Predicting the Future

Our equipment, once new, is now old and in need of replacement. In preparation for a major renovation of our clinic, we were asked to predict where pediatric dentistry would be in 20 years. Predicting the future is always difficult since what appears to be certain often turns out not to be, and what is unplanned usually occurs. For example, more than 40 years ago a dental caries vaccine was predicted. Today, not only is it unavailable, but it is also unlikely to be developed due to various methodological problems. Forty years ago, at a time when high speed belt driven headpieces were used, it was predicted that the slower speed, high torque, water-driven, turbojet handpiece would win out over the high speed, low torque, air-driven handpiece. The opposite occurred and today most headpieces are air-driven.

Over the years, just as dental practice has changed, dentistry for children has evolved. Whereas most of our time was previously spent treating disease, now much time is spent preventing disease. Yet, there are still too many teeth in need of repair and there is still too much pain experienced by children with oral infections. Though our tools look a little different than they were, they still remain essentially the same. We still use injected anesthetics, and we still place stainless steel crowns. Although some predicted a decreased need for pediatric dentistry, the reverse occurred with a greater demand now for dental care for children. But what of the future? What will occur in coming years, in regard to types of patients, disease patterns, and treatment methods?

The types of pediatric patients treated by general practitioners and pediatric dentists will likely change and patients will become both younger and older. The recommendation of our Academy for infants to be examined at approximately one year of age to prevent early childhood caries will be more widely accepted and infants will be brought to the dentist at an earlier age. Conversely, dentistry for teenagers will be re-emphasized and this important age group will not be neglected as it is now. More children who are different, whether because of culture, socioeconomic level, medical condition, or physical or mental handicap will be treated by general practitioners and specialists. Health will be the goal for all children and not just a select few.

In the near future, disease patterns will be similar to the current occurrence of oral disease, but they will change too. Caries will decline for some but will increase for others. Gingivitis and other soft tissue lesions in children will receive increased emphasis rather than being ignored, as now occurs. Saliva, oral soft tissue, and teeth will become diagnostic tools for understanding systemic conditions.

Treatment approaches will be modified and both non-pharmacologic and pharmacologic behavior management methods will be changed. The use of restraint will decrease and the use of nitrous oxide and other conscious sedation methods for the management of difficult children will increase. New anesthetic methods with alternative delivery systems and more potent, shorter acting drugs will be developed. While most current operative procedures will be performed, newer generation bonded materials will drastically change cavity preparation design, and the use of stainless steel crowns will decline. New technologies, such as laser and air abrasion, will be refined for optimum use with children. Anti-microbial agents to control or reverse gingivitis, dental decay, and a variety of pulpal conditions will be recommended. Sealing active dental caries will become a recognized treatment method. Earlier interceptive and remedial orthodontic treatment will be recommended. Not only will new equipment, instruments, and devices be developed, but also expanded duty personnel will become much more accepted. Additionally, dentists treating children will have new concerns. For example, tobacco and other substance abuse will be discussed in the dental office. An increased partnership will develop with pediatricians to promote general health and well-being rather than to treat disease.

People will become educated consumers of health care. They will question the value of dentist-applied topical fluoride, particularly in fluoridated areas, or for those children who have been caries free for many years. They will seek justification for semi-annual rubber cup prophylaxis to remove plaque. As consumers, they will seek evidence based treatment.

While it is difficult to predict the future, it is unmistakably clear that pediatric dentistry will increase in importance in the United States and around the world. Specialists and general practitioners will meet the challenge so that all children will grow and develop with optimum health.

With this issue of the journal, I am completing my three-year term as Editor-in-Chief of the Academy. During that term, I reviewed 375 manuscripts. One hundred and seventy-one papers were subsequently revised and published. I have worked together with numerous authors, and was able to implement many reader suggestions. Nevertheless, it was the combined efforts of the Editorial Board, the Abstract Editors, the Clinical Board, a dedicated production staff, and the many authors who write for the journal that *Pediatric Dentistry* remains the preeminent international journal of the specialty. The Academy's Board of Trustees has renewed my appointment for the coming year, and I look forward to continued service to our readers.