

Difficult children: the practical experience of 145 private practitioners

Philip Weinstein, PhD Peter K. Domoto, DDS, MPH
Tracy Getz, MS

Abstract

This report details child management problems of 145 Washington dentists and seeks to determine if dental school and continuing dental education courses have met practitioners' needs. An average of one third (21) of all patients seen per week (60) were children. Of that number, 6.5 percent presented difficulties. Fifteen percent of the practitioners reported twenty or more percent of child patients as problematic. Infants and toddlers were the most difficult age group to manage. Rates of successful treatment for problem categories were as follows: inability to communicate (29%), lack of cooperation (50%), "out-of-control behavior" (61%), and fear and anxiety (75%). No one technique for managing child behavior was used more often or more successfully. Referral rates for the problem categories also varied. One-third of the practitioners graduating prior to 1973 reported formal instruction in child management. All subsequent graduates indicated some instruction. The vast majority of practitioners feel child management should be required in dental school and electives and CDE courses should be available. Findings document that serious recurring problems exist and provide support and direction for the development of educational programs to meet practitioners' needs in the management of children.

Introduction

In treating children, it is often said that the process of providing care is at least as important as the outcome: the completion of needed dental care. Research indicates that childhood dental appointments establish behavioral patterns and expectations that maintain themselves into adulthood.¹

In the past, dentists had few options when faced with problem behavior. Disruptive children were usually physically restrained, sedated or treated under general anesthesia.² More recently, child management based on behavior modification^{3,4,5} and communications theory^{6,7,8} has emerged. Nonetheless, there has been no assessment of the problem that general practitioners face. Neither are data available on how practitioners are using the new options available in treating

difficult-to-manage children.

The dental curricula of the past did not consider the study of human behavior.^{9,10} With the recognition of the importance of child management and the availability of new management procedures there has been a recent expansion in dental schools and continuing education courses of offerings in the application of behavioral principles to child management in the dental office.^{11,12}

A recent report has shown the effectiveness of new dental school courses in increasing skill and confidence in child management.¹³ No similar report exists for continuing education.

Purpose

This research is a systematic attempt to collect information on the experience of general practitioners in the management of children. It reports the nature and extent of child management problems of 145 Washington dentists and seeks to determine if dental school and continuing dental education courses have met the needs of the general practitioners.

Methods and Materials

Questionnaire: A fifteen-item questionnaire was developed and pretested. The instrument provides information about: 1. the nature and extent of behavior problems (age distribution of children, percent of children presenting behavior problems, and ratings of the difficulties encountered in treating children of various ages); 2. techniques employed in the management of difficult children (critical incidents¹⁴ data — what was the child doing, what was done, the outcome) and referral patterns; and 3. the experiences and attitudes of practitioners concerning pre-doctoral and continuing education courses (descriptions and ratings) in pedodontics. Responses to the questions were coded. Frequencies, means and standard deviations were calculated, as were intercorrelations between selected items.

Subjects: This instrument was mailed to a 33 percent sample of randomly selected members of the Washington State Dental Association. The cover letter requested that only general practitioners treating children complete the questionnaire. Of the 307 questionnaires mailed, 33 were not delivered and 51 were returned by practitioners not treating children. Of the 153 usable questionnaires received, eight were completed by pedodontists and 145 by general practitioners. This report is based upon the response of these general practitioners. Approximately one-half of Washington practitioners are graduates of the University of Washington's predoctoral program.

Practitioners in this study were found to have practiced general dentistry an average of 16 years and to have worked with children 15 of these 16 years. Forty-four percent had 10 years or less experience in practice, 35 percent 10-20 years, and 21 percent greater than 20 years experience. The returns were checked for respondent bias by comparing the distribution of years in practice of respondents to that of all Washington dentists. No significant difference was found. A sample of non-respondents were interviewed over the telephone and no response bias was evident. Thus, it appears that the findings reported here are representative of Washington dentists.

Results

1. Nature and Extent of Problems. Practices reported treating an average of 61 patients in a typical week (the variation was large, standard deviation = 29.3). The percentage of children treated by age each week and the perceived degree of difficulty in treatment is presented in Figure 1. An average of 6.5 percent of all children were perceived as problematic. This means that one to two children each week present behavior problems. Fifteen percent of practitioners reported 20 percent or more of child patients as problematic, an average of four or more children presenting problems each week.

2. Management of difficult children. Utilizing "critical incidents questions," 14 practitioners were asked to describe in considerable detail the most difficult behavior problem actually managed in the preceding three months ("What was the child doing? What did you do" and "What was the outcome?"). Rates of successful treatment (judged atraumatic, treatment completed) reported by general practitioners varied for the different categories of problems. Results are presented at right.

Techniques used to manage difficult children ranged from hand-over-mouth, mouth props, premedication with valium and N₂O, to praise, desensitization and careful explanation. Analyses indicate that no one technique was utilized by general practitioners signifi-

Figure 1. Percentage of children treated per week and perceived difficulty.

Age Group	% Per Week		Perceived Difficulty (1 = Very Difficult, 7 = Easy)	
	\bar{x}	S.D.	\bar{x}	S.D.
0-3 Infants and Toddlers	3	4.3	3.3	2.04
4-5 Preschool/ Kindergarten	15	10.1	5.0	1.54
6-11 Grade School	38	13.8	6.2	1.21
12-14 Junior High	44	16.9	6.6	.81

cantly more often than any other technique. No one technique resulted in more "successful completions" than any other technique.

Seventy-five percent of respondents indicated that they refer some difficult-to-manage children. Of the referrals made to pedodontists, 28 percent were for lack of cooperation, 28 percent for inability to communicate, 15 percent for out-of-control behaviors, and 12 percent for fearful/anxious behaviors.

3. Education and Experience. As dental students, 48 percent of respondents had some formal instruction regarding the management of children. Instruction ranged from "nothing" to 20 hours of lecture and a course in which students were videotaped in clinic. Only approximately one-third of practitioners graduating prior to 1973 reported receiving formal instruction in child management.

As practitioners, 16 percent indicated that they had participated in at least one CDE course or study club that provided instruction in child management. Responding to a question as to when child management should be taught, only four respondents indicated that child management was "unnecessary to identify and teach as a special area." The vast majority (141 of 145) felt this subject should be required in the dental school curriculum. A significant proportion believed

Problems encountered in last three months	Frequency of Responses	Rates of Successful Treatment
Fear and Anxiety	8	75%
Lack of Cooperation (defiance, body movement, refusal to open)	50	50
Difficulty with Parents	0	—
Inability to Communicate (too young to reason, mentally retarded, lack of maturity)	7	29
Out of Control (screaming, kicking, tantrums)	13	61
Gagging	0	—

electives in dental school and continuing dental education courses after graduation should be available (112 of 145 and 113 of 145, respectively). Differences between more and less experienced groups of practitioners were not found for any continuing education question.

Intercorrelations (Pearson's r) were calculated for a limited number of selected variables to indicate the effect of experience. Results show that when few children are treated each week, there is a greater likelihood ($r = -.38$, $p = .001$) of making a referral when behavior problems occur. Years-of-experience with children was not found to be related to the rate of referral of problem patients ($r = .12$, $p = .75$). Ratings of the ease of management of young children (0-3 and 4-5) were significantly correlated with the percent of children seen in these age groups ($r = .21$, $p = .02$; $r = .17$, $p = .04$, respectively) and the years of experience of the practitioners ($r = .26$, $p = .002$; $r = .27$, $p = .001$, respectively). The more young children were seen, and the more years of experience the practitioners had, the less difficulty in treating young children was perceived.

Discussion

The purpose of this study was to determine the experiences of a representative group of Washington general practitioners. Results indicate that managing children, especially young children, presents real problems for our sample of practitioners. Lack of cooperation, e.g., refusal to open mouth, inappropriate movement, etc., was the most frequent encountered problem. However, inability to communicate, e.g., age or mental status, results in the lowest rate of successful treatment. Some caution must be taken in interpreting these results, as 41 practitioners in our sample did not respond to the critical incidents question.

In attempting to understand the differences in rates of referral, one hypothesis is that difficulties occurring early in treatment may be the most likely to result in referral. Lack of cooperation and inability to communicate may be evident during early non-restorative appointments. Practitioners may be less likely to refer children when problems such as needle fear or tantrum during injection emerge in later appointments. Further investigation is needed to determine the explanation behind differing referral rates.

The general practitioners studied were able to specify the nature and extent of the management problems encountered. However, no one technique appeared to practitioners to be more successful than any other management strategy in ameliorating problems. Pharmacological approaches were as unsuccessful as non-pharmacological approaches. Formal dental school training in child management is a recent undertaking. However, results indicate that instruction in

child management is valued by experienced, as well as inexperienced practitioners. General practitioners believe dental school and continuing education offerings should be available in this subject.

This study suggests that regular and frequent contact with young children is at least as important as overall years of experience in the successful management of children. Practitioners may develop greater confidence as increased numbers of children are seen, which in turn facilitates management of more difficult children and decreases referrals. Sufficient supervised contact and experience in treating young children appears to be an important component of any professional education program.

This investigation was supported by Research Grant 1 RO1 DE04770-01A1 from the National Institute of Dental Research and Training Grant 5T24 MH14767-03 from the National Institute of Mental Health.

Dr. Weinstein is associate professor and acting chairman, department of community dentistry, Dr. Domoto is associate professor and chairman, department of pedodontics, and Dr. Getz is lecturer, department of community dentistry, University of Washington, Health Sciences Building, Seattle, Washington 98195. Requests for reprints should be sent to Dr. Weinstein.

References

1. Forgiione, A. and Clark, E. Comments on an empirical study of the cause of dental fears, *J Dent Res*, 53:496, 1974.
2. Drash, P. W. Behavior modification. In L. A. Fox ed. Symposium for the handicapped child, *Dental Clinics of North America*, 18, 1974.
3. Chambers, D. W. Managing the anxieties of young dental patients, *J Dent Child*, 37:363-374, 1970.
4. Rosenberg, H. M. Behavior modification for the child dental patient, *J Dent Child*, 41:111-114.
5. Barenie, J. T. and Ripa, L. W. The use of behavior modification techniques to successfully manage the child dental patient, *JADA*, 94:329-334, 1977.
6. Till, M. J. and Brearley, L. J. Communicating with children, *Northwest Dent*, 50:392-397, 1971.
7. Kreinices, G. H. Ginott psychology applied to pedodontics, *J Dent Child*, 42:119-122, 1975.
8. Chambers, D. W. Communicating with the young dental patient, *JADA*, 93:793-799, 1976.
9. Gies, W. Dental education in the United States and Canada: A report to the Carnegie Foundation for the advancement of teaching, New York: Carnegie Foundation, 1926.
10. Hollinshead, B. S.: Survey of Dentistry, Washington, D.C. American Council on Education, 1961.
11. Council on Dental Education Dental Education in the United States in 1976, Chicago: American Dental Association, 1977.
12. Council on Dental Education Continuing education courses listing for July through December 1979, *JADA* 98:963-981, 1979.
13. Domoto, P.K., Weinstein, P., and Getz, T. A pilot study utilizing remote broadcasting equipment to provide instruction in pedodontics, *J Dent Ed*, 43:599-601, 1979.
14. Flanagan, J. C. The critical incident technique. *Psychol Bull*, 51: 327-358, 1954.