

Reporting of Child Abuse: A Follow-up Survey of Texas Dentists

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Abstract

Purpose: Child abuse is a disturbingly common finding in society today. There have been substantial and significant increases in the incidence of child abuse since the last national incidence study was conducted in 1986. Kassebaum first reported the under-reporting of child abuse by Texas dental professionals in a survey in 1986. The objective of the current study was twofold: (1) assess the level of knowledge and attitudes among dental professionals on the important issue of child abuse; (2) evaluate and compare the results of the current study with a similar survey conducted in 1986.

Methods: A 24-question survey similar in format and content to the 1986 questionnaire was mailed to 1,046 Texas dentists, randomly selected from a membership roster provided by the Texas Dental Association. Both general dentists and selected specialists were included in the study group. The questionnaire consisted of multiple-choice and dichotomous yes/no questions.

Results: There were 383 responses to the questionnaire, yielding a response rate of 38%. The majority (N=289) of the respondents were general dentists. In answering questions about suspected and reported cases of child abuse, nearly 50% of the responding dentists reported they had suspected at least 1 case of child abuse. In the 1986 study, only 36% of the responding dentists reported they had suspected at least 1 case of child abuse. Between 1986 and 2001, the survey has shown that the percentage of dentists who reported at least 1 case to authorities slightly increased from 19% in 1986 to 25% in 2001, but the ratio of suspected to reported cases had not changed since 1986.

Conclusions: Although the composite percentage of suspecting and reporting cases of child abuse from this survey is higher than the percentage demonstrated in 1986 study, there was no significant change in the relative ratio of reported cases to suspected cases in both surveys. This indicates that under-reporting of child abuse cases is still a significant problem in the dental profession in Texas. (*Pediatr Dent.* 2003;25:541-545)

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Children are one of the most vulnerable groups in our society. Child fatalities due to maltreatment represent the worst-case scenario in attempts to protect children. Despite the efforts of the child protection system, child fatalities remain a serious problem. Although the untimely deaths of children due to illness and accidents have been closely monitored, the same cannot be said of children who have died as the result of physical assault or severe neglect. Interventional strategies targeted at resolving this problem face complex challenges.

Child abuse is a disturbingly common finding in society today. There have been substantial and significant increases in the incidence of child abuse since the last national incidence study was conducted in 1986. It has been reported that the number of physically abused children who were countable under the Harm Standard rose by 97% from an estimated 311,500 in 1986 to 614,100 in 1996.¹ Most cases of child maltreatment fall into the 3 basic categories: (1) neglect (52% of all reports); (2) physical abuse (25%); and (3) sexual abuse (13%). Half of all victims are under 7 years of age.²

Conservative estimates indicate that nearly 2,000 infants and children die in the United States each year from abuse by parents or caregivers. There are more than 18,000 serious disabilities and over 141,000 serious injuries each year as a result of child abuse and neglect.³ In a report by the Department of Health and Human Services in 1996, it was noted that 1 million children were victims of substantiated child abuse and neglect in 1994, resulting in a 27% increase from 1990 data.³

Dentists are in an ideal position to help detect signs of child abuse because statistics have shown that as many as 50% to 75% of all cases of child abuse include trauma to the mouth, face, and head. Head injury from abuse is a significant cause (40%-70%) of disability and death in children.^{4,6} Factors that may be contributing to the increase include economic problems, stress, lack of a family support network, alcohol/substance abuse, and the cyclical problem of abuse as a learned behavior (in other words, perpetrators of abuse are likely to have suffered from abuse during their childhood).^{2,7} Alternatively, heightened awareness and stricter standards among professionals may be responsible for the increase in the recognition and investigation of child abuse.

While dentists are in a position to report suspected child abuse cases, few will make reports. A study by Kassebaum in 1986 demonstrated that only 19% of Texas dentists had reported 1 or more suspected cases.⁸ In a survey of 2,005 California dentists, 16% had suspected a case of child abuse or neglect in the past 5 years, with only 6% of the respondents actually reporting a case to authorities.⁹ A recent survey of 243 Massachusetts dentists found that 76 (31%) indicated they had suspected cases of child abuse in their patients, but only 25 reported these suspected cases.¹⁰ Although dentists are in a unique position to recognize child abuse and neglect, only 1% of all reported cases in the United States are made by dentists.¹¹ It is widely believed that abuse is still being under-reported by health care professionals, including the dental community.

The objective of the current study was to evaluate and compare findings with a similar survey conducted in 1986 and to assess the level of knowledge and attitudes among dental professionals on the important issue of child abuse.

Table 1. Summary of Dentists' Responses to Survey Questions (N=383)

| | Dentist response | |
|-----------------------|------------------|------|
| | 1986 | 2001 |
| Overall response rate | 34% | 38% |
| Total number | 335 | 383 |
| General dentists | 268 | 289 |
| Oral surgeons | 34 | 17 |
| Pediatric dentists | 28 | 24 |
| Orthodontists | * | 34 |
| Endodontists | * | 9 |
| Dental public health | * | 5 |
| Periodontists | * | 3 |
| Unspecified dentists | 5 | 2 |

*Specialists not selected for inclusion in the 1986 survey.

Table 2. Summary of Responses by Gender, Year of Graduation, and Age of Practitioner for 2001 Study*

| | Dentist response | |
|----------------------------|---------------------|-------------------------|
| | Suspected, reported | Suspected, not reported |
| Gender | | |
| Male (N=305) | 22% | 24% |
| Female (N=69) | 36% | 20% |
| (9 did not answer) | | |
| Year of graduation | | |
| 1940-49 (N=2) | 0% | 50% |
| 1950-59 (N=11) | 27% | 18% |
| 1960-69 (N=45) | 20% | 18% |
| 1970-79 (N=106) | 25% | 29% |
| 1980-89 (N=125) | 25% | 19% |
| 1990-2000 (N=94) | 32% | 23% |
| Age of practitioner | | |
| 25-35 years (N=65) | 32% | 17% |
| 36-45 years (N=109) | 21% | 24% |
| 46-55 years (N=128) | 27% | 28% |
| 56-65 years (N=59) | 22% | 7% |
| 66 years or greater (N=22) | 18% | 0% |

Methods

A 24-question survey similar in format to the 1986 questionnaire was mailed to 1,046 Texas dentists, which represented approximately 10% of dentists with active Texas licenses. The names of practicing dentists were randomly selected from a membership roster provided by the Texas Dental Association. Both general dentists and selected specialists (pediatric dentists, orthodontists, oral surgeons, dental public health, periodontists, and endodontists) were included in the study group. Dentists in the specialties of prosthodontics and pathology were excluded from the mailing, as it was determined that these specialties were unlikely to treat pediatric patients on a significant basis. The 1986 survey, by design, was targeted to approximately 20% (N=1,000) of Texas general dentists, pediatric dentists, and oral surgeons only. Orthodontists were not included in the 1986 survey group, based on a desire to poll dentists who would be seeing a cross-section of socioeconomic groups. The 2001 survey was mailed to additional specialists, including orthodontists, since it was felt that children would be a significant part of the practices.

The original survey contained questions on the demographics of the responding practitioner's practice, the practitioner's ability to distinguish between accidental vs inflicted injury, and information related to the practitioner's

Table 3. Summary of Dentists' Responses to Survey Questions

| Dentist response | | |
|--|------|-----|
| 1986 | 2001 | |
| Have suspected patient victim of abuse | 36% | 50% |
| General dentists | * | 45% |
| Pediatric dentists | * | 96% |
| Orthodontists | † | 56% |
| Oral surgeons | * | 47% |
| Have reported at least 1 case to authorities | 19% | 25% |
| General dentists | * | 22% |
| Pediatric dentists | 47% | 79% |
| Orthodontists | † | 24% |
| Oral surgeons | 39% | 18% |
| Hesitancy to report | | |
| Lack of adequate history | 62% | 58% |
| Lack of knowledge about abuse and dentists role in reporting | 22% | 28% |
| Concern about effect on practice | 2% | 6% |
| Believe legal obligation is to: | | |
| Report suspected cases of child abuse | ‡ | 84% |
| Report only known cases of child abuse | ‡ | 9% |
| Did not know | ‡ | 7% |

*Not reported by specialty in the 1986 survey.

†Specialist not included in 1986 survey.

‡Question not asked in the 1986 survey.

reporting practices. In the 2001 survey, additional questions were asked in regards to the practitioner's age, gender, year of graduation, and legal obligations in reporting abuse. The questionnaire consisted of multiple-choice and dichotomous yes-no questions. Participants were given a postage-paid envelope for mailing the results of the survey to the principal examiner. No identification was requested for either the name or location of those completing the survey.

Results

There were 383 responses to the questionnaire, yielding a response rate of 38%. The first part of the survey addressed questions concerning the demographics of the practitioner. The majority (N=289) of the respondents were general dentists. The remaining respondents included 24 pediatric dentists, 34 orthodontists, 17 oral surgeons, 9 endodontists, 5 dental public health providers, 3 periodontists, and 2 "unspecified dentists." Eighty percent of the respondents were male, 18% identified themselves as female, and 9 respondents did not answer the gender question. The 46- to 55-year-old group represented the

largest group by age, with age selections ranging from 25 to over 65 as options. The reported year of graduation from dental school ranged from 1942 to 2000, with the largest group by decade being those dentists graduating from 1980 to 1989. The majority (N=370) of the respondents were private practitioners, with 245 practicing dentistry in a large metropolitan area—city or suburb. The remaining respondents (N=13) practiced in an academic or institutional environment (Table 1).

Table 2 presents an overview of the demographics concerning the respondents of the 2001 survey who suspected and reported cases of child abuse. Since the questions regarding age, gender, and year of graduation were not asked in the 1986 survey, the data reflects the 2001 responses only.

The second section of the survey pertained to child abuse and contained questions relating to legal obligation to report, recognition of child abuse, hesitancy to report, and the numbers of cases suspected and reported (Table 3). In the authors' study, nearly one half of the responding dentists reported they had suspected at least 1 case of child abuse. In the 1986 study, only 36% of the responding dentists reported they had suspected at least 1 case of child abuse. Between 1986 and 2001, the survey has shown that the percentage of dentists who reported at least 1 case to authorities slightly increased from 19% in 1986 to 25% in 2001, but the ratio of suspected to reported cases has not changed since 1986. There was an increase in the pediatric dentists who reported cases of abuse (79% vs 47%), while at the same time a decrease in the reporting rates of oral surgeons (18% vs 39%). Furthermore, dentists were asked to identify the major reason for their hesitancy to report a suspected case of child abuse from a list of the following 3 choices:

1. lack of adequate history;
2. lack of knowledge about abuse and dentists' role in reporting;
3. concern about the effect that it might have on the practice.

Fifty-eight percent of respondents identified the lack of adequate history as their major reason, while 28% indicated that their lack of knowledge about child abuse and the dentist's role in reporting had made them hesitant to report a suspected case. Only 6% indicated that they were concerned about the effect it would have on their practice. Dentists were also asked about their legal obligation toward child abuse. Most of the dentists (84%) recognized their legal obligation to report suspected cases of abuse. Nine percent selected an option describing a legal obligation to report only known cases, while 7% did not know what their obligation is. Finally, participants were asked to indicate whether the simple survey instrument had increased their knowledge or awareness of child abuse; 61% responded yes.

Discussion

The objective of this study was to evaluate and compare the current results with a similar survey conducted in 1986 and

assess the level of knowledge and attitudes among dental professionals on the important issue of child abuse.

The most significant findings of the survey were determined from the questions about whether the practitioners had ever suspected a case of child abuse or had ever reported a case of child abuse, and the reasons that they may have been hesitant to report a suspected case. In this study, the authors have shown that nearly 50% of the responding dentists reported they had suspected at least 1 case of child abuse. In the 1986 study, only 36% of the responding dentists reported they had suspected at least 1 case of child abuse. Between 1986 and 2001, the survey has also shown that the percentage of dentists who reported at least 1 case to authorities slightly increased from 19% in 1986 to 25% in 2001. These results demonstrated that there is a disparity between the number of suspected and reported cases. On the other hand, the ratio of suspected to reported cases has not changed since 1986. These findings suggest that under-reporting of child abuse is still a significant problem in the dental profession in Texas.

With regard to the question of hesitancy to report, the majority of the respondents indicated that their major reason for hesitating to report was the lack of adequate history. Perhaps dentists need to be better informed about how to recognize and gather information to explain children's physical wounds or emotional behaviors. On the other hand, 28% of the dentists indicated a lack of adequate knowledge about abuse, and the dentists' role in reporting was the reason. This finding highlights the need for mandated training related to recognition and reporting of child abuse. Most predoctoral dental programs in the United States and Canada only devote 2 class hours to this topic.¹² It appears that this level of instruction is inadequate and should be increased for dentists to recognize the signs of abuse and how to report it.

Analysis of survey data revealed that the majority of the responding dentists (84%) know their legal obligations regarding the reporting of suspected cases of child abuse, but continue to make fewer reports (only 25% do so). Although pediatric dentists and oral surgeons attend advanced educational programs that include a child abuse curriculum, oral surgeons made fewer reports (18%) in the present study while the pediatric dentists' overall reporting rate increased to 79%. However, the number of oral surgeons responding to the 2001 survey was half the number responding to the 1986 survey (N=17 and 34, respectively). Thus, the difference noted in reporting rates for oral surgeons between 1986 and 2001 may be related more to the small sample size as opposed to any trend in reporting rates. Each of the specialties was affected by a small sample size. A study designed to survey all practitioners within the specialties of pediatric dentistry, oral surgery, and orthodontics may demonstrate profoundly different results.

Table 2 provides a demographical overview of the respondents of the 2001 survey who suspected and reported on child abuse. Because of the small sample number of

participants, particularly in the 1940-1949 year of graduation category, the information should not be viewed as representational of Texas dentists in that category. Since these questions on practitioner demographics were added to the 2001 survey, no comparison with the 1986 survey can be made. The highest percentages of those reporting cases of child abuse were from recent dental graduates and respondents in the 25 to 35 age grouping.

A limitation in any self-reporting survey is that those who choose to respond are likely to have strong sentiments on the subject and are not necessarily a cross-sectional representation of the target group. Additionally, dentists who lack knowledge on the topic of child abuse or how to approach the reporting of abuse may feel uncomfortable in answering a survey on the topic and, thus, may choose not to participate.

Conclusions

Although the findings of this 2001 study indicate a small increase in the percentage of child abuse cases reported, the ratio of suspected to reported cases has not changed since 1986. This suggests:

1. Under-reporting of child abuse is still a significant problem in the dental profession in Texas.
2. Continued efforts by educational institutions, organized dentistry, and government agencies should be brought to bear on this significant social and healthcare problem.
3. Increased instruction in the areas of recognition and reporting of child abuse and neglect, whether through dental school curricula or continuing education courses, should be stressed.

References

1. Sedlak A, Broadhurst D. The third national incidence study of child abuse and neglect. US Dept of Health and Human Services. Washington, DC; September 1996.
2. Persaud, DI, Squires J. Abuse detection in the dental environment. *Quintessence Int.* 1998;29:459-468.
3. US Dept of Health and Human Services. Child maltreatment 1994: Reports from the states to the National Center on Child Abuse and Neglect. Washington, DC: US Government Printing Office; 1996.
4. Becker DB, Needleman HL, Kotelchuck M. Child abuse and dentistry: Orofacial trauma and its recognition by dentists. *J Am Dent Assoc.* 1978;97:24-28.
5. Needleman HL. Orofacial trauma in child abuse: Types, prevalence, management, and the dental profession's involvement. *Pediatr Dent.* 1986;8:71-80.
6. Jessee SA. Physical manifestations of child abuse to the head, face, and mouth. *J Dent Child.* 1995;62:245-249.
7. Blain SM. Abuse and neglect. *J California Dent Assoc.* 1991;19:16-24.

8. Kassebaum DK, Dove SB, Cottone JA. Recognition and reporting of child abuse: A survey of dentists. *Gen Dent.* 1991;39:159-162.
9. Ramos-Gomez, F, Rothmand D, Blain S. Knowledge and attitudes among California dental care providers regarding child abuse and neglect. *J Am Dent Assoc.* 1998;129:340-348.
10. Babae R, Cheney WR. A survey of Massachusetts dentists regarding child abuse. 2002 AAPD Foundation Research Award Competition Abstracts. *Pediatr Dent.* 2002;24:164-165.
11. Mouden LD. Dentistry preventing family violence. *MO Dent J.* 1996;76:21-27.
12. Jessee SA. Child abuse and neglect curricula in North American dental schools. *J Dent Educ.* 1995;59:841-833.

ABSTRACT OF THE SCIENTIFIC LITERATURE



VERTICAL GROWTH CHANGES AFTER ADENOIDECTOMY

The purpose of this retrospective cross-sectional study was to compare vertical growth changes of the craniofacial complex between subjects with early and late adenoidectomy and nonsurgery controls. The study consisted of 93 lateral cephalometric radiographs (42 boys and 51 girls) from 3 groups of adolescent patients: (1) 12 patients who had an adenoidectomy between 1.5 to 4 years of age; (2) 54 patients who had an adenoidectomy after 4 years of age; and (3) 27 patients with a clear airway who served as nonsurgery controls. A series of cephalometric variables were measured to assess vertical relationships in each patient. No statistically significant difference in these variables was found between the early and late surgery groups, so these groups were combined for subsequent analysis. Excessive vertical growth and a narrower upper airway were found in the combined adenoidectomy group when compared to the nonsurgical control group.

Comments: No respiratory parameters were used to assess functional airway status. The results suggest that vertical growth patterns of the craniofacial complex are established very early and adenoidectomy may have limited success in altering these patterns, even if performed early. LDK

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Arun T, Isik F, Sayinsu K. Vertical growth changes after adenoidectomy. *Angle Orthod.* 2003;73:146-150.
38 references