

Survey of attitudes and practices in behavior management

Association of Pedodontic Diplomates

Abstract

Members of the American Academy of Pedodontics were surveyed in March of 1980 by the Polling Committee of the Association of Pedodontic Diplomates. A similar survey of members of the Association of Pedodontic Diplomates had been made in 1971. The 1980 survey compared the attitudes and practices of Diplomates of the American Board of Pedodontics with those of the total membership of the American Academy of Pedodontics, to determine if the attitudes and practices of the Diplomates are a valid representation of those of the membership of the Academy. Significant changes in certain attitudes and practices of the Diplomates since 1971 could also be determined. The only significant differences in responses from the Diplomates and the total membership were in three areas of the attitude survey. In the 1971 survey, 35.8% of the Diplomates indicated they used hand-over-the-mouth airway restricted as compared to 54% in this survey. In 1971 only 35% used nitrous oxide analgesia as compared to 65% in 1980. On the basis of the results from the 1980 survey, it appears that in future studies the practices being used by pedodontists can be determined by polling the Diplomates alone, as an economical and valid alternative to conducting a survey of more than 1700 Academy members.

Introduction

The Polling Committee of the Association of Pedodontic Diplomates (Paul Starkey, D.D.S., David Avery, B.S., D.D.S., M.S.D., Arthur Klein, D.D.S., M.S.D., Chairman; and special consultant Leonard Koerber, B.A., M.A., Ed.D.) surveyed members of the American Academy of Pedodontics in March of 1980 to determine their attitudes and practices regarding the management of child behavior in the dental office. A similar survey of members of the Association of Pedodontic Diplomates had been made in 1971.¹

The 1980 survey compared the attitudes and prac-

tices of Diplomates of the American Board of Pedodontics with those of the total membership of the American Academy of Pedodontics, to determine if the Diplomates' attitudes and practices are a valid representation of those of the membership of the Academy. The information obtained should also indicate any significant changes in certain attitudes and practices of the Diplomates since the 1971 survey.

Results

Of the 1769 questionnaires sent, 1142 (64.6%) were returned, with 1123 (63.5%) being usable. The total that were sent included 317 mailed to Diplomates, with 236 of these being returned. Thus the response from the Diplomates was about 10% better.

Most members (77%) and Diplomates (61%) are in private practice. Twenty-five percent of the Diplomates, as compared to 12% of the total membership of the Academy, are in education, research or administration. An additional 9% of the members and 10% of the Diplomates have a combination of private practice and education and/or research. Practices are located in communities of various sizes, with just over one-third in cities over 300,000 population. The median age of the Diplomates is about 45 and that of all members is 40. Diplomates have been practicing pedodontics an average of about 16 years, compared to about 11 years for the total membership.

Attitudes

Based on values from the Likert intervalled scale, t-tests comparing choices by the Diplomates and the total group of Academy members showed significant differences only in the following attitudes:

1. More Diplomates felt that in most situations, behavior can be managed through personal interaction alone. ($t = 2.17$)
2. More Diplomates felt that when extra time is spent managing behavior through personal interaction, the appointment fee should reflect the special effort. ($t = 2.39$)

Accepted: January 22, 1981

This survey was financed by the Association of Pedodontic Diplomates with computer services and clerical support provided by the Indiana University School of Dentistry.

3. More Diplomates felt that regardless of their perceived behavior, most children are initially apprehensive during dental appointments. ($t = 3.04$)

Despite these differences, the great majority of members (93%) felt that most behavior situations could be managed by personal interaction alone, with fees reflecting extra time spent managing behavior. Only slightly more than half the responses indicated that behavior management was one of the more trying aspects of practicing pedodontics or that children are initially apprehensive. Pedodontists were divided on whether restricting the airway is potentially harmful psychologically, with slightly more feeling that it was not harmful. Most members (68%) stated that at least a minimal dental procedure should be accomplished with the child who presents behavior management problems. Again, the vast majority of members (92%) indicated that local anesthesia should be used when restoring primary teeth. Fifty-nine percent of the respondents said that completion of a hospital accredited course in anesthesiology should not be required before NO₂ is used in the office.

Practices

Parents Permitted in the Operatory. Almost 90% of all members, including Diplomates, allow parents in the operatory, at least for selected cases, usually with children three years old or under. The most often cited occasion involves a handicapped or ill child. Other reasons include the fearful/timid child, parent's request and behavior management conditions (Table 1).

Hand Over Mouth with Airway Open. About 90% of the members use hand over mouth with the airway open, usually on patients from three to nine years old. The predominant reasons given were current behavior, temper tantrum, hysteria, aggression and resistance. The predominant purposes indicated were gaining the child's attention, dampening noise and gaining cooperation (Table 2).

Hand Over Mouth and Nose Airway Closed. About half of the respondents (54%) use hand over mouth with the airway closed in selected cases, and the other half never use this control measure. When it is employed, it is usually with patients ranging in age from three years and up and usually on the basis of current behavior, to control temper tantrums, aggression, hysteria and resistance. The purposes indicated were to gain attention, cooperation and to dampen noise (Table 2).

Premedication. Most members (80%) use premedication in selected cases, starting with age two or earlier and continuing through the older patient. Principal reasons given were previous and current behavior in the office and handicapping conditions of the child. Behavioral reasons cited include fearfulness, hysteria, resistance and aggression. Drugs commonly used in-

Table 1. Parents permitted in the operatory.

	% Diplomates	% Members
Always	6	7
Selected Cases	84	80
Never	8	12
Age and/or Behavior Considerations For Allowing Parent in Operatory		
Prevalent Age Range	0-3 Yrs.	0-3 Yrs.
Another Office	27	23
Your Office	33	29
Current Behavior	38	35
Handicapped	73	69
Parent Request	43	40
Child Request	25	22
Temper Tantrum	7	6
Aggression	12	9
Withdrawal	21	18
Fearfulness	39	34
Resistance	18	13
Hysteria	16	15
Timidity	39	31

clude tranquilizers, chloralhydrate and narcotics (Table 3).

Other Physical Restraints. Eighty-six percent of the members said they use physical restraints other than hand over mouth in selected behavior management situations, principally by having the assistant restrain the patient or by using the mouth gag or prop and body wrapping. These procedures are used with all ages of children. Prevalent reasons cited were current behavior, a handicapping condition and previous behavior patterns. Management problems include resistance, aggression, temper tantrum and hysteria (Table 3).

Nitrous Oxide Analgesia. In behavior management situation, 73% of the members said they use nitrous oxide analgesia in all cases or in selected ones. While nitrous oxide is used for all ages, most members limit its use to children two years old and older. Reasons given include current and previous behavior, handicapping conditions and request by child or parent. Behavioral reasons include fearfulness, resistance, timidity and withdrawal (Table 4, see page 250).

General Anesthesia. General anesthesia is used in selected cases by 76% of the members, spanning all ages of patients. Prevalent reasons given were handi-

Table 2. Hand-over-the-mouth.

	<i>Airway Open</i>		<i>Airway Closed</i>	
	% Diplomates	% Members	% Diplomates	% Members
Always	3	3	1	1
Selected Cases	85	88	54	53
Never	9	7	44	44
Age And/Or Behavior Considerations For Using Hand-Over-the-Mouth				
	<i>Airway Open</i>		<i>Airway Closed</i>	
	3 - Up	3 - Up	3 - Up	3 - Up
Prevalent Age Range	21	23	13	14
Another Office	27	28	14	16
Your Office	83	85	53	51
Current Behavior	6	7	3	3
Handicapped	84	85	52	50
Temper Tantrum	60	55	43	31
Aggression	3	3	2	2
Withdrawal	8	6	6	5
Fearfulness	49	43	35	30
Resistance	69	71	38	38
Hysteria	1	2	1	1
Timidy	Purpose			
Dampen Vocal Noise	66	65	32	28
Gain Attention	11	82	47	49
Gain Cooperation	59	62	42	41

capping conditions, present and previous behavior. Behavioral reasons include hysteria, resistance, aggression and fearfulness. General anesthesia is ordinarily administered in a hospital by an anesthesiologist. Patients treated with general anesthesia include those with handicapping conditions, nursing caries, the very young and behavioral problems. The median number of patients treated annually in a hospital setting is about 10 — with considerable variation (Table 4).

Discussion

Member cooperation with this survey was excellent, indicating that Academy members are not only interested in the subject but also willing to cooperate by providing important information. Occasionally the type of information obtained in this survey is needed to document the fact that certain behavior management techniques are acceptable and commonly employed in selected cases.

One purpose of this survey was to determine if the attitudes and practices of the Diplomates are representative of those of the total membership of the Academy. When members of the Association of Pedodontic Diplomates were polled in 1971, there was a 77% return from the 123 questionnaires mailed. This 1980 survey brought a 74.5% return from the Diplomates and a 64.6% return from the total membership. The only significant differences in responses from the Diplomates and the total membership were in three areas of the attitude survey, as cited in the Results section.

Another purpose of the survey was to determine if there have been any significant changes in certain attitudes and practices of the Diplomates since the 1971 survey. In 1971, 96 (80%) of those returning usable questionnaires indicated that in selected cases they would use physical contact with the face and airway. Of those 96, 43 indicated that they would use the measure restricting the airway. This represents 35.8%,

Table 3. Premedication and physical restraint other than hand-over-the-mouth.

	<i>% Diplomates</i>	<i>% Members</i>	<i>% Diplomates</i>	<i>% Members</i>	
Always	4	5	1	1	
Selected Cases	79	80	84	86	
Never	14	13	9	10	
Age And/Or Behavior Considerations For Using Premedication					
Prevalent Age Range	0 - Up	0 - Up	0 - Up	0 - Up	
Another Office	29	32	21	18	
Your Office	70	69	48	47	
Current Behavior	63	66	79	76	
Handicapped	57	57	65	63	
Parent Request	21	21			
Child Request	16	15			
Temper Tantrum	31	33	58	56	
Aggression	40	40	66	60	
Withdrawal	27	24	11	8	
Fearfulness	72	68	19	15	
Resistance	53	55	69	67	
Hysteria	53	56	50	54	
Timidity	30	24	8	5	
	Percentage Using The Drugs Listed		Types Of Restraint And % Using		
Narcotics	46	45	71	75	Assistant
Barbiturates	15	14	66	66	Body Wrap
Tranquilizers	65	66	19	16	Straps
Belladonna	3	4	72	71	Mouth Prop
Antihistamines	32	29			
Chloralhydrates	50	51			

as compared to 54% in the 1980 survey, a significant increase. Also in the 1971 survey 97 (80%) said they would allow the parents in the operatory in selected cases, and in 1980 84% said they would, an insignificant change. In 1971 only 42 (35%) of the Diplomates used nitrous oxide analgesia, as compared to 65% in 1980, a highly significant increase. In the 1980 survey, 81% of the Diplomates said they employ general anesthesia in selected cases, which is almost the same as in 1971 (80%). In the 1971 survey, 86% of the Diplomates indicated that they used premedication in their practices as opposed to 83% in 1980, a slight decrease.

On the basis of results from the 1980 survey, it appears that in future studies the practices being used

by pedodontists can be determined by polling the Diplomates alone as an economical and valid alternative to conducting a survey of more than 1700 Academy members.

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References

1. Association of Pedodontic Diplomates: Technique for behavior management — A survey, *J Dent Child*, 39:368-372, 1972.

Table 4. Nitrous oxide analgesia and general anesthesia.

	<i>% Diplomates</i>	<i>% Members</i>	<i>% Diplomates</i>	<i>% Members</i>	
Always	9	15	1	1	
Selected Cases	65	58	81	76	
Never	25	25	15	19	
Age And/Or Behavior Considerations For Using Nitrous Oxide Analgesia And General Anesthesia					
<i>Prevalent Age Range</i>	<i>0 - Up</i>	<i>0 - Up</i>	<i>0 - Up</i>	<i>0 - Up</i>	
Another Office	34	33	23	19	
Your Office	62	61	60	50	
Current Behavior	69	68	60	55	
Handicapped	48	51	75	70	
Parent Request	32	32	21	18	
Child Request	42	42	9	7	
Temper Tantrum	25	29	30	24	
Aggression	31	34	45	36	
Withdrawal	36	40	24	18	
Fearfulness	67	68	41	34	
Resistance	42	46	49	43	
Hysteria	35	37	52	47	
Timidity	43	45	21	16	
Other Data On General Anesthesia					
<i>Where Administered</i>			<i>Types of Patients</i>		
Office	0	2	70	66	Nursing Caries
Hospital/Office	3	3	61	57	Very Young
Hospital	79	72	55	51	Behavior
<i>Who Administers</i>			78	71	Handicapped
Anesthesiologist	80	75	<i>Number of Patients Treated Last 12 Months</i>		
Other	5	4	10	10	Median
			0-60	0-60	Range