Current trends in behavior management techniques as they relate to new standards concerning informed consent

Barrie B. Choate, DDS, MSD N. Sue Seale, DDS, MSD Warren A. Parker, DDS, MPH Carolyn F.G. Wilson, DDS, MSD

Abstract

Standards governing informed consent are changing across the United States, and these changes have potential impact on the techniques of behavior management used by pediatric dentists. The purpose of this study was to determine pediatric dentists' awareness of standards of informed consent in the state in which they practice, as well as the impact of the professional community standard versus the reasonable patient standard on their use of certain behavior management techniques. A stratified random sample of 502 practitioners was selected from the total membership of the American Academy of Pediatric Dentistry; 292 returned surveys provided data related to behavior management techniques, consent standards, and demographic variables. These were analyzed by Chi-square (P < 0.05). Results revealed that 73% of the respondents do not know which consent standard is in effect in the state in which they practice; 50% do not get verbal consent; and 80% do not get written consent to use the specific management techniques. There is a lack of knowledge on the part of some pediatric dentists concerning the changing laws governing informed consent and a reluctance to acknowledge the implications that these changes would have on behavior management techniques.¹

Introduction

Pediatric dentists traditionally have used a variety of nonpharmacologic techniques in managing the uncooperative child while paying little attention to the parental attitudes regarding these behavior management techniques. New findings suggest that many parents do not approve of some of the more commonly used management techniques (Murphy et al. 1984), specifically the use of hand over mouth exercise (HOME) and the Papoose Board[™] (Olympic Medical Corporation, Seattle, WA). These findings have implications regarding the need for informed consent prior to using these techniques. The issue of prior consent for behavior management techniques historically has been neglected by pediatric dentists. However, it is essential that the profession understand the legal doctrine of informed consent and its relevance to everyday practices. The doctrine of informed consent requires that health care providers inform patients (or parents, in the case of a minor) of the nature of the proposed treatment, the benefits and risks of such treatment, and the nature, benefits, and risks of the alternatives to other treatment — including nontreatment.

Until recently, the majority of American states adhered to the *professional community* standard with respect to informed consent. Under this standard a patient's or parent's consent was considered to be legally informed for that treatment which is deemed reasonable by the majority of local practitioners. The *professional community* standard upholds that a doctor could be held liable for nondisclosure only if the standard of professional practice was violated by failing to disclose the information at issue (Hagan et al. 1984).

An alternative to the professional community standard of disclosure has evolved over the past decade in American courts. This new rule on informed consent "focuses on the informational needs of the average, reasonable patient rather than on professionally established standards" (Hagan et al. 1984). This new reasonable patient standard states that a practitioner may be held liable if a patient or parent has not received all the information that is material to their decision to accept or reject treatment (Ozzi 1982; President's Commission 1982). Cases now on record have suggested that implied consent applies only to those aspects of treatment that the average patient anticipates and approves, regardless of their acceptance or use in the professional community. Those aspects of treatment that the average patient does not consider common and expected have to be expressly disclosed. There are certain behavior

¹ The abstract for this manuscript previously appeared in J Dent Res Special Issue 68:370, 1989. Abstract #1512.

management techniques with which the average patient may not be aware and thus would require explicit description for consent to be considered informed. With the establishment of these new standards, pediatric dentists need to consider carefully the behavior management techniques they employ and the means by which they obtain parental consent.

The purpose of this study was to assess the awareness of pediatric dentists as to which informed consent standard existed in the state in which they practiced, and to determine if there had been a change in the use of certain behavior management techniques by pediatric dentists in states with the *professional community* standard versus the *reasonable patient* standard. In addition, the study investigated whether the necessity to obtain express parental consent had affected the use of certain behavior management techniques by pediatric dentists for any aspect of treatment that might be considered objectionable to the average parent.

Materials and Methods

A stratified random sample of 502 pediatric dentists selected from the total membership of the American Academy of Pediatric Dentistry (AAPD) was mailed a questionnaire regarding their knowledge of informed consent standards and their use of certain behavior management techniques. (Copies of the questionnaire used for this study are available upon request.) The questionnaire used in this study was divided into two sections. The first section dealt with the personal data of the pediatric dentists and was developed in order to determine the age and sex of the practitioner, number of years in practice, type of practice, location of practice, and AAPD status. The second section addressed the use of four specific behavior management techniques: the Papoose Board, HOME, physical restraint by dentist, and physical restraint by office personnel.

A computer utility program which scans frequencies was designed and utilized for this analysis. Once the frequency of each response was determined, the frequencies were categorized in terms of years of practice, type of practice, age and sex of the practitioner, location, and AAPD status. The summary data were presented in tabular form, as absolute and relative frequency distributions, for each of the categories listed above by questionnaire response. Observations of the absolute frequencies indicated that in most cross tabulations there were cells present in which the frequencies were too low to permit inferential testing (Miller 1981). Therefore, the categories and questionnaire responses were collapsed to meet acceptable standards for inferential statistical testing for the method selected (Roscoe 1975). The differences in frequencies between the categorized data were examined statistically with Chi-square analysis where the differences were considered significant at P < 0.05.

Results

Of 309 returned questionnaires, 17 were not included in the study for various reasons; 292 questionnaires were analyzed, resulting in a compliance factor of approximately 58%.

The techniques being evaluated appear to be used by the majority of practitioners in at least some situations. The Papoose BoardTM was never used by 25% of the respondents, and only 13% and 15% respectively never used HOME or physical restraint.

Responses to the question concerning the frequency of obtaining parental consent for the use of selected behavior management techniques were determined by collapsing the cells containing the responses of *always*, *sometimes*, and *seldom* to reflect positive answers as described in the materials and methods section. Results indicate that when the question concerning consent is asked in general terms, the majority of the pediatric dentists surveyed responded that they do obtain parental consent prior to using behavior management techniques.

However, when the specific mode of obtaining consent is questioned, more than 85% of the respondents never obtain specific written consent for the use of the techniques listed. Specific verbal consent is obtained by 79% for the Papoose Board, 61% for HOME, and 67% for physical restraint.

Approximately 97% of the respondents indicated that their explanations of behavior management procedures were not due to the consent standard of their state. It was found that, if the *reasonable patient* standard of consent was put into effect in states currently with the professional community standard, more than 60% of the respondents indicated that their use of certain behavior management techniques would change. More than 50% of the respondents indicated that if the law required more detailed explanation of the selected techniques, it would affect their use of these techniques. Based upon their personal interpretations of the *reasonable patient* standard, only half of the pediatric dentists felt that the practitioner must obtain express parental consent involving a detailed explanation of HOME and physical restraint prior to using either technique. With respect to the Papoose Board, 69% of the practitioners replied that express parental consent would be required under this standard.

Only 27% of the respondents correctly identified the informed consent standard which existed in the state in which they practice. When the data concerning knowl-

edge about state standards was compared to status as private practitioner versus academician, the Chi-square analysis revealed that significantly more academicians knew the correct response (P < 0.05).

The impact of years of practice (< 10 years versus > 10 years) on the use of the selected behavior management techniques was determined. Chi-square statistical analysis of the data revealed that more recent graduates were found to use the Papoose Board and HOME significantly more often than those in practice > 10 years (P < 0.05).

A final comparison was made among the Diplomates, associates, and members with respect to use of certain behavior management techniques in the event of a change in the law of consent in their state. Chi-square analysis revealed that no significant difference exists (P> 0.05) with respect to the use of the Papoose Board and HOME. A significant difference was shown to exist (P < 0.05) with respect to physical restraint.

No statistically significant differences were shown when years in practice and AAPD status were compared to any of the other variables and when sex, age, or location were compared to any of the variables.

Discussion

The results of the survey revealed an alarming lack of awareness among pediatric dentists as to which informed consent standard existed in the state in which they practiced. The results indicated that only 27% of the total sample actually knew the correct standard governing informed consent in their state, indicating that many pediatric dentists are not well informed as to their state's standard. The response rate of 58% may represent an increase in interest by pediatric dentists brought about by litigations over commonly used behavior management techniques.

Answers to questions regarding whether the practitioner obtains parental consent prior to his use of behavior management techniques were somewhat contradictory. When asked in general whether they obtained permission prior to the use of behavior management techniques, the majority responded that they do so. However, answers to the more specific questions concerning how consent was obtained indicated that many were not obtaining specific written parental consent prior to the use of HOME, the Papoose Board, or physical restraint. The small percentage who stated that they obtained specific verbal and written permission indicated that they had always done so and that the acquisition of consent did not relate to the standard of consent existing in their state.

The results of the questions addressing the mode of obtaining consent indicated that if consent is obtained, it is most often verbal. With the current increase in litigation surrounding dentistry, the practitioner would be well advised to obtain written consent prior to using selected behavior management techniques.

The Papoose Board is the standard of care in many medical and dental emergency situations, even though Fields et al. (1984) reported that it is viewed as objectionable by the majority of parents. Fifty per cent of the practitioners reported that if the law required them to explain the Papoose Board in more detail prior to using it, it would affect their use of the device. This may reveal that the pediatric dentists felt that Papoose Board use was such an aversive technique that they would choose not to use it rather than explain it in detail to the parent before using it. Another explanation may be that many pediatric dentists use the Papoose Board in situations simply for convenience, where its use would be difficult to justify if an explanation were required.

The finding that only 11% of the respondents obtain specific verbal or written permission for the use of HOME revealed that a very low percentage of pediatric dentists obtain parental permission for what is likely considered to be the most aversive behavior management technique presently used. The reason this technique was not explained to the parent may be that the dentist was afraid that the parents would feel it is far too aversive a technique to use on a child. A technique which involves covering the mouth and/or airway to obtain the child's attention could be difficult to explain to a parent without the technique sounding abusive. This was evidenced by the fact that the need to provide such an explanation would affect two-thirds of the respondents' use of HOME.

It is disquieting to note that based on their personal interpretations of the *reasonable patient* standard, only half of the pediatric dentists felt that the practitioner must obtain express parental consent involving a detailed explanation of the Papoose Board and HOME prior to using either technique. In light of recent findings (Fields et al. 1984) that the Papoose Board and HOME are not acceptable by the majority of parents, the *reasonable patient* standard of informed consent would require that these techniques always be described in detail. Apparently, there was a lack of understanding by the pediatric dentists of what constitutes informed consent under the *reasonable patient* standard.

The relationship between years in practice and use of the Papoose Board and HOME was surprising. In light of the increased awareness of consent standards and the decreased emphasis on aversive behavior management technique use in graduate pediatric dentistry programs, we would have thought that more recent graduates would be less likely to use the Papoose Board and HOME, while older graduates would continue to use aversive techniques emphasized in their training. However, the more recent graduates were found to use the Papoose Board and HOME significantly more often than those in practice for more than 10 years. Three possible explanations are:

- 1. The older graduate treats fewer management problems because his practice population is an older group of children;
- 2. The older graduate chooses to treat management problems in the hospital as opposed to the private office; and/or
- 3. The older and more experienced graduate is more effective with other management techniques.

Because the academician is responsible for teaching the most current techniques and legal ramifications with respect to the literature in his field, we suspected that when a comparison was made between the academician and the private practitioner concerning consent standards, that the academician would be more aware. In fact, of the academicians interviewed, close to half correctly identified the standard of consent in their state. Conversely, only one fourth of the private practitioners were able to identify their state's consent standard correctly. This difference was found to be statistically significant (P < 0.05).

Conclusions and Directions

- Many pediatric dentists lack knowledge concerning the changing laws that govern informed consent.
- 2. Many pediatric dentists are reluctant to respect the implications that changing laws may have on their use of behavior management techniques.
- 3. An awareness program for the profession needs to be developed to focus on consent standards as they relate to behavior management techniques.

4. A follow-up survey should be done to reveal any changes in the use of specific behavior management techniques as practitioners become more knowledgeable about the laws governing informed consent.

Dr. Choate is assistant professor, clinical; Dr. Seale is professor and chairman; and Dr. Wilson is assistant professor, department of pediatric dentistry, Baylor College of Dentistry, Dallas, TX. Dr. Parker is professor and chairman, department of community health and preventive dentistry, also at Baylor College of Dentistry. Reprint requests should be sent to: Dr. N. Sue Seale, Dept. of Pediatric Dentistry, Baylor College of Dentistry, 3302 Gaston Ave., Dallas, TX 75246.

- Fields HW, Machen JB, Murphy MG: Acceptability of various behavior management techniques relative to types of dental treatment. Pediatr Dent 6:199-203, 1984.
- Hagan P, Hagan JP, Fields HW, Machen JB: The legal status of informed consent for behavior management techniques in pediatric dentistry. Pediatr Dent 6:204-208, 1984.
- Miller SL: Introductory Statistics for Dentistry and Medicine. Reston, VA: Reston Publishing, 1981. p 235.
- Murphy MG, Fields, HW, Machen JB: Parental attitudes concerning behavior management techniques in pediatric dentistry. Pediatr Dent 6:193-98, 1984.
- Ozzi WM: Survey of the law of informed consent, in Physician-Patient Relationships in Legal Medicine. CH Wecht, ed. Philadelphia: WB Saunders, 1982. pp 111-36.
- Roscoe JT: Fundamental Research Statistics for the Behavioral Sciences. Dallas: Holt, Rinehart and Winston, 1975. pp 254-59.
- President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research: Making Health Care Decisions. Vol. 3 (Appendices, Studies on the Foundations of Informed Consent). Washington, DC: US Government Printing Office, 1982. pp 1-35, 63-81, 117-42, 193-251.

Mouthguards available in various colors

All 1990 National Collegiate Athletic Association (NCAA) football players must wear colored intraoral mouthguards covering all maxillary teeth, according to a new ruling.

The mandate for colored mouthguards was called for because officials couldn't tell when players were wearing clear or white mouthguards. As a result, the previous NCAA mouthguard rule wasn't being enforced. With a high visibility color mouthpiece, it will be much easier for officials to track players' compliance. In college football, a five-yard penalty is levied against a team if any member of that team is seen on the field without a mouthpiece.

Mouthguards have been recommended for collegiate football players since 1962. The provision making them mandatory equipment was added to the rule book in 1973.