

# Children's Perception of Their Dentists

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## ABSTRACT

**Objectives:** The aim of this study was to assess school children's feelings and attitudes toward their dentist.

**Methods:** A questionnaire designed to evaluate children's attitudes and preferences toward dentists was completed by 583 children (289 females, 294 males) with age range 9-12 years attending public schools.

**Results:** 76% of the children who completed the questionnaire reported that they had been to the dentist before. Of the children who had visited the dentist, approximately 64% reported liking their visit, 11% didn't like their visit, and 12% were afraid. 90% of the children preferred their dentist to wear a white coat, while 40% preferred them to wear a mask and protective eye glasses as protective measures during treatment. When asked to choose between two pictures of different clinical settings, 63% of the children indicated that they preferred a decorated dental clinic over a plain clinic. Fear of local anesthesia and tooth extraction were the most common reasons cited for not liking dental treatment.

**Conclusions:** Children have strong perceptions and preferences regarding their dentists. Data collected for this study can be used by dentists to improve delivery of care. (Eur J Dent 2011;5:186-190)

**Key words:** Dental care; Perception; Questionnaire; Dentist.

## INTRODUCTION

For some adults and children, a visit to the dentist is not an extraordinary event. For others it can be a terrifying experience that they will only put themselves through when the agony associated with a dental problem becomes unbearable. Fear

of dentists and dental treatment has been considered a major hindrance to the delivery of quality dental services.<sup>1</sup> Surveys indicate that between 5% and 6% of the population and 16% of school-age children have a fear of dentists.<sup>2</sup>

It is important for dentists to establish a friendly relationship with patients, especially children, in order to combat patient fears and to deliver effective and efficient treatment. Creating a strong rapport on the child's first visit helps to create a comfortable atmosphere in which the child does not feel threatened.<sup>3</sup> Children often make judgments about their dentist based on his or her appearance and often record and analyze their dentist's every word, movement and gesture during a dental appointment.<sup>4</sup>

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A friendly relationship with the dentist can help patients cope with identification specific stimuli such as the sight of the anesthetic needle and the sight, sound, and sensation of the dental handpiece and bur which have been shown to provoke anxiety.<sup>4</sup> Miller emphasized the need to reduce a patient's anxiety and fear of dentistry as much as possible.<sup>5</sup> Since fears have their genesis in childhood, it is logical to choose children as the target for this study.<sup>6</sup> Children who have positive interactions with their dentist will be less likely to develop a fear of dentists and will experience less anxiety during dentist appointments. As a result, they will be more likely to visit the dentist as adults and will have better dental health. Given the importance of dental health, all members of the dental profession need to be aware of patient perceptions, preferences, and fears in order to meet patient needs and provide them with quality care in a manner that is comforting and reduces anxiety.

The perceptions of children regarding their dentists and dental care have not been previously assessed or documented. This information is important as it can help dentists better shape their practices to meet the preferences and needs of their patients. Therefore, the aim of this study was to assess school children's feelings and attitudes toward their dentist.

## MATERIALS AND METHODS

Data was obtained from a sample of children with a questionnaire developed by study investigators. The study protocol received institutional approval from the Ethics Committee of the College of Dentistry Research Center (CDRC) of the King Saud University in Riyadh, Saudi Arabia.

The study group was composed of children aged 9-12 years attending public schools in Riyadh capital of Saudi Arabia selected by the Ministry of Education. Eight primary public schools that were representative of the middle social class of the population were selected to participate. Permission to circulate the questionnaire was obtained from each school's principal. The author went to the schools to explain the study questionnaire to the teachers and to distribute them to the students. The questionnaire was administered to a total of 583 children including 289(49.6%) females and 294(50.4%) males.

The questionnaire included 8-items designed to assess children's perception of their dentists. Subjects were asked if they had been to the dentist before and if there were any physicians in the family. They were also asked to describe the attitudes of sibling's regarding dental visits. Also, each child was asked to choose between pictures to indicate their preference regarding the dentist's gender, attire, and protective equipment as well as preferences regarding the design of the dental clinic.

During a pilot study, 40 children were asked to complete the questionnaire and comment on overall structure, specifically on any questions which were difficult to understand. Following the comments from the respondents, certain modifications were incorporated and certain pictures were changed.

The data from the questionnaire was coded and entered into the SPSS version 12.0 (SPSS Inc., Chicago, IL, USA) for the statistical analysis. Descriptive and analytic approaches were used in the data analysis. Both Chi-square test and non-parametric test at 5% level of significance were used to determine the relationship between different variables.

## RESULTS

Seventy six percent of all the school children in this study had been to the dentist. The children's responses to their previous dental experience are summarized in Table 1. The majority of the children (64%) reported they liked their visit to the dentist, while only 11% claimed they did not like their visit. Additionally, 12% reported that they were afraid when they visited the dentist, while 14% reported that they did not know how they felt about their visit. Children's perception concerning their visit to the dentist depended significantly on their gender type ( $P<.005$ ), as girls liked their visit to dentist more than the boys. The perceptions of children who had a physician in the family were significantly different ( $P<.005$ ) from children who did not. Fifty-five percent of the children who had a physician in the family did not like their visit to the dentist compared to 19% of children who did not have a physician in the family and that was statistically significant ( $P<.05$ ). Approximately 42% of the children reported that a sibling had a pleasant perception of their visit with a dentist

The children's perception of their dentists is summarized in Table 2. Approximately 54% of the children preferred to be treated by a male dentist. Further analysis revealed that preference regarding the dentist's gender was dependent on the gender of the child. Boys strongly preferred to be treated by a male dentist while girls preferred to be treated by a female dentist.

Sixty-nine percent of children preferred that their dentist wear some type of protective equipment. When shown a picture of a dentist wearing a mask, a picture of the same dentist wearing protective eye glasses, and a picture of the dentist wearing both the mask and the eyewear, 40% of the children picked the picture of the dentist wearing both pieces of protective gear as the dentist they would like to be treated by, while 12% chose the picture of the dentist wearing eye glasses and 17% of the children chose the picture of the dentist wearing the mask. Children who had a previous dental visit experience were more likely to prefer that their dentist wear protective gear (32%) than those who had not attended a dental clinic (9%) and this difference was statistically significant ( $P < .05$ ). Ninety percent of the children preferred their dentist wear a white coat instead of a colored one. This preference was significantly differ-

ent ( $P < .005$ ) between boys and girls, as more girls than boys preferred the colored coat ( $P < .005$ ).

Eighty-two percent of the children preferred that their male dentist wear the formal attire as opposed to having casual attire (Table 2). Children were also asked to indicate how their dentist smelled. Eighty-eight percent of the children reported that their dentist had a good smell.

When the children were asked to choose between pictures of an undecorated dental clinic and a decorated dental clinic as the clinic they would like to be treated in, 63% selected the decorated dental clinic. However, preference pertaining to clinic décor differed significantly ( $P < .05$ ) between age groups as only 37% of respondents from the younger age group (9-10 years) liked the decorated dental clinic compared to 15% of the older age group (10-12 years).

Children cited several causes of fear related to visits to the dentist's office (Table 3). These fears were related to injection (74%), tooth extraction (31%), teeth drilling (27%), restorations (14%), and sight of dental instruments (12%).

## DISCUSSION

This study revealed that children have strong perceptions and preferences regarding dental vis-

Table 1. Summary of child's response to the dental visit.

Question	Response	Number (%)
Have you been to the dentist before?	Yes	446 (76.5)
	No	137 (23.5)
Is there a physician in your family?	Yes	128 (22.0)
	No	455 (78.0)
How did you feel during dental treatment?	Like it	370 (63.5)
	Don't like it	66 (11.3)
	Afraid of it	68 (11.7)
	Don't know	79 (13.6)
How did your sibling feel when he/she visited a dentist?	Like it	247 (42.4)
	Don't like it	60 (10.3)
	Afraid of it	104 (17.8)
	Don't know	172 (29.5)

Table 2. The children's perception of their dentists.

Questions	Response	Number (%)
Do you prefer to be treated by a male or female dentist?	Male	312 (53.5)
	Female	271 (46.5)
Which outfit do you prefer?	Colored coat	57 (9.8)
	White coat	526 (90.2)
Which dentist do you prefer?	No dental protection	181 (31.0)
	Protective glasses	69 (11.8)
	Mask	98 (16.8)
	Mask & protective glasses	235 (40.4)
Which outfit do you prefer?	Formal attire	480 (82.3)
	Casual attire	103 (17.7)

its and dentists. The majority (63%) of the children in this study reported that they liked their visit to the dentist which is consistent with the results of other studies that have examined children's attitudes toward dental care.<sup>7,8</sup> However, dental practitioners should be concerned by the fact that 11% of children in this study reported that they disliked their visit and another 12% reported that they were afraid of the dentist.

The purpose of identifying children's attitudes towards their dentists is to effect positive changes or adjustments that would make children more comfortable in the dentist's office and improve the quality of dental visits. Children in this study indicated that they would prefer to be treated by a dentist of the same gender. Assigning children to dentists of the same gender may improve the general comfort level of children in the dentist's office.

Physical appearance has been shown to be a factor in a person's choice of a family physician and plays an important role in the development of the physician-patient relationship.<sup>9</sup> Our results indicated that children prefer their dentist to wear the traditional formal attire with white coat in the dental clinic. This finding supports the study done by McCarthy et al<sup>10</sup> that found that contrary to popular belief, children are not afraid of the physician in white coat and view a more formally dressed physician as more competent and concerned. This agrees with the study in which adult patients expected and ranked highly their male physician who dressed in a formal suit and a tie.<sup>11</sup>

Children may prefer the white coat as they may see it as a symbol for healing. This agrees with McKinstry and Wang<sup>12</sup> on the patient's attitude to the way the doctors' dress. The majority of patients (64%) thought that the way the doctor dress is of some importance, with many patients feeling that they would have more confidence in a doctor dressed in white coat. However, this finding differs from other studies which found that patients were less favorable towards the white coat.<sup>13,14</sup>

This study also examined if children noticed and liked the smell of their dentist. Most of the children reported that their dentist had a good smell which underscores the importance of self care of the dentist especially if he or she is a smoker.

It is important that laws and regulations regarding proper dress and use of protective clothing be followed to protect both patients and health care providers from contracting infectious diseases in the dental clinic. It is also important to examine how patients perceive certain protective clothing and to evaluate if the use of certain clothing increases or decreases patients' satisfaction with care. The study showed that almost half of the children preferred that dentists wear masks and protective eye glasses while approximately one fifth were satisfied if the dentist wore a mask during dental treatment. This is far from the data reported by Shulman and Brehm<sup>15</sup> in which 70% preferred that dentists wore mask during dental treatment. Children may be intimidated by protective devices such as masks and eye glasses and may be unaware of the protective purposes they serve. Dentists may calm the fears of patients, especially children, by explaining the purpose of the protective devices.

The children in this study favored a decorated dental clinic design with the toys and posters over a routine and bare clinic. The finding is in agreement with McCarthy et al<sup>10</sup> study where the majority of the children favored the decorated clinic over a plain clinic. This finding may be attributed to the comfort a decorated clinic generates or the distraction it causes in their minds while they are receiving dental treatment.

In order to make positive changes and adjustments that would make a dental visit more attractive, it is important to understand what children see as unpleasant aspects about going to the dentists. The children cited injection, tooth extraction and dental tools as most scary and symbol of fear from dentistry. In this respect our findings are

Table 3. Summary of the factors that cause anxiety during dental visit.

Answer	Number (%)
Injection	434 (74.4)
Extraction	179 (30.7)
Teeth drilling	156 (26.8)
Restorations	82 (14.0)
Sight of dental instruments	71 (12.2)

consistent with other studies.<sup>4,8</sup> These findings emphasize the need to use only the necessary instruments during treatment and the use of tell-show-do technique systemically during treatment.

Certain other factors may contribute to a child's fear of visiting their dentist such as siblings' scary stories about their previous visits to a dental clinic.<sup>15</sup> In our study 10% of patients reported that a sibling did not like their visit to the dentist and 18% reported that a sibling was afraid of the dentist. This result emphasizes the importance of ensuring that children are comfortable during their visit to the dental office and have a positive experience. Children who have negative impressions of the dentist are likely to spread these impressions to other children. These negative impressions are difficult to overcome, especially if they form a child's first perception of a dentist.

## CONCLUSIONS

The results of this study present new insight about children's perception of dentists and the delivery of dental care and should be used by dentists to improve their practices. The study identified that children have strong preferences regarding the appearance of their dentist and dental clinics and have identifiable fears associated with dental visits. It is important to note that while the children in this study did indicate certain preferences regarding their dentist's appearance and appearance of the clinic, these preferences may carry little weight when compared with personal attributes of the dentist such kindness, willingness to listen, and clinical competence. These attributes may be what truly determine children's perceptions of their dentist. However, it is relatively easy to change one's style of dress and clinic décor to suit the preferences of patients, and these changes could greatly improve a patient's perception of the care they receive. Dentists should make these changes in addition to taking on the more difficult tasks of improving chairside manner and clinical competence in order to provide optimal care for patients.

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