Guiding and Managing the Child Dental Patient: A Fresh Look at Old Pedagogy

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Abstract: Society’s approach to children during the past half-century has changed dramatically, and a transformation of medical and hospital pediatric care has followed. Dentistry has been slower to incorporate sound, child-friendly approaches to care. Nonetheless, much has changed in dental practice pertaining to children. The regular involvement of parents in the surgical/therapeutic suite is one such change. Expanded communication to ensure informed consent for treatment as well as consent for type of management approach to children is the standard of care. Since sedation policies are becoming more complex, enhancing the skills of all dentists and staff members in the best methods of nonpharmacological child management will be essential in the next decades. Biobehavioral methods will gain prominence, along with better communication skills of the dental team. These changes will occur only if more time and resources are positioned to teach dental students, dentists, and staff the necessary skills. Emphasis must be placed on early, timely intervention; parental involvement; effective communication; cultural competence; and the “medical/dental home” concept as methods to reduce negative dental attitudes and behaviors of children.

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Pedagogy is a term derived from the Greek word paidagogy—a family slave who escorted children to school. It is illustrative to use that image to discuss how to effectively welcome children into the dental setting and guide them through dental procedures. The concept of paidagogos is fundamental to the process of exploring future improvements in pediatric dental health care. Children need dental care—diagnostic, therapeutic, and surgical interventions. The Surgeon General’s Report on Oral Health documents areas of need in pediatric care and specifies that disparities in oral health among racial, cultural, and economic groups are a common finding. For example, many schools report that the most common reason for their young students’ absences from school is dental emergency care. Much more must be done to solve these problems. To perform our modern and technologically advanced treatments, dentists must successfully approach and work in close proximity to the child. Other authors in this issue direct our attention to technological and pharmacological advances. This paper will be low in technology, but it will describe elements essential to building successful patient interaction, patient trust, and patient compliance, all critical to enhanced dental care for children.

Pharmacological Management in Children: Limitations and Complexity

As we have developed better and more effective pharmacological methods to manage fear, anxiety, and pain, many patients have benefitted. It is commonplace for these strategies to be used with our most difficult young dental patients. Nonetheless, there are consequences of drug management. Risks and confounding factors, such as morbidity, mortality, cost, and resources, exist. Although we expect new twenty-first century improvements in pharmacology, measurable risks and considerable costs remain. Moreover, pharmacological intervention often interferes with communication and learning, a desired outcome with any patient.

In addition, the past decade has brought major change in oversight and credentialing for drug-related management methods. National and state regulatory agencies have codified regulations on the use of such agents with children. Increased regulation, although justifiable for the safety of children, has persuaded many clinicians to stop using pharmaco-
logical management techniques. This evolution is not likely to change, resulting in fewer, albeit better prepared, practices that use pharmacology.

Those interested in pursuing pharmacological methods usually try to attain a level of conscious sedation, since the regulations concerning deep sedation or general anesthesia contain mandates that are much more involved and costly. When conscious sedation is the goal, the profession must ask whether it is possible to create true “conscious sedation” in children. The young patient, incapable of understanding the subtleties of anxiety reduction, responds differently from the way cooperative adults respond. It may be impossible to hold a child in an altered state of consciousness for a painful procedure or for a procedure that requires immobility while at the same time satisfying the requirement of conscious sedation that the patient be responsive to vocal or physical stimuli.3

Even with the necessary continuance of conscious sedation to treat some children, the skills of communicative management of the patient remain valuable in improving outcomes of pharmacological management.4 Pharmacological management should always be accompanied by skillful communication methods.

Therefore, because of the complications and confounders in pharmacological management of children and the measurable value of communication, nonpharmacological methods remain highly important for the regular practitioner.

Changing Views of Society Toward Children

Contemporary society places high value on children and on their physical, mental, and emotional well-being. Evidence for this valuation is seen in the recognition of and legal attention to child abuse and neglect and in the contemporary realization that society holds a responsibility to step into the family arena and protect vulnerable children when necessary. Modern health professionals forget that the child protection movement is a recent phenomenon. Work in the early 1960s by pioneering pediatric specialists resulted in the recognition of “battered child syndrome,” leading eventually to all states having child abuse statutes requiring health care providers, teachers, etc. to report suspected child mistreatment. Legal system protection of children has as its basis the first successful protection of a child in the late nineteenth century—a case in which the state of New York had to establish protection for a child through laws against cruelty to animals, the only available legal recourse at the time.6 Current laws regarding the reporting of abuse and neglect, including dental neglect,7 are important cornerstones of child protection.

Pediatric health care has evolved since World War II into a more sophisticated patient-oriented science. In addition to giant steps forward in the technology of diagnostics and treatment, significant attention has been paid to the human aspects of children’s care. Pictures of children in hospitals until the mid-1950s show lonely, scared faces, children who are enduring the stresses of medical care largely cut off from their most vital support system—parents and family. Such imposed isolation is no longer acceptable care. The revolution in pediatric care, initiated by pioneers in mid-century8-12 and formalized by the Platt Report published in Britain in 1959,13 has led to a more holistic approach to child and family management.14 Now, parents accompany children through most experiences in health care. In fact, parents often maintain twenty-four-hour contact with children during in-patient hospitalizations. Parents are involved in much of the decision-making and delivery of care.15 Routinely, children’s hospitals conduct familiarization tours for families scheduled for hospital care. Once they are in the hospital, a specialist in “child life” works with the children to make their time as understandable to them as possible while normalizing life in the hospital by including school time, play time, and typical interactions built to desensitize children to the surrounding health care system.

Parent Involvement in Dental Care

A similar evolution is occurring in dentistry, albeit more slowly. Although most of us were trained that dental care for children should be done far from any probing eyes and the negative input anticipated from parents, now a significant number of dentists use the parents’ presence effectively in treating children. Drawing the parent into treatment decisions through informed consent procedures is now a standard of care. This level of communication has helped
to enlighten parents’ about dental care and the methods by which we perform it on their children.

It was only in the 1980s that published studies examined parents’ viewpoints on many of the routine procedures used by dentists to gain cooperation of children. The first such investigation by Murphy et al.16 queried adults after they viewed video sequences of behavior management methods commonly used by dentists. The results were dismal, showing that parent groups ranked most of the procedures very negatively. Subsequent studies refined this methodology, and these later investigations revealed that educating parents about the why and how of these procedures turns their early negative feelings into much more positive ones.17 During the same decade, legal consultants were making it clear that informed consent was a required cornerstone of our communication with parents. Taken together, these forces led most pediatric health care providers to devote extensive time to parent education, parent involvement, and informed consent. Many of us simultaneously moved to accepting of parental presence during treatment as a logical next step.

Pediatric dentistry, as a specialty, has been a leading advocate for excellence in communication with children—“communicative management” is a phrase often used. Now, these communicative strategies include parents as well. These management tools include verbal and nonverbal communication, the old “tell-show-do” technique, modeling, distraction, positive reinforcement, flexibility, foreshadowing, visualization, relaxation, and the presence of parents.

Health professionals who have experience with children use these methods without thinking. They use what works, and these strategies work. Explaining new and strange procedures to children always helps them understand and cope. The rapport that can be developed with children in a few short minutes of careful talk and play pays great dividends of trust. Trust leads to decreased patient anxiety, which leads to decreased pain perception and pain response (see Table 1). In all, a skilled practitioner’s use of dialogue, expression, and tone of voice leads to success with children; to an untrained observer, the results often look like magic.

Unfortunately, many of the strategies long-used successfully by child health providers are not uniformly understood in dentistry. In fact, many methods and phrases commonly used by dentists lead to negative outcomes in relating to children.18 Yes, there truly are bad patient behaviors that are iatrogenic. In addition, a shortcoming of many dentists when treating children is their lack of knowledge, skill, or attention to the vital performance of providing and assuring profound local anesthesia. Many dentists are uncomfortable with their skills and avoid giving children local anesthesia. It is no wonder that so many children develop bad perspectives on dentistry when it is delivered in that way. Therefore, it is essential that providers who treat children learn what does work with kids and how to use the wonderful strate-

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**Table 1. The relationship cycle in child management**

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<tr>
<th>Rapport Building</th>
<th>Honest Explanations and Foreshadowing</th>
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<td>↑</td>
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<tr>
<td>Increased Trust</td>
<td>Good Technique on Simple Procedures</td>
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<td>Excellence in Delivery and Assurance of Profound Local Anesthesia</td>
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<td>Decreased Pain Perception and Pain Response</td>
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gies available, so that dental care for children can be a more enjoyable experience for all involved. For this vision to become reality, many more dental professionals will need to be aware of and skilled in the communication management methods advocated by the American Academy of Pediatric Dentistry.\textsuperscript{18} It is informative to mention several behavioral issues to serve as examples of such expected changes.

**Parental Presence During Treatment**

Let me use the issue of parental presence during treatment as an example of progress in child care. Parental presence illustrates a pedagogy that has changed. Consider the *paidagogos* in this example to be the parent escorting children to the dental treatment setting.

Until recently, parent involvement during dental treatment was minimal; in fact, it was actively discouraged by the dental staff. Subsequently, pediatric practice has evolved to match prevailing societal attitudes that ask for more parental involvement. Other health providers work closely with parents now, often using them as support systems in hospital treatment rooms, oncology therapy suites, and even anesthesia induction areas. In light of the literature that shows the overwhelming interest that parents have in accompanying children during stressful procedures\textsuperscript{20-22} and in light of the changes in the medical view of parental presence,\textsuperscript{21} it is surprising to find many dental clinicians very firm in their stance against parent presence in their treatment rooms. Although viewed as a personal opinion by clinicians, strong data support parent presence for young children during procedures.

It is not a goal of this paper to argue for or against parent presence in the operatory, but rather to suggest a way in which the presence of parents may be used to an advantage. Primarily, it is assumed that all professionals agree on parent involvement in the process of treatment and patient management decisions. Informed consent is a legal and practical reality, and communication is the cornerstone of that process. Regarding the decision of whether to allow parents into or ban them from the treatment setting, consider three key priorities. The first priority is to communicate effectively with parents; second, we must involve parents in decisions that affect their children; and third, the dental team must stay within their own personal comfort zone regarding patient management decisions. Nonetheless, the presence of the parent can be a useful tool for dental practice, allowing the informed consent and communication steps to be streamlined into the course of normal office flow. It is clear that children are always "escorted by parents" into the treatment area, whether that escorting is done in reality or imaginatively. Thus, the use of the term "pedagogy"—a form or method of teaching. The ability of the parents to see what we do and observe how hard we work helps in communication with them. They see the reality of the kindness, guidance, and communication we extend to their child, rather than sitting in the waiting room and imagining what is going on, conjuring up images of dental treatment from their past. We do things differently now! It is important to give parents and children that message and have them witness that fact.

Parental presence can also be used as a communication aid and a reassurance for parent and child. We want the parent to "come to school," pedagogically speaking, with the child, for we have things to teach them both. It is possible to do that teaching simultaneously. My initial phrase to parents is "We have an open-door policy here. You can come in or go out as you wish. But I also reserve the right to tell you, based on my long experience with treating children, when I think your child would do better if you went out to the waiting room. You, then, can decide whether or not to leave."

There are advantages to parental presence. Data from past studies suggest:

a) no increase in negative patient behavior with parents present,\textsuperscript{22-26}

b) great parental interest in accompanying their child,\textsuperscript{21,22} and

c) improvements in patient management and anxiety reduction in medicine and dentistry when parents are effectively involved.\textsuperscript{25,27-29}

Societal wishes and expectations lean strongly toward parental presence and involvement. Therefore, our job is to determine how best to use it in a way that is advantageous for the child patient and the dentist. This change has enhanced my own communication skills, and it drives us all to better communication with child and parent. One constantly reviews the use of words and phrases when considering the wider audience of child and parent.

Many advantages flow from simultaneous communication with child and parent (see Table 2). As mentioned before, parents see the reality of our work
with their child. This serves as proof of our hard work and our caring approach. For most of our methods, the way we approach and communicate with children is a model of respect and effectiveness. It serves as a practice builder, since most parents are impressed with what they see. The value of a parent hearing all the dental education messages you give the child sets them up to be reinforcers of these messages at home. In addition, the perceptive dentist can gauge the feelings of parents concerning the dental care or the behavior management methods. Informed consent discussions can take place immediately in the event of change in treatment need or management strategy. The last advantage is possibly the most important. Parents are appropriate support for very young children in new and challenging situations. Without question, parent presence is important to the feelings of well-being of certain children, especially the very young and some developmentally disabled or mentally challenged patients.

Disadvantages exist as well, but these are outnumbered by the advantages. Clearly, the parent must be coached on how to help the health care provider, how to let the clinician maintain primary communication with the child, and how to avoid fear-provoking messages. Therefore, the professional must be able to manage the child and the adult.

As a care provider, we all serve as actor, teacher, guide, and wise counsel. Putting these skills to work for parent and child simultaneously can be efficient and effective. The amazing successes you have with children as patients can be wonderful images for parents to carry with them as they extol your virtues to others in the community.

### Behavioral/Imaging Methods and Dentistry

Expanding the concept of communication to another level leads to biobehavioral methods with children. In this age of high-tech wonders and truly remarkable drug improvements, pediatric care by some professionals focuses on the value of powerful mental strategies, for which the creative minds of children are fertile and receptive. These health care providers maintain an abiding interest in some of the pain and anxiety management strategies that preceded effective pharmacological techniques. Historically, an upsurge of interest in the work of Franz Anton Mesmer swept the continent of Europe and then the United States in the early to mid-nineteenth century, leading to a variety of credible and some less credible claims of therapeutic value in psychiatry and medicine. Some of the most reliable reports of success with hypnotism involved relaxation and analgesia. In the late 1800s and early 1900s, hypnotism, other forms of mental imagery, and distraction methods were practiced by many of our professional predecessors because there were few analgesics or sedative alternatives. With the dawning of the age of pharmacological analgesia, many of these methods lost favor. Clearly, there is still value in the practice of these strategies, and I suggest that a new era of behavioral, psychological strategies will parallel our improvements in pharmacological techniques, allowing young patients to be empowered in their treatment lives.

This therapeutic direction is evidenced by work in pediatric settings where formal techniques of hypnotism and imagery are used regularly. In work published by Leora Kuttner, practicing in the Children’s Hospital in Vancouver, B.C., she reports striking improvement of children’s acceptance and compliance with medical procedures using hypnotism, imagery, and the involvement of parents. Pediatricians Karen Olness and Don Kohen pioneered hypnosis strategies in young patient care at Minne-

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<th>Table 2. Advantages of parental presence during procedures in dentistry for children (effectively using the Paidagogos)</th>
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<tr>
<td>1. Parents want to accompany children in stressful situations.</td>
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<td>2. Parents view the reality of our excellent care.</td>
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<td>3. Parents see proof of the dentist's hard work and caring approach.</td>
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<td>4. Parents are not left imagining our interaction with their child.</td>
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<td>5. Parents feel a part of the process of decision-making and care.</td>
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<td>6. Health care messages can be delivered simultaneously to child and parent.</td>
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<td>7. Dental care delivered can be described simultaneously to child and parent.</td>
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<td>8. Communication time is saved by decreasing need for repeated messages.</td>
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<td>9. Dentists can get rapid informed consent for changes in treatment or management.</td>
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<td>10. Dentists can get rapid feedback on parent's attitude and beliefs.</td>
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<tr>
<td>11. Very young children can get appropriate physical and psychological support.</td>
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<td>12. Patient behavior and anxiety reduction can be improved.</td>
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More recently, neuroscientists have advanced our understanding of the psychological and neural mechanisms of the affective dimension of pain. Brain scanning and neurobiological investigations allow a clearer definition of pain control as a bi-directional system that includes modulations of pain sensation and perception at many levels of the nervous system. Studies show clear and measurable physiologic effects in the central nervous system caused by hypnotic and mental imagery strategies as well as placebo treatment in the modulation of pain. Thus, the strategies of communicative management with children and careful interaction with patients, viewed from the perspective of their ability to command the power of support, suggestion, and even hypnotism, should be accepted as a credible influence on improving patients’ impressions of the treatment experience.

Other behavioral methods have been proven effective in managing children during stressful situations. Allowing a child to perceive some control in frightening situations reduces physiological and clinical measures of anxiety. Strategies of explaining and structuring the time of an appointment, giving children signal mechanisms to allow them the opportunity to interrupt care and to communicate, and engaging children in an active role in the appointment procedures all are part of contemporary pediatric care. Such strategies are gaining additional favor and acceptance and have been recently reviewed. In such circumstances, reinforcers and brief escape from dental treatment are made contingent upon periods of cooperative behavior.

Those who pay attention to communication strategies with children fold into daily actions the elements of mental imagery, suggestion, distraction, behavioral methods, and hypnosis. Few of us name our methods that way, and fewer study the full potential of such old strategies. Regardless of our acceptance of the power of hypnosis and imagery, we all can take some successful aspects of these tools and make them work for our own style of communication. A calming, warm, and engaging voice and the use of positive images, positive reinforcement, and foreshadowing statements are fundamental clinical tools for many of us, yet few of us call these actions by their formal names. We know the powerful effect such a verbal method can have on young children, even those children who are preverbal or those who do not understand our language. The wholesale recognition of this powerful style of communication among providers of pediatric care would open many avenues of successful treatment previously thought to be impossible.

### Voice Control as a Communication Example

It is always interesting to note when studies confirm the value of methods used by one’s profession for decades, but initially only based on anecdote and belief. Such confirmation has occurred with the basic method of communicative management called voice control, defined as a controlled alteration of voice volume, tone, or pace to influence and direct a patient’s behavior. Although all who deal with children use the method—for example, a parent or teacher calling out loudly, “Johnny, do not go near the waterfall”—some question its use in the controlled environment of health care delivery. In addition, some misunderstand the concept of gaining a child’s attention and consider that the clinician is angry when the voice changes or the volume rises. Greenbaum et al. found that the contingent and specific use of firm commands, at points where children were beginning to lose control and drift away from communication, led to much more control, compliance, and good behavior during dental treatment and led to the patient’s better sense of self-worth after treatment.

### Flexibility in Managing Children

Flexibility is a fundamental skill in pediatric care because teaching only one or two methods of speaking with children will never solve the problems of managing behavior in the dental office. Many different approaches are necessary to be able to communicate with the variety of children who enter the dental operatory. Some need upbeat encounters; some need quiet ones. Some are overly assertive and ag-
gressive; some are very introverted and withdrawn. All need communication, teaching, and guidance in the new environment. Therefore, the health provider must have many tools in his or her tool chest and must be ready to use many approaches, all with the fundamentals of communication in mind. The expert can try one approach, evaluate its effect, and immediately alter the approach if necessary until finding one that works. As stated in the Behavior Management Guidelines published by the American Academy of Pediatric Dentistry, “Behavior management is as much a clinical skill as it is a science. It is not an application of individual techniques created to ‘deal’ with children, but rather a comprehensive methodology meant to develop a relationship between patient and doctor that ultimately builds trust and allays fear and anxiety.”

It is also critical to recognize what effective communicative management of young patients is not. It is not “talking nicely” with kids. It is not letting the child set the agenda for the dental visit. It is not accepting the parent’s ideas about dental health and caries diagnosis while abdicating the dentist’s responsibility. Instead, it must be described as a dentist-patient, teacher-student relationship in which the health care provider holds the significant power afforded by knowledge and experience. We then spend time in pedagogy, teaching the parents and children an understanding of the need for good dental health and the process by which this health is achieved. All the while the dental health provider/teacher is working to allay anxiety and fear and is setting the tone for respectful interaction, guiding the child to comply with the dental teams’ suggestions and directions. This is where a critical knowledge of principles of child psychology, educational methods, effective verbal and nonverbal communication, and leadership and command all coalesce into a comprehensive methodology of behavior management for children.

Medical/Dental Home Concept

All of this discussion of effective communicative management leads to the conclusion that there is a need for a relationship—a friendly, familiar environment—a concept that has been labeled the “medical home” by our pediatric colleagues. Many barriers to health care exist today, and our most vulnerable populations, the ones with the most pathology and unmet needs, are faced with tremendous challenges in obtaining care. Recent work by Ismail and Sohn show clearly that removing only the financial barriers to care does not necessarily result in more access to care. The issue is much more complex, and the solutions will need to be comprehensive.

The medical home concept suggests that some strategy be developed by which each family has a familiar place to go in their search for health care. This concept argues for a place that does not change each year with the vagaries of the third-party payment system, governmental support, or practitioner market. Medical studies show that having such a home allows appropriate care to be initiated more often in the primary care center than in the emergency room. This concept supports a place where all families feel they will be welcomed for regular, comprehensive care and where they are understood and valued. Empirical evidence suggests great value to a long relationship with child patients, one that allows additional learning and reframing of experiences after difficult procedures have been needed. This can only occur if the family has a comfortable relationship with the dental home. The present alternative is a system that leads to episodic and emergency care.

In a familiar and welcoming environment, relationships can be made with children that yield compound interest in the treasured wealth of behavior management, easing the stress of health care for children. In addition, a medical/dental home enhances familiarity of professional staff with the stresses of individual patient’s family life that often influence children’s behavior in our offices. A medical/dental home is much more likely to establish compliance of parents with early and regular care, a cornerstone of prevention in dentistry, and it is much more likely to lead to better child acceptance of dental and other health care procedures.

Summary

This decade will produce a health care movement running parallel to pharmacological and technological improvements. This movement will lead to better understanding and implementation of communication skills, an appreciation of the power of careful guidance of children through the learning phase of health care, and a commitment to finding all families a medical-dental home. This
nonpharmacological movement will be synergistic with the pharmacological one, because the use of these strategies will help with or without drugs, enhancing drug action when drugs are necessary, and will decrease misunderstanding between providers of health care and recipients. Such a movement will require upgrading education of health care providers, and it will require funding agencies’ investment. It will rest on an understanding of the old Greek perspective that paidagogos, the slave that escorts children to school is, in a sense, made up of a part of all of us—parents and care providers—and that with such an escort, pediatric health care can be more pleasant and effective for all concerned.

REFERENCES