

THE ATTITUDE OF PRIVATE DENTAL PRACTITIONERS TOWARDS TREATMENT AND MANAGEMENT OF CHILDREN IN RIYADH, SAUDI ARABIA.



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OBJECTIVE: The aim of this investigation was to conduct a survey among private dental practitioners in Riyadh concerning their attitude towards treatment of children including those with special care needs.

METHODOLOGY: The sample was drawn from dentists working in private dental clinics in Riyadh for a questionnaire survey. A 5 point Likert-type scale was used to describe the participants' response to questions concerning adequacy of undergraduate training, preference of behavior modification techniques, barriers preventing dentists from treating children and the most suitable incentive options for dentists in treating children.

RESULTS: A total of 204 responses were returned with a response rate of 20.4% which provided valid and usable information. The sample included 96.1% Non-Saudi and 3.9% Saudi dentists, 58.1% male and 41.9% female dentists, 64.7% general practitioners, 30.5% specialists and 4.7% consultants. Among the 204 respondents, 85% treated children, 65.7% reported time consumption and financial loss as a major barrier in treating children and 60.8% favored tell-show-do as the preferred method of behavior management technique.

CONCLUSIONS: Our study suggests that majority of private practitioners have a positive attitude towards treating children but time consumption and financial loss was found to be a major barrier in treating children and those with special health care needs effectively.

KEY WORDS: Pediatric patients, special care needs, attitude, barriers.

INTRODUCTION

Dentistry is a rapidly growing profession in the world where the demand for basic dental care continues to increase¹. Over the years, several revolutions have taken place in dental practice pertaining to children. Among such changes are the regular involvement of parents in the delivery of care for their children and adhering to informed consent protocols as a standard of health care². In 2003, Seale et al³ reported that, in spite of the advances in preventive services that the profession's newest technology offers, dentistry has not reached all young children. This justifies the report of the oral health of America that Dental caries in the primary dentition has not decreased in the past 10 years³. In the US,

this report has spurred an increased interest among leading professional health organizations and they have delivered a consensus on pediatric oral health stating that: "the earlier a child receives preventive oral health services, the less his or her risk of developing dental disease"⁴.

Several studies in the US reported that, the majority of dental practitioners were willing to accept and treat children^{3,5} and those with special health care needs.⁶⁻⁸ Some of them considered the training they received was adequate and therefore, set up their practices favoring the treatment of various types of special needs patients⁶, while others did not think their undergraduate dental education had prepared them enough to treat special needs patients.⁵⁻⁸ According to a study conducted in Sweden, the barriers to the access of dental treatment for individuals with disabilities were reported to be either due to lack of adequate knowledge, experience, a constrained work environment, too little time or general stress⁹. In the U.K, majority of dental care to young children is provided by the general dental practitioners (GDP). A study by Dailey et al¹⁰ reported that the influence of education and experience over time has a positive impact on these GDPs regarding their approach to the care of young children. In 2006, a research conducted in Nigeria reported very few

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dentists having adequate knowledge of management of children with special needs, irrespective of their age, gender and place of practice. A considerable number of those with more experience rated their knowledge as fairly adequate. Although most dentists rated the management of these children's behavior as challenging, they indicated their willingness to treat them in their practices¹¹.

A recent research in Saudi Arabia investigated the parental attitudes towards behavior management techniques in pediatric dentistry.¹² However, the attitudes of dentists regarding the treatment of children including those with special care needs have not been explored in Saudi Arabia. Accordingly, the aims of this investigation were to provide information on a) the attitude and willingness of, b) the barriers faced by, c) the opinions concerning parental accompaniment, treatment modalities and favorable behavior management techniques of private practitioners in treatment of children and those with special care needs and d) the influence of undergraduate training on the management of these patients.

METHODOLOGY

The sample was taken from dentists working in private dental clinics or hospitals which were randomly selected from a list provided by the Ministry of Health for private dental clinics and hospitals in Riyadh after sending a formal request to participate in the study. Approval from the College of Dentistry Research Centre (CDRC) Ethical Sub-committee was obtained prior to commencement of the study. Consent to participate in this study was sought out from the dentists. A team of research assistants carried out the distribution of questionnaires to the dentists after explaining the purpose of the study and were requested to complete the questionnaire within a week.

We developed a 26-item questionnaire survey to determine the variables associated with the attitude of dentists towards treating children. A pilot test of the survey was conducted for content and organization. Questions in the first part of the survey focused on the demographic data and professional background of the dentists which included age, gender, nationality, qualification, year of graduation, practice location, type of practice (solo, group, network, hospital-based or others), job profile (intern, general dental practitioner, specialist, consultant) and field of specialty. The second section of the survey, concerning the treatment of child patients, included questions regarding whether they treat child patients, average number of child patients they treat in a week, their opinion about general dentists treating child patients, the barriers they face in treating children and the most suitable incentive for dentists in treating child patients. It also included questions concerning how much their undergraduate training enabled them to treat children effectively, any advanced training in pediatric dentistry and in treating child patients with special health care needs, their preference of parent accompanying the child

during dental treatment and preference of use of behavior modification/control techniques.

The respondents were asked to use a 5-point Likert-type scale³: always, usually, sometimes, rarely, or never for the questions concerning whether the undergraduate training enabled them to treat children effectively and the preference of use of behavior modification/control techniques. The respondents were also asked to use a similar 5-point scale: highly agree, moderately agree, agree, moderately disagree or highly disagree for questions pertaining to the barriers that prevent dentists from treating children and the most suitable incentive options for dentists treating child patients.

The statistical analysis of the data included classification of data and calculation of frequencies and was carried out using Microsoft Excel. The results were analyzed using basic descriptive statistics.

RESULTS

A total of 204 responses were returned with a response rate of 20.4% which provided valid and usable information. The majority of respondents were non-Saudis (96.1%), males (58.1%) and general practitioners (64.7%). Saudi dentists constituted only 3.9% of the total study population whereas 41.9% were females, 30.5% were specialists and 4.7% were consultants. The majority of respondents were Syrians (n=96, 47.1%). The number

Country of origin	Frequency	Valid percentage
Indonesia	5	2.5
Algeria	1	0.5
Azerbaijan	1	0.5
Colombia	2	1.0
Egypt	34	16.7
Guatemala	1	0.5
India	3	1.5
Iraq	2	1.0
Canada	1	0.5
Jordan	5	2.5
Saudi Arabia	8	3.9
Lebanon	3	1.5
Mexico	1	0.5
Pakistan	2	1.0
Philippines	16	7.8
South Africa	1	0.5
Romania	2	1.0
Russia	2	1.0
Sudan	2	1.0
Sweden	2	1.0
Syria	96	47.1
Ukraine	4	2.0
USA	2	1.0
Yemen	7	3.4
Armenia	1	0.5
Total	204	100.0

Table 1: Distribution of private dental practitioners according to their country of origin

of Philipinos and Egyptians were 16 (7.8%) and 34 (16.7%) respectively. Majority of specialists in this sample were orthodontists (24.4%) followed by prosthodontists (23.1%). Table 1 shows the distribution of private dental practitioners according to their country of origin. Table 1

85% of the respondents treated child patients and among them, 68% treated 5 children or less per week, 27% treated 6 to 20 children a week and 5% treated more than 21 children a week. Among the respondents who treated child patients, 65.7% reported time consumption and financial loss as a major barrier in treating children whereas 13.4% reported lack of specialized training in pediatric dentistry and 10.4% reported lack of interest as a barrier in treating child patients. In addition, 5.2% of the respondents reported lack of tolerance and 5.3% stated previous bad experience as barriers in treating children. Figure 1 shows the barriers faced by dentists in treating children (%). Figure 1

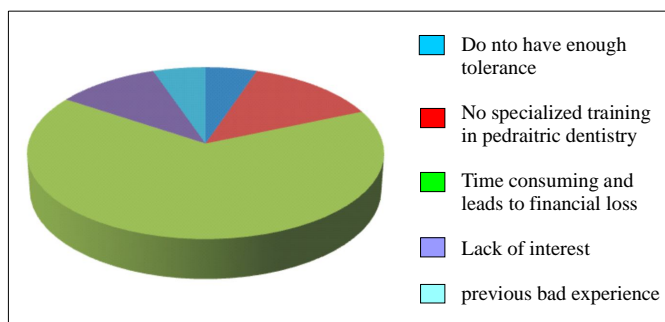


Figure 1: Barriers faced by dentists in treating children (%).

Regarding the question on whether the undergraduate training had enabled them to treat children effectively, 45% of the subjects answered as 'at times', 30% as 'usually', 16% as 'always', 5% as 'rarely' and 4% as 'never'. Figure 2 shows the opinion of dentists regarding how much their undergraduate training had enabled them to treat children effectively (%). Figure 2

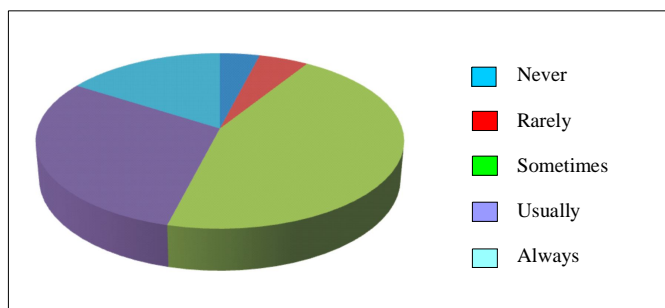


Figure 2: Opinion of dentists regarding how much their undergraduate training had enabled them to treat children effectively (%).

No official consensus exists amongst pediatric dentists regarding whether a parent should be permitted in

the dental operatory or not. Nevertheless, trends in this survey revealed that 39.2% of respondents preferred parents accompanying the child during treatment always whereas 48.5% favored parental escort at times, and 11.7% of respondents reported that they never preferred parental escort in the dental operatory.

Regarding the question on the preferred method of behavior modification/control technique, majority of respondents (60.8%) favored tell-show-do whereas the least preferred was general anesthesia.

Concerning questions on treating children with special health care needs, 56.7% of the respondents reported treating special health care need children and among them, 73.3% treated children with psychological disabilities. With reference to what might be a good incentive for the dentists to treat children, 94.9% reported more and better training opportunities, 93.3% reported social and professional appreciation and recognition and 76% reported financial rewards as the possible means.

DISCUSSION

This survey reports one of the first attempts to explore the attitudes of dentists in Saudi Arabia towards managing and treating child patients, including those with special health care needs. The findings from this survey that 85% of the respondents treat children is encouraging, keeping in mind that majority of respondents were general practitioners (64.7%). This may not be in agreement with the results of a study conducted by Seale N.S. and Casamassimo P.S. in terms of percentage, who reported that more than 90% general practitioners treated child patients but they do report that these general practitioners treat children younger than 4 years of age, children with high levels of caries and children covered by Medicaid only in very few numbers³. Mouradian WE¹³ recommended that dental professionals must be comfortable examining pediatric patients, sensitive to the needs and concerns of parents and able to counsel them optimally. Edelstein BL¹⁴ suggested that training enhancements for predoctoral, postdoctoral, graduate students, hygienists, as well as primary-care medical providers can markedly improve the oral health of young children. The fact that only 16% believed that their undergraduate training had enabled them to treat child patients effectively reveals that the quantity and quality of undergraduate training in dental school for treating child patients may not be adequate to be competent in this aspect. This outcome corroborates with the results of a study conducted by Cotton K.T., et al⁵.

Even though a study conducted by Hallberg U et al⁹ reported barriers to access dental treatment, studies exploring the barriers faced by dentists in treating children are uncommon in literature. Our study has made a genuine effort in determining the obstacles faced by dentists in treating pediatric patients and found time consumption and financial loss as the major factor.

The Dentists who participated in a study conducted by W. C. Tsai et al¹⁶ agreed that financial reward endorsements and more treatment training opportunities would raise the quality of dental services and may increase their willingness to treat disabled children. Likewise, in our study, more and better training opportunities, social and professional appreciation and financial rewards were considered as good incentive for dentists to treat children and those with special care needs.

A pleasant and approachable relationship between the dentist and the child is important for effective and efficient treatment. Creating a strong rapport on the child's first visit helps to build a comfortable atmosphere in which the child does not feel vulnerable. The dental visit and treatment of child patients may be significantly influenced by parental accompaniment. The majority of dentists surveyed in this study favored parents accompanying their child in the dental operatory always or at times, which was also demonstrated in a study conducted by Crossley and Joshi¹⁷. Nearly 12% of the dentists surveyed did not prefer parents accompanying the child and this may be due to fact that these dentists are coerced by parental expectations. The preferred behavior management technique by majority of dentists was 'tell-show-do' which was in contrast to the results of surveys in USA indicating greater use of the 'hand-over-mouth' technique. Studies conducted in Australia and UK reported minimal use of hand-over-mouth technique. The hand-over-mouth technique is associated with professional controversy and poor patient compliance even though it is an effective method in gaining a troublesome child's attention and can be successful in selected cases¹⁷. The differences in attitudes between dentists in different countries are probably caused by differences in the dental school training and curricula or due to acceptance in the respective societies.

Our study revealed that 56.7% of the respondents treat children with special health care needs but only 8.6% had specialized clinical training for treating these patients. These findings are in contrast to the results of a study conducted by Casamassimo et al. They reported that majority of dentists rarely or never treat children with cerebral palsy, mental retardation or those who are medically compromised. The educational programs directed towards special needs patients do not necessarily increase the number of dentists willing to care for these patients as suggested by Casamassimo, but rather strengthen the resolve of those practitioners who already serve these individuals with such overwhelming needs⁸.

Even though our study is informative and useful, it has certain limitations. Cross-sectional studies cannot establish a cause-effect relationships and self-reporting of data is considered to be less accurate than collection of data by observation. A large sample size is required if the data are to represent the nation and to analyze complex relationships. The results presented in this paper were

taken from a small sample of registered private dental practitioners in Riyadh and is not representative of the entire Saudi dentist population. Moreover, the sample consisted of majority of expatriate dentists and therefore the results may not truly correspond to that of Saudi dentists. The possible reason for a low response rate in this study may be attributed to either lack of interest of dentists in participating in studies or due to a busy schedule. To increase the survey response, we used the qualitative measurements of 'always', 'usually', 'sometimes', 'often', or 'never' rather than more precise quantitative measurements. Since we left these categories open to each dentist's perception, the apparent definitions of these categories may have differed among dentists. This study is unable to comment on the extent to which self-reported attitudes decipher into actual deeds and clinical practice as with all analyses concerning attitudes.

To conclude, our study found that, even though majority of private practitioners treat children and have a positive attitude towards treating them, time consumption and financial loss was a major barrier in treating children and those with special health care needs effectively. Additional longitudinal studies among Saudi dentists are mandatory to reveal the true picture. It was anticipated that by identifying the deterrents in treating pediatric patients, recommendations could be made to modify dental school curricula to encourage dentists to provide treatment to child patients without any reluctance. Policy makers and educators should use the information obtained from this study to determine whether the graduate and post graduate students have the necessary knowledge and skills in treating children and those with special care needs and efforts should be made to increase the general dentists' willingness to treat children by overcoming the barriers or by referring the children to pediatric dentists as and when necessary.

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