

Looking ahead in pediatric dentistry

AS WE BEGIN THE LAST DECADE in this century it seems appropriate to look ahead in pediatric dentistry and make some predictions regarding the future of our specialty. However, before looking ahead, it may be instructive to look back and review some of the predictions that were made three decades ago about where we would be in 1990.

Dr. J. Roy Blayney, in a presentation to the Illinois Unit of the American Society of Dentistry for Children in 1959, made the following statement. "The practice of dentistry, particularly the practice of dentistry for children, would in the foreseeable future take the same course as pediatrics." Dr. Blayney spent less than 10% of his time treating diseases while the majority of his time was spent practicing preventive measures designed to prevent not only infectious diseases but the deficiency states as well.

Your editor also attempted to look ahead almost three decades ago (1961) and predicted that the interest in dentistry for children would continue to rise and would be reflected in changes in undergraduate, graduate, and postgraduate dental education. He predicted that the pediatric dentist would assume more responsibility for tooth movement and orthodontic preventive procedures. Preventive procedures to control dental caries and inflammatory changes in the gingival and supporting tissues would be widely accepted. It was suggested that while research in pediatric dentistry encompassed almost all aspects of dentistry, there was a pressing need for expanded clinical research—particularly in areas such as child behavior, oral habits, reactions of teeth to traumatic injury, and periodontal disease. While many of these predictions have come true there is still need for research in both the basic science and clinical areas of pediatric dentistry.

In a recent report, Waldman (1989) referred to a continuing decrease in the prevalence of dental caries in U.S. school children observed during a 1986-87 national study of almost 40,000 children. Almost half of U.S. children age 5 through 17 years are caries-free in their permanent dentition. Almost two-thirds of

carious lesions involve occlusal surfaces. Interproximal caries is approaching eradication in some groups of children. However, at the same time, there are reports that children and their families are using dental services more frequently. Some of our colleagues refer to these survey figures and point to the bleak future for pediatric dentistry because of the rapidly decreasing dental caries experience.

A different view, however, has been expressed by Davies et al. (1985) who believe that it is premature to predict that the current improvement in oral health necessarily will reduce consumer demand for dental care. An intriguing hypothesis was presented—that improved oral health might lead to a *greater* demand for dental services. This hypothesis is supported by the fact that better educated and higher income groups enjoy better oral health. It also is recognized that with increases in insurance coverage for dental services some of the economic barriers to dental services will be removed. In just a five-year period between 1981 and 1986, the percentage of employees in medium and large firms with dental insurance increased from 61% to 71%.

Additional interesting information has been obtained from the American Academy of Pediatric Dentistry Task Force Survey. Data were collected from more than 80% of pediatric dentists in private practice. Dentists noted that there continues to be a strong demand for restorative services. There also is considerable need for pulp therapy in spite of the emphasis on general preventive practices and exposure to fluorides. There is a need and demand for pediatric dentists to continue providing a full spectrum of behavior management, including nitrous oxide and other forms of conscious sedation. Also, it was reported that although management of the developing occlusion is a significant service provided by pediatric dentists, it has by no means superseded the preventive and restorative activities of the specialty. Those services of the pediatric dentist demonstrating increased demand could be grouped as preventive measures, esthetic material restorations, infant

screening, parental counseling, and guidance of the developing occlusion. Of these, infant screening and parental counseling are especially unique to the specialty and provide an effective basis for a preventive program.

It is anticipated that in the future, pediatric dentists will continue to be more heavily involved in providing care for the developmentally disabled, particularly in the hospital setting. As indicated by Waldman in 1989, many pediatric dentists, as a result of special training and experience, are in the forefront in the care of special population groups including the developmentally disabled.

In the decades ahead, the pediatric dentist will give even greater emphasis to dietary counseling. Currently, this practice is a part of the infant dental care program that many pediatric dentists consider their responsibility. In the future, however, perhaps they also will target older patients in their practice. Story (1989) has pointed out that adolescence is a critical and complex developmental period in which major biological, social, psychological, and cognitive changes occur. These developmental changes impact strongly on the eating behavior patterns of adolescents. Teenagers often are searching for independence, self-identity, and peer acceptance. This search, coupled with an active lifestyle often results in missed meals, frequent eating away from home, increased snacking, adoption of fad diets and—especially for females—restrained eating practices. It therefore will become an increasing challenge for nutrition educators and health professionals, including the pediatric dentist, to work with teenagers and their families to promote healthy eating patterns and develop lifetime skills for healthy eating.

Looking ahead, it is quite probable that there will be a shortage of dentists to meet dental needs in the decades ahead. In 1989 there were 138,749 active civilian dentists with a ratio of 56.5 dentists per 100,000 population. From 1997 through the year 2000

and beyond, there will be a continuing decrease in the number of dentists and the dentist-to-population ratio. By the year 2000 the dentist-to-population ratio will decrease to 53.0 per 100,000 and there will be a further decrease to 48.4 per 100,000 by the year 2010. It also should be noted that the number of accredited advanced education programs in pediatric dentistry has been decreasing; in 1984 there were 59 programs; in 1988 there were 55. The number of graduates of pediatric dentistry programs also has decreased from 157 in 1984 to 137 in 1988, a 13% decrease. The potential decrease in additional numbers of graduates and the increasing number of children in the United States will present a challenge for pediatric dentists to provide all the care needed.

What your editor stated in 1961 is still true today: "The future of pediatric dentistry is indeed bright. This prediction is true regardless of the specialized field of interest—be it practice, teaching, or research. One who is interested in pediatric dentistry may be limited in his or her achievement perhaps only by a lack of imagination and foresight."



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