Multiple authors have noted that parenting practices have undergone significant changes in the past 15 years that have likely impacted children's behaviors. These changes have been attributed to multiple influences including: (1) the media; (2) Internet; (3) single parents; (4) working parents; (5) cultural shifts; and (6) the increasing pace of contemporary living. Reportedly, all of these factors have influenced parents' disciplinary techniques with children. The increased speed of contemporary changes is often accompanied by more feelings of stress.

Within this evolving environment, pediatric dentists are increasingly expected to deliver care to children who may not always be as compliant as they need to be. Often, this is easily resolved with information and gentle verbal redirection. Facilitating behavioral management techniques has been a part of the pediatric dentist's training and practice for many years. As health care professionals become more adept at dealing with all health care issues, expectations are also changing from consumers, resulting in improved and more accessible care, better outcomes, and continually lower costs. Health care providers may not always be able to provide these requests or deliver on these expectations, which may lead to disappointment by consumers and professionals. The importance of these expectations is sometimes focused on a person's compliance with medical procedures. This is a particularly acute issue for pediatric dentists working with young children in the operatory.
changes had resulted in “somewhat or much worse patient behavior.” Pediatric dentists also reported currently performing less assertive behavioral management techniques due to these changes. The authors believe this was in part related to the limited actions and consequences that parents used for child misbehaviors.

Today, there is an increased awareness that many children may have more psychological problems due to increased understanding of mental health issues. Some clinicians anecdotally report a tendency for parents to absolve children of personal behavioral control because of medical or psychological diagnoses. Accountability seems to be directed toward the medical or psychological condition rather than the personal control of the child or the families’ skills in disciplinary management.

The easy availability of information appears to influence parents. For example, parents are often bombarded with tremendous amounts of information on the Internet regarding rearing practices and disciplinary activities. It is, however, very difficult for parents to determine who the expert is and what type of information should be followed, given the nearly infinite amount and type of information that exists. There is also some evidence to suggest that there is a connection between childhood aggression and observed aggression in the media.4,5

Garbarino1 documents an increasing and somewhat disturbing trend that he describes as raising children in violent environments. Much of the violence that occurs in our contemporary culture is often felt to endorse or at least “model” poor behavioral control for some children and glamorize aggression as a quick solution to disagreements.

Reviewing these parenting issues in today’s society, it is not surprising that parents are at least somewhat confused about what the best rearing and disciplinary practices are and how to apply them within their family’s context.

**Childhood psychosocial problems**

Numerous studies have examined the prevalence of childhood psychosocial problems over the past decades. Kelleher et al6 examined changes in pediatric psychosocial problems and related risk factors from 1979 to 1996. During this time period, clinician-identified psychosocial problems increased from 7% to 19% of all pediatric visits among 4- to 15-year-olds. The use of psychotropic medications, counseling, and referral also increased substantially. The percentage of children with attention-deficit/hyperactivity problems receiving medications increased from 32% to 78% during this time. These changes also paralleled demographic changes of children presenting to primary care offices in larger populations.

In contrast, Achenbach et al7 used validated behavioral checklists from 1989 to 1999 and reported few differences in youth between reports by youths and teachers of problem behaviors in children between 11 and 18 years of age. The authors note that “this does not necessarily mean all is well among today’s young people.”

**Contexts for children’s dental interactions**

The contexts in which the child comes to the pediatric dentist for treatment needs to be understood so optimal care can be provided. These contexts consist of interactions between the child, parents and other family members, pediatric dentist, dental community, and surrounding environment (Figure 1).

The child’s immediate context is a function of age, prior health care experiences, and often families’ existing attitudes toward dental health. For example, children 3 years or younger are impressed with the newness of the dental operatory, where everything is exciting; they need to explore and move around. These behaviors should be permitted initially and focused on the exploration of new sights and sounds. The advantages of such guided initial interactions are obvious and can set the tone for future dental visits.

![Interactive contexts](image)

Figure 1. Interactive contexts.
Parents bring many expectations to the dental interaction. These include their:
1. expectations of the dentist;
2. health care values;
3. ability to pay for the needed services; and
4. lack of knowledge in preparing a young child for the dental interaction.

Parents often wish the dentist would address more than the immediate dental care issues, especially those related to dental hygiene. Parents’ health care beliefs are not based on biomedical principles, but do follow logical processes. Although obvious, parents have particular expectations which need to be accessed. Dentists should determine how to incorporate parents’ input in the dental interaction. Although parents may value good dental hygiene, they may also value the evidence for this health behavior differently. Therefore, parents often train the child differently than the dental provider expects. Parents value positive outcomes but may not implement the same dentist-recommended pathways to outcomes. If dentists ask for and provide basic educational information, clearly they can increase potential competencies for dental care.

Context for the pediatric dentist
Like all health care professionals, dentists face difficult realities in treating disease within a limited time frame and decreased financial support. The most pressing needs are to deliver competent, safe, comprehensive, and relatively pain-free care in an affordable fashion. These demands place considerable pressures on the pediatric dentist to perform and create major stress within the dental profession. The pediatric dentist’s office environment may also help the child and family if it can be organized in a “child-friendly fashion” to promote an atmosphere that acknowledges the child’s needs. The staff’s child orientation, style, and family centered approach are often key factors in promoting positive dental care for families. In summary, an awareness of the interrelated contexts of the child, family, and pediatric dentists can help promote the “style and quality” of comprehensive pediatric dental care and needs to be addressed concurrently in today’s practice settings.

Childhood fears and the dentist
There are predictable developmental fear reactions as well as types of fears that are noted in the childhood literature. Fear is best understood within a multifactorial context of personal, environmental, and situational factors in combination with the child’s developmental level or intelligence (mental age). Fearfulness is a general personality variable often associated with temperament, shyness, negative mood, or emotional liability. Children ages 2 to 3 years are more reactive to immediate situations and are literal in their framing of fears. These are often associated with strange environments, new situations, and parental separation.

Fears of 4- to 8-year-olds are characterized as related to prior situations, and these children are described as focusing on more imaginative fears and fantasies. Children here begin to anticipate situations and react with fear. Generally, by age 9 and older, fear is more couched in personal failure and social peer situations. Medical fears are a common subgroup. These include fears of doctors, injections, dental situations, and hospitals. These fears are largely based on prior experiences and are often cultured in the families’ particular experience.

The literature on childhood fear reactions in dental situations generally defines reactions of anxiety and fear related partly to prior experience and family endorsed fears. Practically speaking, parents need anticipatory guidance on how to respond to their child’s questions about discomfort or pain during the dental interaction. A joint parent/child/dentist plan of treatment and dialogue is often the best anticipatory strategy for allaying fears. Arnup found that fear and personality characteristics may serve as aids in treatment planning. Nonfearful, introverted, and outgoing children were probably influenced by previous negative dental experiences and dental stress. Fearful, introverted, yet outgoing children were influenced by parental factors. Fearful, inhibited children seemed to be influenced by personal factors, while internalizing, impulsive children appeared to be uncooperative for numerous reasons. These difficult behaviors were not restricted to the dental environment.

Changing families
Today, families in the United States are very diverse. Married, two-parent households only account for 26% of all families, while 8% of children live in married families where the father works and the mother is at home. Today, 50% of children live in single-parent families, and 85% of these are headed by females. Two percent of children are adopted, and 8% to 10% of children live with gay or lesbian parents. Teen parents also head families, or a child may be in foster care. The children may be placed in these families through a formal arrangement with the court and the Department of Social Services. More often, children are informally placed with family members. Child care has also changed our families. Currently, 60% of mothers with children <1 year of age work full-time outside the home.
Multicultural issues
Multiculturalism endorses the integration of cultural values, beliefs, and practices into the patient-provider relationship. It is estimated that by 2020, 40% of school-aged children will be minority group children. Even within multicultural issues, there are some generalities, which should be noted:
1. What is typical of a particular group does not necessarily predict the beliefs of an individual within that group.
2. It is impossible for any health care provider to be familiar with all relevant cultural practices.
3. Each family is a unique cultural unit.
4. Communication skills and partnership building are essential to improving the relationship between the health care provider and family.

Health care providers can effectively demonstrate openness to different family types by asking open questions about the family in a nonstereotyped manner. For example, “Who lives in your home?” “Who supports your family?” and “Who else is involved in the care of your child?” Family history should include all significant caregivers, not just biological ones. This helps note relationship quality, including parenting and behavioral issues. If possible, all significant caregivers should be included in the visit. Health care providers can also revise their questionnaires to be inclusive of all types of families, such as using the word “caregiver” instead of “father” or “mother.” Office décor and reading materials should be reflective of a variety of cultures and family constellations.

Today, approximately 45 million people in the United States speak a language other than English, and 19 million have limited English proficiency. Language issues can, therefore, be very important within an individual practice. Flores et al found in one study that “ad hoc interpreters significantly increase the number and types of clinically significant translation errors,” and they concluded that qualified interpreters should be used, if at all possible. Pediatric dentists can improve communication by recounting key points of a family’s conversation so they may be able to correct misunderstandings, and demonstrate comprehension of the family’s point of view.

Therapy plans should be patient and family-centered. Simply asking “What parts of this plan will be hard for you to do?” or “What do you believe you will not be able to do?” helps anticipate problems before they arise and works to build partnerships with the family. Consent or assent may be needed from influential family and community members and not only the biological parents. For example, it may be important within a family to have a grandparent, aunt, or other person involved in this decision-making. As another example, within the Amish community, consent may need to be obtained from community leaders, as it is often the community that bares the financial burden for its members’ health care.

Pediatric pain management
Major changes have occurred in pediatric pain management over the past 10 years. There is an increased understanding of pain neurophysiology, improved assessments and analgesic techniques, improved medication delivery devices and monitoring protocols, development of clinical pain services, and significant changes in pediatric dentists’ perception toward pediatric pain.

In general, invasive treatment can be described as any painful repeated procedure. However, the child’s perception of the experience must be acknowledged. The outcomes of children undergoing invasive treatments show a mixed impact where some children become anxious, withdrawn, fearful, angry, or hostile, some recall memories, and some have sleep disturbances; others do not have these reactions. One study found children admitted to the pediatric intensive care unit had more lasting fears and a lower sense of control of the future than children on a general ward. Schwartz and Perry stated “the potential long-term importance of children’s perception of their illness experience is supported by work indicating that a child’s level of development, along with parent and family factors, can determine whether or not an event will become a dramatic stressor and lead to ongoing sequelae.”

Three effective methods for treating pain and fear of invasive procedures are: (1) pain medications; (2) noninvasive techniques; and (3) family-centered therapy. Use of pediatric pain medications has increased. Medical examples include sucrose analgesia for infant circumcision, EMLA cream (AstraZeneca, lidocaine 2.5% and prilocaine 2.5%) for IV insertion and blood draws, and conscious sedation such as nitrous oxide for suturing and fracture alignment.

Noninvasive techniques also improve children’s experience of invasive procedures. A comprehensive meta-analysis of pain management techniques found that “distraction had
a positive effect on distress across multiple populations.”

Parents using a combination of 5 nonpharmacological methods found that children reported lower levels of pain than children who received the control. Other studies have shown that parents are willing and highly motivated to provide care to their children, but they lack knowledge and information about their role in doing so.27,28

A literature review of family presence during invasive procedures and resuscitations in the emergency room found that families wanted to be given the option of being present and, when given the option, often remained. Families reported favorable experiences and felt it was beneficial to themselves and the patients. Health care providers had mixed opinions regarding parental presence. Results of randomized controlled trials of parental presence during invasive procedures are mixed on whether or not the family presence actually helps the patients.29 Bachner and colleagues conducted a randomized controlled trial of children <3 years of age undergoing invasive procedures in a pediatric emergency room.30 They found there was no difference in the child’s actual pain between groups. There was more parental anxiety in the not-present group, and there was no significant difference in the clinician anxiety or the performance of the procedure. They concluded that parents want to be present, present parents are less anxious, and parental presence does not affect the performance of procedures.

Communication suggestions
Health care providers should begin to prepare children and parents at every opportunity. Multiple times over multiple days is key to successful communication. For example, when the family makes an appointment, the provider could give information on the back of the appointment letter or send a booklet or video. When the family comes to the office, offering interactive play equipment can help with preparation. It is important to acknowledge that, in certain contexts, it is proper to stop the examination and treatment. If this occurs, rescheduling the procedure and setting expectations for the next visit will help patients, parents, and health care providers.

Other suggestions for communicating with children include:
1. using a relaxed style in the tone of voice;
2. acknowledging the child’s interests, such as sports, reading, or other activities; and
3. talking to them at an appropriate developmental level.

Verbal rewards should be very specific. For example, “You have done a good job holding your head still.” Framing requests as a binary choice can also help with communication. When doing so, make sure the choices are both acceptable. The child should be set up to win with either answer. For example, ask “Do you want me to tap your top teeth or bottom teeth first?” The request should not be framed in such a way that one choice is not acceptable. For example, “Do you want to me to tap your teeth?” should not be asked, as “no” is not an acceptable response.

When speaking with children, truthfulness and reality in the explanations should always prevail. For example, tell them that it will feel funny or hurt for a moment. Explain to them the sights, smells, tastes, and sounds they will experience during treatment.

When communicating with parents, be very clear and concrete about acceptable behavior for them and their children. Work to understand the parents’ reasoning behind their decisions, and individualize the plan for the patient and family. Acknowledging the family’s and child’s strengths and generalizing from these to other patients is a helpful tactic. As health care professionals, demonstrating expertise in child development and empathy for the situation improves rapport.

When preparing parents to be in the operatory or assisting in a procedure, ask if they would like to be present and if they have any experience with this. Tell parents exactly what you expect them to do and not to do. For example, tell them where you want them to stand, how you would like them to hold the child, or if they should talk to the child. It is also important to ask if they can, in fact, do what you are asking them to do. At this time, some parents will choose not to be present or actively involved in helping their child through the procedure.

Behavioral management in pediatric dentistry
The American Academy of Pediatric Dentistry has a long history of developing guidelines for behavior management. These consist of an array of techniques viewed as “a continuum of interactions with a child/parent directed toward communication and education. Its goal is to ease fear and anxiety while promoting an understanding of the need for good dental health and the process by which it is achieved. Communication between the dentist and the child is built on a dynamic process of dialogue, facial expression, and voice tone.”31

These guidelines have consistently served the pediatric dentist well. Changes in these practices from dental training programs and current utilization of practitioners have been minimal. The only exception is the marked decrease in the use of the hand-over-mouth exercise.

The majority of behavioral management procedures are based on the general practice of distraction. The child is usually engaged in conversation during procedures. The tell-show-do is a “behavioral-shaping” distraction technique that is most popular and widely used.31 The use of distraction during medical procedures has a long and substantial history. Numerous authors32-34 have reported behavioral techniques which have been useful in assisting individuals during painful or uncomfortable medical procedure. These include: (1) guided imagery; (2) reading; (3) listening to audio; (4) watching videos; (5) practicing relaxation; and (6) self talk. These methods can be applied by dentists to assist in child management. Niven and Buchanan35 explored different styles of anxious responding children in the operatory. They noted...
that certain children benefited from certain approaches offered by the dentist. Some children preferred “blunting,” a distraction approach, over monitoring. Behavioral distraction approaches can be applied in several ways. They can be practiced prior to the dental treatment session with instruction and guided parental practice. Such techniques can precede the dental treatment session or can be interspersed during treatment when convenient or when needed. Figure 2 shows examples of common behavioral distraction techniques and their potential uses in dental treatment.

All these techniques are frequently used or combined with at least some brief breathing exercises (eg, “breathe in and out slowly” 3 to 4 times). The use of technology to assist these procedures often takes the form of audio headphones playing relaxing music or a TV monitor showing age-appropriate viewing material. Relaxation methods, guided imagery sessions, and verbal self-talk rehearsals are frequently augmented by CDs, tapes, and home-based practice.

Distraction techniques can be used in a variety of ways to assist the child and family. Using these methods often tells the family more about the style and type of pediatric dental practice and can communicate messages of mutual partnering with families. Obviously, these methods require some time and need to be incorporated into the busy dental visit. Practitioners also report that their use often makes the visit more child-friendly and fun in the opinion of their families.

Conclusions

The recurring message given is the child’s voice needs to be “heard” and addressed, which historically has been an integral part of the pediatric dentist’s practice. Today, the child and parent are in an evolving context with many demands on them that affect dental health care interactions. Cooperative behavioral management with children and families can assist in promoting optimal dental care. Enhanced communication and partnership building improves comprehension and compliance with dental treatment. Diagnosing the child and family within the immediate local context is central to developing and accomplishing an effective dental treatment plan.

References


