory during treatment with or without nitrous oxide."

The purpose of this investigation was to determine how frequently Florida pediatric dentists permit parental presence during children's dental visits and to relate the influence of patient age, doctor's years in practice, procedure type, and practitioner attitude on parental presence.

Methods and materials

A cover letter and questionnaire were mailed to 91 practicing pediatric dentists in Florida. All pediatric dentists who did not return the questionnaire within 6 weeks were contacted with a second letter and questionnaire. The questionnaire asked for the number of years in practice, the number of patients seen on an average day, and included a continuous visual analog scale to determine their practice approach with regard to parental presence. The visual analog scale was applied to three questions: "What was your approach to parental presence when you began your practice?", "What is your current approach to parental presence?", and "What do you project your future approach to parental presence to be?" Respondent scores to questions that utilized the visual analog scale were determined by measuring the distance in centimeters from the respondent's marking to the scale origin. The dentists also were asked if parents were allowed to be present for specific dental procedures including: new patient examination, recall examination, emergency examination, restorative procedure, extraction procedure, treatment of a mentally handicapped child, and during treatment of a disruptive child. The dentists were asked to address the above procedures for children younger than 4 years old and children older than 4 years old on a three-item scale—never, sometimes, and always. Finally, in order to determine dentists' attitudes toward parental presence, they were asked to indicate how frequently the following listed items were affected by parental presence: limits productivity, comforts child, wastes time, disrupts child, makes dentist uncomfortable, improves behavior, educates parent, develops trust, is a parental right, and is a parental privilege, using the three-item scale of never, sometimes, and always. The questionnaire gave the dentist choices—there were no open-ended questions or "other" categories.

Results

Changing practice regarding parental presence

The return rate of the survey was 98.9%, with 90 out of the 91 surveys being available for evaluation. The survey results indicate that pediatric dentists have exhibited a significant change in their practice approach regarding parental presence in the dental operatory. The mean response on the visual analog scale to the question of parental presence was found to increase significantly ($P = 0.007$) from the period when the respondent began practicing compared with the respondent's current practice approach (Table 1). Additionally, the respondents indicated that they expected their future practice to exhibit further increases in likelihood of parental presence in the dental operatory ($P = 0.014$). The distribution of respondents to their approach to parental presence in the various time periods was mixed (Table 2). While individual practitioners had either increased or decreased their practice approach from the past or planned to do so in the future, the net effect was toward greater parental presence during treatment of the child patient.

When the number of years in practice was compared with the current and future practice analog by linear regression, no significant relationship was observed. The correlations for the regressions were R = 0.043 and R = 0.049, respectively. However, when the number of years in practice was compared with the beginning practice analog, a significant correlation ($R = 0.24$, $P < 0.03$) was observed, which indicated that the longer dentists had

TABLE 1. BEGINNING, PRESENT, AND FUTURE APPROACHES TO PARENTAL PRESENCE

Practice Period	*Mean*	*Std. Error*	*Mode*	*Range*	*Variance*
Beginning*†	2.46	0.30	0.00	0–10	7.83
Current‡	3.55	0.34	5.00	0–10	10.54
Future	3.77	0.34	5.00	0–10	10.43

Significance determined by paired *t*-test.

* $P = 0.007$ when beginning compared to present.

† $P = 0.001$ when beginning compared to future.

‡ $P = 0.014$ when present compared to future.

TABLE 2. PERCENT CHANGE IN APPROACHES TO PARENTAL PRESENCE

	Percent Change in Respondents		
Practice Interval	*Decrease*	*No Change*	*Increase*
Beginning to current	26.7	23.30	50.00
Beginning to future	27.8	20.00	52.20
Current to future	20.0	52.20	27.80

been in practice, the less likely they were to include parents in treatment. When the number of patients seen on an average day was compared with the current practice analog, a nonsignificant ($R = 0.10$, $P < 0.39$) trend toward increased parental exclusion with increased practice volume was observed.

The effect of patient age and procedure type on parental presence

Patient age and procedure type had significant effects on parental presence. Parents of children younger than 4 years were more likely to always be present for each procedure than were parents of children older than 4 years (Table 3). ANOVA indicated a significant difference ($P < 0.05$) in parental presence for the new patient exam and the recall exam when the age of the patient was compared with the practice approach. The most frequent procedures in both age groups (< 4 years / > 4 years) for which parents were never allowed to be present included extractions (41% / 49%), restorative procedures (40% / 47%), and treating the disruptive child (36% / 44%). The most frequent procedures for which parents were always allowed to be present, included new patient exams (53% / 47%), emergency patient exams (46% / 39%), and treating the mentally handicapped (29% / 25%).

The relationship of practitioner attitude on parental presence

The relationship of practitioner attitude to parental presence is shown in Table 4. The most frequent attitudes that influenced the practitioner to always allow parental presence included "parental privilege" (48%) and "parental right" (42%). The most frequent attitudes that influenced the practitioner to exclude parental presence included "limits productivity" (41%) and "wastes time" (34%). There was a striking polarization in the practitioner response to "parental right" with 34% of respondents indicating that it was never a parental right while 42% of respondents indicated that it was always a parental right.

When ANOVA was used to compare the practitioner's current office practice (current analog response) to their attitudes regarding parental presence, several significant trends were demonstrated. The likelihood of practitioners permitting parents to be present in the operatory was positively influenced by their agreement with "comforts patient" ($P < 0.05$) and "improves behavior" ($P < 0.01$). It was negatively influenced by their agreement with "wastes time" ($P < 0.001$), "disrupts child" ($P < 0.05$), and "makes dentist uncomfortable" ($P < 0.05$). When the attitude "makes dentist uncomfortable" was compared by ANOVA with the number of patients seen in a day, a significant positive association ($P < 0.05$) was found.

TABLE 3. PRACTICE APPROACH TO PARENT IN THE OPERATORY BY AGE OF CHILD AND PROCEDURE

	Percent Respondents to Parental Presence					
	Never		*Sometimes*		*Always*	
Procedure *Age:*	*<4*	*>4*	*<4*	*>4*	*<4*	*>4*
New patient exam	10	21	37	32	53	47
Recall exam	23	36	49	41	28	23
Emergency exam	12	14	42	47	46	39
Restorative procedure	40	47	43	42	17	11
Extraction procedure	41	49	43	40	16	11
Mentally handicapped child	11	12	60	63	29	25
Disruptive child	36	44	51	45	13	11

TABLE 4. PRACTITIONER ATTITUDES TOWARD PARENTAL PRESENCE

	Percent Respondents			Significance* Current
Attitude	*Never*	*Sometimes*	*Always*	*Approach*
Limits productivity	6	53	41	NS
Comforts child	11	88	1	$P < 0.05$
Wastes time	3	63	34	$P < 0.001$
Disrupts child	0	85	15	$P < 0.05$
Makes dentist uncomfortable	10	75	15	$P < 0.05$
Improves behavior	22	78	0	$P < 0.01$
Educates parent	4	63	33	NS
Develops trust	7	69	24	NS
Parental right	34	24	42	NS
Parental privilege	17	35	48	NS

* Determined by analysis of variance (ANOVA).

Discussion

The high return rate of the survey (98.9%) suggests that this issue was of considerable interest to the pediatric dentists in Florida. This high response rate is similar to that of a survey conducted by Cipes and Miraglia[15] in 1985. The current sample of pediatric dentists indicated that their overall practice approach had shifted toward increased parental presence since they had begun their practice. Additionally, the respondents projected increased parental presence in the future. These findings are important in that they demonstrate a significant change in practice style. This response may be associated with the recently reported desire of many parents to participate in their children's medical / dental care.[11-13] Changing professional behavior also may

be related to the reduction in aversive behavior management techniques used over the past decade.[16, 17] Practitioners may be more comfortable having parents observe the management techniques that they currently utilize. It should be noted that the large variance in the practice approach indicated a wide range of practice styles with regard to parental presence.

This study did not demonstrate a relationship between the number of years in practice and the current or future practice analog.[5] This finding is in disagreement with that reported by Cipes and Miraglia.[15] However, when the dentists were queried regarding the frequency of parental presence when they began their practice, a significant correlation was found. This suggests that while in the past more experienced dentists were more likely to exclude the parent, this finding is no longer true. The practice approach of all pediatric dentists appears to have changed to accommodate parents' desire to be present to an equal extent.

It was not surprising that parents of children younger than 4 years were more likely to always be present for all procedures compared to children older than 4. Younger children are prone to a number of fears, including fear of the unknown, separation from parents, and abandonment, while children older than 4 years of age are more independent and better able to care for themselves in an unfamiliar surrounding.[4] They also are more developed in social interactions and more capable of responding positively in the dental environment.

The results of this survey indicate a distinct difference in the frequency of parental presence with regard to the type of procedure being performed. Dentists reported that parents were allowed to be present for new patient examinations at least sometimes in 90% of children younger than 4 and 79% of children older than 4. Similar trends were seen in recall and emergency examinations. In contrast, dentists reported that parents never were allowed to be present for restorative procedures in 40% of children younger than 4 and 47% of children older than 4. Similar trends were found for extraction procedures. The "never", "sometimes", and "always" responses were selected to facilitate the questionnaire and resulted in a high response rate. Retrospectively, the continuous visual analog scale may have been more appropriate and may have allowed more accurate conclusions about parental presence.

In 1961, Roder et al.[1] reported that 69% of dentists in Washington preferred the mother to be absent from the operatory while the child received dental care. In 1983, Glasrud[14] reported that 75% of respondents viewed parents as a hindrance in managing preschoolers' behavior. In 1985, Cipes and Miraglia[15] reported 71% of pediatric dentists allow parental presence during examinations, but 55% allow parental presence for treatment visits. In 1989, Nathan[16] reported that 60% of dentists generally agreed to allow parental presence during examinations while only 49% generally agreed to permit parental presence during restorative treatment. While direct comparison with these studies is not possible, they suggest that parental presence has become more frequent compared with earlier investigations.

Dentists who indicated that they currently permitted a high frequency of parental presence had a significant agreement with the statements "comforts patient" and "improves behavior." These findings suggest that many respondents were comfortable with parental presence and that it helped manage the child. Conversely, dentists who never allowed parental presence had significant agreement with the statements "wastes time," "disrupts child," and "makes dentist uncomfortable." Parental presence for these dentists is considered a hindrance. Furthermore, there was a significant positive correlation when the attitude "makes dentist uncomfortable" was compared with the number of patients seen in a day. Additionally, a nonsignificant positive correlation was observed when the average number of patients seen per day was compared the current practice with regard to parental presence. These findings suggest that increased patient volume may influence the dentist to exclude the parent from the treatment area.

The decision to include the parent in the treatment of the child patient appears to be affected by two important factors: the wishes of the parent and the attitudes of the dentist. Our study addressed the dentists' attitudes but little information exists on current parental wishes. The effects of parent age, socioeconomic status, parental anxiety, and the severity of dental disease on the desire of the parent to be present during dental treatment has not been elucidated. Parental behaviors that influence the dentist who only sometimes permits parental presence were likewise unstudied.

Conclusions

1. Pediatric dentists practicing in Florida demonstrated a significant positive trend toward increased parental presence in the dental operatory.
2. Parents of children 4 years old or younger were more likely to always be present for procedures than parents of children older than 4 years.
3. Parental presence for examination procedures was more likely than parental presence for restorative or extraction procedures.
4. Significant variables that influenced dentists to never allow parents to be present included "wastes time," "disrupts the child," and "makes dentist uncomfortable."

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The advent of a diagnostic boon

For the first time in Atlanta, says the *Constitution*, of that city, the X-ray has been used in making a diagnosis of an interesting case in Dr. Catching's practice. These are the particulars: Some time ago a young lady patient consulted him about a loose upper front tooth. An examination of the mouth showed a perfectly sound set of teeth, with the one exception in question as loose as a child's tooth about to be displaced by a permanent tooth. No reason could be given for the condition except that one of the cuspids had never come into place, and the trouble was attributed to this wandering tooth.

This peculiar case presented a chance for the surgical work of the X-ray. Arrangements for an examination were made at Dr. Catching's residence, where he had in operation one of the most powerful X-ray apparatus in the south. At the appointed time an interested group of spectators gathered to watch the working of the wonderful X-ray. The patient was placed in such a position that the rays from the apparatus would shoot down down by the nose, through the lip and bone and around the suspected tooth. A strip of photographic plate, especially prepared by Mr. Motes, and wrapped in a piece of black paper, was placed in her mouth, and the cathode ray allowed to remain on it for one minute. The development of the plate was anxiously awaited, and when at last it was completed it showed with great distinctness the malposed tooth imbedded in the jaw in just such a position as Dr. Catching had diagnosed. The cuspid was trying to force its way out, and in doing so had destroyed one of the young lady's front teeth.

This experiment is the first one in which the X-ray has been used as a means of finding a malposed tooth embodied in the jaw.

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