INTRODUCTION

Over the last 25 years, educators, physicians, dentists, and parents have become progressively more aware of the increased prevalence of uncooperative behavior in children and teens.1-4 There have been many factors in the lives of children that have been suggested to be the cause of this increase. These factors include changes in parenting styles such as permissive parenting, changes in education styles, increased numbers of children with psychological disorders, including attention span and hyperactivity disorders, and an increased prevalence of playing video games, and watching television and movies in American households.

Dentists who have treated numerous children over the past two decades have become increasingly aware of the change in the relationship between the child, parent, and dentist and its potential impact on dental treatment.5 Accordingly, dental offices today are designed to be child-friendly. Numerous dental materials, equipment, and technologies are designed specifically for children, making dentistry a less traumatizing experience. Despite these advances, the ultimate goal of dentistry for children remains the same: to perform procedures to remove oral disease in a way that is efficient, cost-conscious, and with the least amount of trauma possible inflicted on children whose behavior can range from cooperative to hostile.

It was the goal of this research to explore general dentists’ perceptions of the type and quality of training they received while in dental school, specifically targeting the management and treatment of children with attention span disorders or hyperactivity issues.

MATERIALS AND METHODS

A 21-question survey was administered through email. Questions 1 - 6 were designed to collect general demographic information about subject participants. Questions 7 - 9 were designed to collect information regarding training. Questions 10 - 19 were designed to collect information regarding characteristics of each dentist’s practice. Questions 20 and 21 were designed to collect information regarding dentists’ perceptions of parental behavior.

Subjects of the study were dentists who are affiliated with the Arizona School of Dentistry and Oral Health as external faculty who oversee 4th year dental students on their rotations. 250 surveys were sent out via email; 83 surveys were returned, giving a response rate of 33%. Participation in the survey was strictly voluntary; all results were anonymous; and no personally identifiable information was collected.

RESULTS

Geographic Location
The location of each participant’s current practice was recorded. The two greatest locations for survey participants were Arizona (38%), and Washington (13%).

Training

Most pertinent to this audience were the responses to Questions 7 and 8. Question 7 ("If you are a general dentist, would you say you’ve had enough training in dental school to manage children with attention span/hyperactivity issues in the dental office?"") revealed that 70.3% of dentists surveyed felt they did not have enough training (Figure 1). Subjects responded further in Question 8 by describing what kinds of additional training they felt would be helpful. Thirty seven percent of subjects answering this question said pharmacologic interactions would be useful; 43% of subjects said training in conscious sedation would be useful; 20% felt general anesthesia training would be useful; 30% felt hospital orientation would be useful (Figure 2). (Each choice of additional training acted independently, resulting in more than 100% total respondents.)
A recent study by Seale and Casamassimo reported highly significant associations between the types of pediatric dental procedures students are exposed to while in dental school and the procedures general dentists are willing to perform in their own practices. They report that students that were more frequently exposed to hands-on training while in dental school were more likely to perform those procedures in their private offices. For example, in many dental schools, undergraduate dental students do not treat children with complex behavior management issues. The dental practitioners that participated in Seale & Casamassimo’s survey also reported not seeing children with more difficult behavior management issues in their private offices. Similar to our own results, most dentists surveyed did not feel that they had enough behavior management experience while in dental school and therefore the majority would like more training in techniques to be able to provide dental care to children more effectively.

Our findings that general dentists would like additional training in conscious sedation, pharmacologic interactions, hospital orientation and general anesthesia are consistent with the results of another study by Seale and Casamassimo in which they surveyed undergraduate dental students from 48 of the 55 dental schools in the United States. Their results describe students’ experience with behavior management techniques while in dental school. They report that the only technique to which all students receive patient exposure is tell-show-do; 79% of respondents report didactic training in oral sedation, while only 6% report hands-on training; 67% of respondents report didactic training in general anesthesia, while only 6% report hands-on training. It is apparent that the majority of our survey respondents do not feel they have enough hands-on training with advanced behavior management techniques while in dental school and that additional training in a range of behavior management techniques would be seen favorably.

**DISCUSSION**

The intent of this survey was to determine if the changes in children’s behavior, specifically the increase in attention span disorders/hyperactivity issues seen in children, has influenced dental practice in the past 25 years and how this change may have impacted general dentist’s comfort level in providing dental treatment for these children. Our finding that 70% of survey respondents do not feel they received adequate training in dental school to feel comfortable treating children with attention span disorders/hyperactivity issues was greater than expected, but not alarming considering the rise of children with these issues.

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**CONCLUSION**

With the prevalence of attention span disorders on the rise, dental schools need to increase the amount of exposure undergraduate students receive in the treatment of children with complex behavior management issues. This will provide a more complete learning experience. Students can then gain the exposure, techniques, and confidence necessary to treat children with behavior management issues once they begin their own dental career.

**REFERENCES**


**Tedi Howell** is a 3rd year dental student at A.T. Still University – Arizona School of Dentistry and Oral Health. (Top photo).

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