

Approaching the Pediatric Dental Patient: A Review of Nonpharmacologic Behavior Management Strategies



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ABSTRACT

One of the difficulties of the practice of dentistry is being responsible for the highest quality of care for patients while often having to propose alternate solutions for a variety of reasons, which include financial concerns. Dental practitioners treating young children have the added responsibility of gaining their patient's cooperation to render the best treatment. Determinants that influence the development of a behavioral strategy for a young patient include disease status, the child's physical and mental development, parental characteristics, and provider personality and capabilities. Classic strategies – including a supportive office environment, “tell-show-do,” successive approximation, distraction, behavior shaping, and retraining – must be matched to the characteristics of each child and family situation. Current cultural trends suggest that disciplinary forms of behavior management strategies – such as hand-over-mouth, physical restraint, and even voice control – are losing societal acceptance.

For the typical dentist, the greatest challenge posed by the young dental patient requiring operative care is the need to elicit the child's cooperation. A practitioner of any level of experience must consider not only the nature and severity of dental disease, but also the interactions between the child, his or her parents, and him- or herself as the clinician. Optimal management of the young patient involves an entirely new set of skills that, given an understanding of some foundational principles, is easy to obtain and develop in both the new and seasoned clinician. The purpose of this review is to summarize some determinants that influence assessment of the pediatric dental patient as well as some classic strategies for managing the child in the dental setting. The article will also address assessment of the child and parents in the current cultural milieu and suggest some directions in behavior management strategies for the future. Ultimately, the goal of this review is to suggest some strategies that will allow the practitioner to give the best possible dental care to young children.

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Determinants of Care

Disease Status

The first thing to consider when deciding how to treat the child patient is disease status. This determines the necessity for treatment. The clinician must consider whether the proposed treatment is preventive or restorative since preventive measures such as dental prophylaxis, fluoride treatment, and sealants can often be deferred. In a child with caries, whether the lesions are incipient or active must also be considered. Again, treatment may sometimes be deferred in a child with incipient lesions. Making certain the parents understand the situation and the proposed solution is important here, particularly if a decision is made to wait until the next periodic evaluation to assess improvements in behavioral maturity and subsequent readiness for restorative treatment.

Extent of dental disease is another consideration. Involvement of multiple teeth creates more urgency than involvement of a single tooth, unless irreversible processes have been initiated. Pulpal involvement or infections make treatment more imperative. Although the primary dentition should certainly not be considered disposable, whether the tooth is deciduous or permanent may also influence the necessity of treatment. In addition, general health status is an important consideration. If the patient is medically compromised or has some other disability, the impact of dental disease changes. Dental and overall disease/health status is then weighed along with the other three determinants to establish an approach for treatment.

Developmental

A second area of consideration is the child's developmental status. As children develop from infancy to adolescence, their cooperative abilities

likewise change. Along with knowing the age of a child patient, the dentist must assess his or her physical development, level of socialization, ability to function independently, intellectual development, and linguistic ability. All of these factors give an indication of the behavioral maturity of the child. **Table 1** summarizes some expected developmental stages for children at various ages.^{1,2}

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Behavior has classically been separated into three stages: preoperative, uncooperative, and cooperative.¹ The preoperative stage extends from infancy to age 2 or 3 in a healthy child. This stage is characterized by an actual lack of cooperative ability. Communication skills and comprehension have not developed to a point where the child is capable of participating in treatment. Children with mental deficits and developmental delays can remain in this category indefinitely. When an infant or toddler presents for treatment, he or she can generally be assumed to be preoperative unless assessment proves otherwise.³ Factors indicating that a child is

moving into the cooperative stage can be identified through observation of the child even before initiating any dental procedures. Levels of socialization and linguistic abilities can be assessed by gauging the child's response when brought into the treatment area or while obtaining or updating the medical and dental history with the parents. Children who have moved out of the preoperative category are capable of carrying on conversations and following directions.^{4,5}

Once a child has progressed beyond the preoperative stage, he or she can classically be categorized as either cooperative or uncooperative. A cooperative child is easy to recognize. This child responds well to questions, has no outward signs of apprehension or reluctance, and will follow directions with little hesitation and occasional enthusiasm. The uncooperative child can be more positively labeled as being "potentially cooperative." Developmental milestones indicate that this child should be able to cooperate, although he or she may not do so. Factors that affect a child's potential to cooperate may be internal or external.

Internally, cooperative ability may be modified by degree of fear/ease, degree of willfulness/willingness, and awareness of dental problems. For nearly all uncooperative children, the central issue in behavior boils down to fear and/or willfulness. These characteristics can occur either as a function of an individual's innate personality/temperament or as a result of some previous experience.⁶⁻⁹ Distinguishing between these two potential origins is rather important, as it will affect behavioral strategies. Fearfulness is much easier to deal with. If the child is afraid of the unknown, the dentist can focus on making things known. If the child is afraid because of a previous violation

Table 1

Developmental stages for children and adolescents

Sensorimotor period

Age 0 to 2 years

- Unable to reason
- Reality is external
- No object permanence
- Reacts to stress with senses
- Element of amnesia

Preoperative period

Age 2 years

- Geared to gross motor skills
- Likes to see and touch
- Very attached to parent
- Solitary play; rarely shares
- Limited vocabulary; early sentence formation
- Becoming interested in self-help skills

Age 3 years

- Less egocentric; likes to please
- Very active imagination; likes stories
- Remains closely attached to parent

Age 5 years

- A period of consolidation; deliberate
- Takes pride in possessions
- Plays cooperatively with peers
- Relinquishing comfort objects

Concrete operations

Age 6 to 13 years

- Eager to learn
- Discriminates, classifies
- Cause-and-effect logic
- Begins to trust
- Internal organization (conceptualization)
- Recognizes and understands pain

Formal operations

Age 13 to 17 years

- Can deal with abstract
- Can solve complex problems
- Reasons inductively
- Developing ideals and attitudes

Based on McDonald and Avery,¹ and Barber and Luke.²

of trust, the clinician can work toward the establishment of trust. Willfulness is more difficult, because it may require a breaking or redirecting of the will and the establishment of authority. Fear and willfulness as core issues are not mutually exclusive. They may interact and can potentially be modified according to the child's understanding of his or her dental problems. Thus, patient education is paramount for the potentially cooperative child, particularly if the origin of the fearful or willful behavior is a previous experience. Fear or willfulness that is simply part of the child's personality or temperament is harder to address. This must also be considered.

Externally, cooperative ability may be modified by previous medical experiences. The child who has experienced multiple unpleasant medical interventions tends to be far less amenable to dental procedures than the child who has had only pleasant experiences.^{8,10} Parental response also plays an external role in the modification of cooperative ability. Parents who are fearful often project this anxiety onto their children.^{8,11} The unique family dynamics of each child also affects the response to authority figures and willingness to submit to authority.^{9,12}

Overall, developmental determinants are highly variable. Not all 3-year-olds respond the same way, nor do all 8-

year-olds respond the same. Personality and temperament play an important role in cooperation that cannot fully be related to chronological age.

Parental

A third area of consideration in the development of a strategy to approach the child patient is interaction with the parents. A general understanding of various cultures is important when considering the effect of parents on the behavior of the child. Culture can affect diet and feeding habits. Sugar content of traditional foods can vary. Other practices, such as the lemon-sucking common in some Middle Eastern and Latin countries, may have deleterious effects on



oral health. As for feeding habits, some cultures encourage prolonged breastfeeding or feeding at night. Mealtimes also vary, with some countries taking meals right before bedtime or a prolonged siesta naptime. Oral hygiene practices and the value placed on dental care also differ according to culture. Even in highly developed countries there is the thought that “they’re just baby teeth and are going to fall out anyway.” Developing countries tend to value oral health to an even lesser extent. Finally, the cultural background of the parents affects child-rearing philosophies and value for authority, which affect the influence the dentist can have on a child. The practitioner must be culturally sensitive and committed to exploring the impact of culture on the child and family.

The socioeconomic status of the parents also bears some weight.¹ Children in privileged school systems tend to have better oral hygiene practices. Somewhat paradoxically, children from higher socioeconomic groups have more restorations, which tend to be less extensive than those of lower groups, in which extractions are more common. This finding mainly reflects differences in access to dental care. Unfortunately, an increase in negative behaviors is associated with more invasive procedures and multiple appointments, both of which are affected by access to care.¹³ Finally, socioeconomic status may affect access to behavior management strategies. Treatment under general anesthesia or deep sedation is often financially prohibitive. This factor often makes nonpharmacologic treatment a necessity.

The most important parental determinant is personality. An accurate assessment of the personality of the parent can significantly influence treatment approaches. The following is a summary of some parental personalities.^{1,14} There is the appropriate attitude.

This parent is nurturing and protective, yet comfortably transfers authority to the dentist. The dentist is allowed to communicate directly with the child, while the parent facilitates, rather than detracts, from the communication and bonding process. The compensatory type is marked by the attempt to be supermom or superdad. These parents have the best intentions, pursuing the right thing for their children, but ask many questions and have a high need

Comprehending the cultural, socioeconomic, and personality determinants of the parents can help us understand the context for the child's behavior.

for approval of their parenting. These parents should be approached with affirmation of what they are doing for their children and given assurance that they need not live in guilt over the presence of dental disease. The overprotective parent often emerges out of the context of a maladjusted family, with little warmth. Alternatively, they may have experienced childbirth late in life or a threatening event to the child's health or life. These parents are often dependent on the child's dependency. These parents should be approached with a gentle discussion of the child's actual behavioral ability and the need for the development of independence. Again, the development of trust is important. Manipulative parents are demanding, with underlying issues of

control and power. These parents often attempt to direct the course of treatment. With these parents, strict adherence to the stated office policy is important. Rational conversation may also help in revealing the underlying causes for their behavior. Also important is helping the parent understand that an adversarial relationship with the dentist does not promote the best interests of the child. The hostile parent may have had a previous poor experience or harbor generally negative attitudes toward health professionals. They may feel insecure in a foreign environment or may simply have misconceptions about dentistry. Hallmarks of this attitude are noncompliant behavior, failure to make eye contact, or a constant questioning of the need for treatment. Often, a compassionate, open conversation can smooth the relationship. Another personality type is the neglectful parent. This attitude is generally related to parental values and lifestyle. These parents may be overly busy, careless, or unappreciative of good dental care. These parents must be educated about the importance of dental health. They must also be made aware of the impact of their attitudes on the well-being of their children. There is another emerging attitude, which hasn't been addressed in the literature, but can be labeled the overindulgent type. These are the parents who are somewhat informed about pop psychology and state concerns about damaging the self-esteem of their children. These parents place few limits and allow their children to make significant choices. They are quite difficult to partner with in the management of their children because they are often convinced that their “yes” is more in the child's best interests than the dentist's “no.”

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ior. This again can set the tone for a behavior management strategy.

Provider

The behavior of a dentist can strongly affect his or her relationship with the child patient, in turn affecting the behavior of the child.^{3,15-17} Therefore, an understanding of provider determinants is important when planning behavior management strategies. The personality of the provider is one such determinant. Some people innately feel more comfortable with an authoritative style, while others may be more naturally inclined to a more empathic approach to the child. Other personalities may be more naturally suited to a personal, high-touch approach. The literature outlines four dentist-related behavioral dimensions that predict success in managing children.¹⁵ In the guidance dimension, dentists who give clear directions and reinforcement achieve the least fear-related behaviors. On the contrary, negative guidance — such as coercion, coaxing, or putdowns — is not as successful. The empathy dimension is another area of behavior influenced by provider personality. Questioning the child for feeling during difficult procedures tends to have a positive effect, as does reassurance. The physical contact dimension indicates the frequency of the dentist's contact with the child. Positive contact — patting or stroking — has a positive effect. Finally, in the verbalization dimension, results indicate that constant conversation is not always beneficial. Mixing up the targets of verbal communication (i.e., to the assistant, parent, and child) may prevent the child from being inundated with auditory input. Each practitioner must therefore consider his or her own personality and adjust accordingly.

As with parental determinants, culture plays a role, affecting communication style and views on authority, male-

female interactions, and misbehavior. These elements must be considered in the context of the office environment and the relationship with both parent

and child. Manifestations of certain personality characteristics or some preferred behavioral strategies may not be acceptable in all circumstances.



Providers must be aware of the limitations of their personalities and cultural backgrounds.

Experience and educational background also play roles in the development of behavior management strategies.¹⁸ Dentists who have had minimal exposure to children younger than 3 years of age tend not to feel comfortable treating these young patients. In fact, they may not even accept these patients into their practice, for lack of an effective behavioral management strategy. In this case, the practitioner must be prepared to talk to the parents about professional limitations and discuss the importance of preventive care for young children, then refer children out appropriately.

Strategies for Behavior Management

Once each of the previous four determinants has been assessed, a strategy for behavior management can be developed.

Pre-Appointment Behavior Management

Behavior management can begin before the patient even comes in for the first visit.¹ Since parents and sometimes older siblings set the tone for the child's expectations of a first visit to the dentist, it is important to make certain the family is representing the upcoming experience appropriately. Several videos and children's books are available with positive representations of the dental experience. These might be recommended for family viewing or reading ahead of time. Pre-appointment mailings with a description of the practitioner's treatment style, an outline of first visit procedures, and a list of euphemistic terminology may also help the parent prepare the child or, conversely, help prevent the parent from "overpreparing" the child. Although not likely to influence the preoperative child significantly, these procedures

may help with the compensatory, over-protective, or even hostile parent, thus reducing the impact of at least one factor on potential negative behavior.

If a child has older siblings who receive regular dental care, it might be prudent to invite the child to observe the periodic oral evaluation of the sibling. This is most useful with children who are borderline cooperative.

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Environment

Attention to the office environment can also influence child behavior before specific management strategies are determined.¹ A positive approach from a friendly and organized office staff with a team approach to treatment can create a positive environment for a child's first dental experience. The child can feel cared for and inspired to behave in a pleasing manner. Office flow and efficiency are also important. Studies indicate that offices with high production and greater time pressure tend to result in more negative behaviors in children.¹⁶ Attire is another aspect of the environment that can be changed preemptively to address behavior. It has been suggested that some children react unfavorably to white coats. Thus, many dentists with high pediatric populations wear colored clothes or scrubs. Similarly, facemasks may

induce apprehension in children who have experienced medical interventions. Many practitioners wait until just before treatment to introduce the facemask and gloves. Not only does a positive office environment set the tone for the child, it also sets the tone for the parent.

Communication

Communication has a twofold purpose in managing the child. It is preventive behavior management, setting the tone of the environment into which the child enters. Later, it becomes a part of the behavior management strategy. Communication is the mechanism by which the dentist conveys the nature of the relationship with parents and child, the expectations of all parties, and the parameters in which all will operate. Communication can be verbal, making word choice extremely important in establishing the environment. It may also be nonverbal, with postural changes, facial expressions, hand gestures, eye contact, and physical touch all conveying information to the child and parent. Either way, communication must be appropriate to the developmental age of the patient and the cultural context of the family.

Verbal communication can take place with various sources. With a well-trained staff, words of affirmation can be given to the patient from the doctor, assistant, or receptionist. Expectations for behavior can also come from these multiple sources. Multiple targets may also be used to convey information. For example, affirmation can be given to the child for good behavior by telling the assistant or the parents how well the child is doing. Similarly, explanations about potential behavior management strategies can be given to the parent in the hearing of an uncooperative child. Additional, messages about oral hygiene or the importance of dental treatment can be conveyed to the par-

ent through verbal instructions given to the child. With any of these methods, tone of voice and additional non-verbal communication can be used to reinforce the message.

In today's multicultural context, special consideration must be given to verbal communication when a child and his or her family do not speak English. If the practitioner doesn't speak the language of the family, then an interpreter may be necessary. Many offices employ auxiliaries with the languages skills represented by the surrounding community. In this case, emphasis must be placed on training the auxiliaries to communicate in styles consistent with the dentist's. In any event, nonverbal communication becomes more significant.

Successive Approximation

The classic "tell-show-do" approach is the most commonly used method of behavior management. The clinician first explains the procedure to the child (tell), next shows an approximation of the procedure (show), and then actually performs the procedure (do). This strategy can be used in anticipation of negative behavior. It is most useful for the child who is progressing beyond the preoperative stage or an uncooperative child whose primary core issue is fear. Few willfully uncooperative children respond well to classic tell, show, do. It is also useful for dealing with parents, particularly compensatory or overprotective types, by demonstrating patience and concern.

It can also be useful as a method of indirect communication to retrain parental vocabulary.

Successive approximations can also be used to gain patient acceptance of operative or other more invasive procedures. For example, if a child is beginning to react to the high-speed handpiece, the dentist might run the bur next to the tooth, checking for comfort level, then touch the back of the handpiece to the tooth. A feather touch of the bur to enamel is a suitable prelude before entering dentin. As the clinician progresses further into actual treatment, he or she can confirm with the child that, "This is OK, right?" Again, this strategy is most useful with the child whose core issue is fear and also



the slightly resistant child who is old enough to understand when behavior is exaggerated.

Distraction

For borderline cooperative children and fearful children, distraction may be an effective method of taking their minds away from the task at hand.¹⁹ Some offices have television screens or even portable virtual screens. Music can be an enjoyable addition. For 4- to 6-year-old children, storytelling or singing may be effective ways of capturing and diverting attention. None of these methods has been thoroughly explored in the literature.

Behavior Shaping

Behavior shaping, or behavior modification, is probably the most commonly used nonpharmacologic method of managing children developmentally mature enough to behave.¹ Based on principles of social learning, it involves a series of reinforcements that eventually leads to desired or ideal behavior. In this process, the provider states the goal for the child or the task for the appointment, explains the necessity for treatment according to the child's understanding, and then sets expectations for the child. When negative responses emerge, appropriate behavior is reinforced, minor inappropriate behavior is disregarded, and major inappropriate behavior is disciplined. To engage in this activity, a child must be capable of good behavior. Hence, behavior shaping is not useful in the preoperative child.

Appropriate behavior is most commonly reinforced with praise. Praise is offered for any behavior the dental team would like to see repeated and for any steps toward desired behavior. It should be given immediately after the child's positive response and continued intermittently even after positive behavior has been established. Verbal re-

inforcement can be directed at multiple targets, telling the parent and the office staff how well the child behaved. Nonverbal positive reinforcement is also important, in the form of applause, pats on the shoulder, or high-fives.

Undesirable but tolerable behaviors can simply be ignored. Diversionary tactics, such as changing the subject or asking unnecessary questions, and bothersome behaviors, such as whining

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or interrupting, must be dealt with by devaluing the behavior's impact on the dentist. The provider can choose not to respond or even turn away from the child until either desired behavior or major negative behavior emerge. Then the appropriate response can be given.

Major negative behavior is much more difficult to handle. These behaviors include refusal to open mouth, kicking, screaming, and frank disobedience of commands. A number of disciplinary measures have remained in use over time. Among the common methods is voice control. Even in late infancy and the early toddler years, a sharp, loud, shouted command can be incredibly effective at gaining the child's attention.²⁰ Such commands, when accompanied

by appropriate facial expressions and body language, can communicate displeasure and the gravity of the negative behavior. Voice control can be used as an attention-getting technique and is most useful for the willful or resistant child, rather than the fearful child. Another aversive method is the hand-over-mouth exercise, which has been decreasing in acceptability and in usage over the years.^{21,22} Also geared toward the willfully uncooperative child, this method is to be used sparingly and only with the assent of the parents, primarily to gain the attention of the child. Hand-over-mouth exercise should not be used for preoperative children or physically or mentally disabled children. In the most commonly recommended protocol for hand-over-mouth exercise,²² the dentist firmly places his hand over the child's mouth and calmly issues a command for the child to stop inappropriate behavior. As soon as the child calms down, the hand is removed, and the child is thanked for the improvement of behavior. A final disciplinary method is physical restraint. There are essentially two contexts in which physical restraint may be used. The first is for treatment of a preoperative child under emergent conditions. Generally, treatment involves either extraction or caries control when one or two teeth are involved. The intent is to avoid sedation for a quick procedure. Although these young children may be successfully restrained by the assistant and parent, use of a papoose board or PEDI-Wrap are most effective. Obtaining verbal consent, at minimum, is necessary for their use. Parents must understand that physical restraint is not punitive but is intended for the safety of the child. Although many young children forget these events, many still remember the environment and thus must be man-

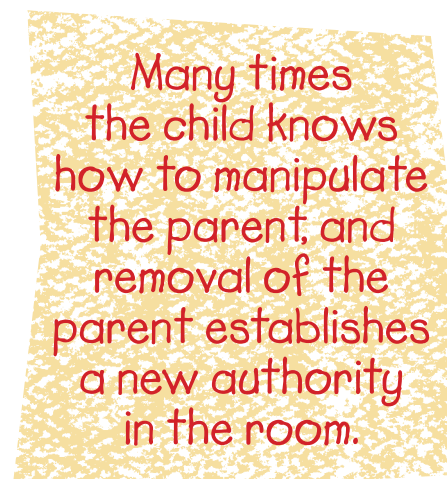
aged carefully in the future. The second context is the willfully uncooperative child. Historically, the rationale behind the use of physical restraint for these cases, most often by papoose board or Pedi-Wrap rather than restraint by parent or assistant, was to subdue the willful behavior of the child. However, usage of this nature is becoming unacceptable in today's cultural context. Thus, proper assessment of the child's cooperative ability and the parent's attitude are absolutely essential. This method, possibly paired with hand-over-mouth exercise, is essentially the last resort for a child who should be able to cooperate and should only be initiated in partnership with the child's parent. The philosophy driving this strategy is to send a clear message to the child that he or she cannot manipulate the clinician. As with other methods, once desired behavior has been attained, praise should be given and the aversive method discontinued.

Among the behavior-shaping methods, disciplinary techniques, especially hand-over-mouth exercise and device-assisted physical restraint, appear to be losing favor with parents.²³⁻²⁵ Among practitioners, also, there has been a decrease in use of aversive behavior management methods, with hand-over-mouth exercise decreasing the greatest in usage.²⁶ Indeed, there has been some negative reaction to hand-over-mouth exercise in recent years due to potential misuse of the technique by practitioners in the past.^{21,22} With the availability of pharmacologic techniques, the practitioner must carefully consider his or her options before including aversive or disciplinary measures in the behavioral strategy for a child.

Retraining

For a child who has had multiple medical interventions or previous poor dental experiences, retraining is often

necessary. This child is usually potentially cooperative but has some apprehension or fear. For most children, only one aspect of treatment is truly the antecedent event for their fear, yet any dental intervention is negatively linked with that experience. Essentially, the goal is to unlink negative associations and disassociate negative behaviors. The child must come to an understanding that some events are in fact quite simple. The provider must reacclimatize the child to various treatment



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interventions in a stepwise fashion. Communication and successive approximations are most useful for this purpose. Terms must be redefined, and trust must be rebuilt. Once a good relationship is established, retraining can be quite successful.

Parent-Child Separation

The traditional policy for dental treatment for many years was to exclude the parent from the treatment area.^{27,28} The idea was that the parent might interfere with the dentist's ability to establish a rapport with the child or that the parent might disrupt or delay dental care. Although many dentists prefer the separation, studies indicate that younger dentists are more prone to allow parents to enter the

treatment area than older dentists.²⁸ Parents increasingly prefer to be present, indicating that they believe their children will feel better and that they themselves will feel better.²⁷ Some parents voluntarily exclude themselves, believing that their children will respond better. How helpful parental presence is depends on the parental personality and the child. An appropriate parent can ease the development of the relationship between the dentist and child. A compensatory, overprotective, or overindulgent parent can actually worsen the situation. Separation of the parent and child is most useful for a willfully uncooperative child, particularly if the parent is one of the just-mentioned three types. Many times the child knows how to manipulate the parent, and removal of the parent establishes a new authority in the room. Children who are in school will eventually respond, because they have become accustomed to external sources of authority. Again, obtaining verbal consent, at the least, is very important. Parents must understand the rationale behind the separation and the potential behavior-shaping methods that may be used. Parent-child separation should not be used in the preoperative child and is not useful for the child who is fearful.

The New Context

The One-Year Dental Examination

As the American Academy of Pediatric Dentistry adopts a policy of anticipatory guidance, a higher value is placed on developmentally paced preventive interventions. In addition, oral health programs in California supported by funds generated through Proposition 10 have also placed an emphasis on early intervention. The one-year dental exam should become an important part of each dental office's care of children. It is an incredibly sim-



ple process. The child's behavioral status is clearly preoperative, with freedom from dental disease in all but the most unusual situations. The only real determinant to consider is parental personality, yet most parents will understand that their child will be unable to cooperate and are willing to accept crying at this age. The knee-to-knee exam is the simplest way to examine the child and allows for a quick assessment of the eruption and disease status of the dentition. There are several benefits to initiating a one-year exam. First, this is a unique opportunity to educate the parent on oral hygiene and diet, potentially preventing or reducing future dental disease. Reduction of more invasive procedures and number of appointments decreases the emergence of negative behaviors.¹⁰ Second, this is an opportunity to assess the personality of the parent and develop a plan for partnership. Since the child will seldom require treatment, the parent can be introduced to the office environment with minimal stress. Finally, this is a wonderful opportunity to expose the child to the dental environment in a pain-free and relatively positive experience. Over the next two to three years, various treatment interventions can be slowly introduced, allowing the child to acclimate at a developmentally appropriate time. In the event that a child should have to experience any restorative procedures, he or she has successfully accepted a full examination, radiographs, dental prophylaxis, and fluoride treatments multiple times. Thus, the importance of an early dental visit cannot be overemphasized.

Changing Family Dynamics

There is no doubt that American culture is changing. This, of course, is something we have come to accept as a norm. However, in the context of non-pharmacologic management of the behavior of pediatric dental patients, this

shift is rather perplexing. Perhaps a legitimate question when observing contemporary family dynamics is "Who is in charge?" This question was addressed in 1990, in a guest editorial in *Pediatric Dentistry*,²⁹ and again in a 2001 feature in *Time* magazine.³⁰ Parents appear to be moving toward a more laissez-faire attitude toward parenting, possibly encouraged by child-care workers who have taught them to accept conflicts with the child as "differences of

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opinion" to be reasoned through. Thus the typical child today is lavished with freedom and given choices, yet lacks self-control. Perhaps as a consequence, there are new diagnostic categories for children.³¹ Not only is there an increase in children with attention-deficit hyperactivity disorder, there is the increased prevalence of newer diagnoses such as conduct disorder, oppositional defiant disorders, and other disruptive behavior disorders. At the same time, professional guidelines indicate a change in the recommendations for effective discipline.³² Spanking and verbal reprimands are far less favored when compared to time-outs and removal of privileges. Although the intent of these recommendations is good

— to protect children from abusive situations — the result is a very narrow window of appropriate circumstances in which either spanking or verbal reprimands may be performed. This trend has most likely made parents feel guilty about the use of either intervention in any circumstance. Interestingly, in a 2002 survey of 577 diplomates of the American Board of Pediatric Dentistry¹² 88 percent of respondents felt that parenting styles had changed in their practice lifetime, with 92 percent believing that these changes were "probably or definitely bad." Most respondents (85 percent) also believed that these changes resulted in "somewhat or much worse" patient behavior. In concert with changing parental attitudes, the diplomates reported less use of assertive behavior management techniques.

Social anthropologists and sociologists have written about the shift in thinking from a "modernist" perspective to a "postmodernist" perspective. Interestingly, the literature in the field of nursing contains numerous references regarding the effects of postmodernism in the health care context.^{33,34} This shift in thinking is thought to have started around the 1970s, which approximates the decade many parents of preschool and elementary school-age children were born. In the postmodernist mindset, relativism is more acceptable than the absolute, the subjective replaces the objective, and personal experience and virtual reality are more important than societal norms or history. It is extremely difficult to define for a parent or child what "appropriate" or "acceptable" behavior is. It is offensive to "impose" an expectation on the child who is being encouraged to find his or her voice. Compounding the impact of this mindset is the fact that most dentists come from a more modernist mindset. Even younger practitioners, who may have grown up with

postmodernism as the prevailing thought, bear the influence of the modernist generation. The foundations of dental education are objective, as evidence-based dentistry has become the goal. Health care decisions cannot be carried out in a relativistic manner.

So what are we to do? Classic behavior-shaping methods are becoming unacceptable. Hand-over-mouth exercise has fallen out of favor even with dental practitioners, possibly as a result of the implications of abuse. Similarly, the use of physical restraint as a punitive measure may not be acceptable to most parents. Even voice control might be considered questionable to many parents concerned about maintaining their child's self-esteem. In addition, time-outs and removal of privileges are not disciplinary considerations in the dental context. In this new cultural context, probably the most important emerging need in approaching the pediatric dental patient is actually accurate assessment of the parents' behavior. The practitioner must be aware of the parents' philosophy of childrearing and discipline, not only to partner effectively with them, but also to understand the effect of the family's dynamics on the child. To do so, a future goal must be to increase focus on the study of new family dynamics. There must be increased understanding of the determinants of parental personality and efforts to develop new behavioral categories for children. And finally, we need to develop new management strategies that will be acceptable to this new generation. This is not an easy task and may involve the use of pharmacological methods or simply referring a child out for treatment elsewhere if the chemistry of parent, child, and practitioner is not conducive to nonpharmacological methods of treatment. Until these new strategies emerge, however, the most effective way of deciding how to approach the

pediatric dental patient still involves an accurate assessment of the child's disease status and developmental determinants, an understanding of the parental type, and an appreciation of the clinician's own strengths and behavioral style. **CDA**

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