

ORIGINAL ARTICLE

Effect of the Dental Office Environment and the Dentist's Attire on children's cooperation

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ABSTRACT

Aim: The purpose of this cross-sectional descriptive study was to ascertain children's dental clinic choices in order to alleviate anxiety during dental operations. This study employed a survey approach.

Methods: A questionnaire was developed to identify a child's choice for a dental facility in order to ease anxiety associated with dental procedures. The research enrolled 92 children aged 7–10 years. The kids were arbitrarily chosen following their initial dental appointment at a private dental institution. Data were analysed using SPSS. The Chi-squared test was used to compare responses to questionnaire questions across age and gender categories. P 0.05 was deemed significant statistically.

Results: The demographic data of 92 kids shows that 34% Boys prefer male dentists, whereas 28% girls prefer female dentists. Majority of females opting for lab coats at 23%. Also, 11% of boys and 11% of girls preferred a dentist in surgical gowns. 86% of the kids who were asked like having cartoons on their doctor's office walls. Among them, 50 (54.3%) of the boys liked clinics with cartoon paintings the best.

Conclusion: The outcomes of this study will help the dental team build a comfortable dental environment for children, lowering anxiety and enhancing overall treatment quality.

Keywords: Child Anxiety, Dentist Attire, child cooperation, dental office cartoon walls

INTRODUCTION

Life Experiences during childhood may have a significant impact on shaping an individual's character as an adult. The most prevalent trepidation is fear of dental treatment, which is based on a variety of experiences¹. Dental anxiety in toddlers is recognised across many regions as a public health concern². For young children, the dental environment may be a cause of stress. These stressful circumstances can instil dread and anxiety in children³.

Most kids are tricky to handle at a dental clinic and do not comply during dental treatment. These management issues stem not just from the mechanical process itself, but also from the child's emotional anguish. Among the most prevalent forms of mental discomfort experienced by a kid undergoing dental treatment are anxiety and fear, which may stem from a past unpleasant experience at the dentist^{4,5}.

One of the most prevalent issues that dental patients, and children in particular, deal with is anxiety. It is regarded to be a coordinated response of several systems to a perceived threat or danger^{6,7}. Pediatric dental anxiety and terror of dental services are public health concerns in many nations.⁴ Dental fear and dental anxiety are often used to describe the same thing⁵. They are thought to be the main reasons for behaviour problems and not going to the dentist⁸.

The existence of dental anxiety in juvenile dental patients is not only a problem for the kids, but it is also a problem for the dental professionals themselves, as it can make treatment more complex and time-consuming to complete properly^{9,10}. In general agreement, fear and anxiety cause stress, and stress causes consequences in many physiological systems. These physiological system reactions are comparable to those that occur when a person is subjected to physical difficulties¹¹. Colors also have an enormous impact on our emotions and feelings, and it's well-known that this is true¹².

Several early studies postulated that certain colours, including red, blue, yellow, green, black, and white, were connected with anger, pleasure, sorrow, surprise, disgust, and fear.^{13,14} Several dimensions had been used to classify colours by the children. Furthermore, they were able to link colours with emotions such as happiness or negative effects¹³.

To battle anxieties and provide effective and efficient treatment, it is critical for the paediatric dentist to create a positive connection with youngsters. On the first visit, it is important to build a strong relationship with the child in order to create a safe environment where the youngster doesn't feel afraid¹⁵. Children's evolving expectations might motivate paediatric dentists to create a more child-friendly environment in their clinics, according to the American Academy of Pediatric Dentistry. Positive environmental aspects can help alleviate anxiety¹⁶.

The study sought to determine whether there is a gender predilection, whether there is a desire for the clinical clothes worn by dentists, and whether the aesthetic of paediatric dentistry clinics impacts.

METHODOLOGY

Cross-sectional descriptive research employing survey methods was carried out on 92 children aged 7–10 who attended the Department of Paediatric Dentistry clinics after getting approval from Ethical Review Board of the institution.

Prior to initiating the study, informed consent was acquired from each child's parents. The research only included kids who showed cooperative behaviour. Data on children's choices and preferences at a dental operator was gathered using a self-completion survey form. There were a wide range of factors that may have affected a child's experience at the dentist, including the type of male or female dentist, appearance of dentist, look of clinic.

Preoperative anxiety in paediatric patients has been extensively studied in research examining a variety of assistance and procedures. A questionnaire based on this material was created. Patients received these surveys after their first dental appointment, following the clinical assessment and before the

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dental chair treatment, so they may view everything they desire in the operator. In the presence of their parents, the youngsters filled out the questionnaire based on their own preferences. There was just one dentist on hand to answer any queries the youngster may have had. There were no surprises for the parents, who were told about the purpose of the study and that it would be kept private.

To analyse the results, a statistician received the surveys. Data was analysed by using SPSS. Cross tables were analysed using the Chi-squared test to examine the responses to the questionnaire items across age and gender groups. $P < 0.05$ was considered statistically significant.

RESULTS

The questionnaires were filled out and returned by 92 kids. The research enrolled 52 (57%) boys and 40 (43%) girls between the ages of 7 and 10 years. According to Table 1, male dentists are preferred by girls, whereas female dentists are preferred by boys. However, 4.3% of children appear unconcerned about the doctor's gender. It shows that 37% of boys found it easy to work with a female dentist, while 30.4% of girls preferred a female dentist. As a consequence of this research, it was shown that girls had a statistically significant preference for male dentists and girls had a statistically significant preference for male physicians ($p=0.00005$). (Table 1).

Table 1: Gender preferences

| Groups | Female doctor | Male doctor | Any doctor |
|--------|---------------|-------------|------------|
| Boys | 34 (37%) | 14 (15%) | 4 (4.3%) |
| Girls | 8 (9%) | 28(30.4) | 4 (4.3%) |
| Total | 42 | 42 | 8 |

P value .00005

Among the items listed in Table 2 is the dentist's attire. The majority of those who took part were at ease in a range of clothing. The majority of participants were males, with 22 % choosing casual wear and the majority of females, with 23% choosing lab coats, respectively. In addition, 11 % of boys and 11% of girls preferred a dentist dressed as a surgeon in surgical gowns, while 13% of boys and 6.5% of girls preferred a dentist dressed as a surgeon in scrubs. The results are statistically significant at a p -value of 0.0064 (Table 2).

Table 2: Dentist Attire

| Groups | Lab coats | scrubs | Surgical gown | Casual |
|--------|-----------|---------|---------------|----------|
| Boys | 10(11%) | 10(11%) | 12(13%) | 20(22%) |
| Girls | 21(23%) | 10(11%) | 06(6.5%) | 03(3.2%) |
| Total | 31 | 20 | 22 | 29 |

Chi square $X^2=17.19$

P value.00064

The result of this study concluded that there was a considerable difference in the selection of clinics by children. Figures in Table 3 reveal that 86.9% of the children surveyed favoured cartoons on the clinic walls. Among them, 50 (54.3 %) of the boys preferred clinics with cartoon paintings on the walls, while 30 (32.6%) of the girls preferred clinics with cartoon walls. Clinics without cartoons on the walls were chosen by only 2% of boys and 11% of girls, respectively. The results were statistically significant at $p=0.0028$ (Table 3).

Table 3. Clinic with cartoon and without cartoon walls

| Groups | Clinic without Cartoon walls | Clinic with cartoon walls |
|--------|------------------------------|---------------------------|
| Boys | 2(2.1%) | 50(54.3%) |
| Girls | 10(11%) | 30(32.6%) |
| Total | 12(13.1%) | 80(86.9%) |

Chi square $X^2=8.91$

P value.0028

DISCUSSION

According to the findings of this study, children have significant preferences when it comes to the dental operator setting. When a child's preferences and dislikes are identified, a more pleasant dentist experience and better patient care can be the result for

everyone involved. 92 children completed and returned surveys. The study involved 52(57%) boys and 40 (43%) girls between the ages of 7 and 10 years. According to Table 1, boys prefer female dentists, whereas girls prefer male dentists. However, 4.3% of youngsters appear uninterested with the doctor's gender. It reveals that 37% of boys prefer to work with a female dentist, while 30.4% of girls prefer male doctors. Similar study conducted by Sanguida A et al and her co-workers. They found that 45.4% of boys and 65% of girls prefer a male dentist, and 31.6 % of boys and 26.5% of girls are fine with both types of dentists¹⁷.

Another comparable survey, conducted by Vivek Padmanabhan, came to the conclusion that 60% of boys prefer a male physician and that 76% of girls choose a female dental practitioner. No matter if a physician is male or female, 8% of boys and 8% of girls are happy either way¹⁸. According to a recent study by Alsarheed, published in the European Journal of Dentistry, 54.5% of children choose male dentists and 46.5% choose female dentists¹⁹.

The dentist's outfit is mentioned in Table 2. The majority of participants were comfortable in a variety of outfits. The greatest number of participants were males, with 22% opting for casual attire, and girls, with 23% preferring lab coats, respectively. In addition to this, 11% of boys and 11% of girls picked a dentist in scrubs, while 13% of boys and 6.5% of girls favoured a dentist dressed as a surgeon in surgical gowns. A study done by Alsarheed found that out of 583 youngsters, 526 (90.2%) preferred a dentist in a white coat, while just 57(9.8 %) preferred a dentist in coloured clothes. Similar findings were observed by triumphimus et al., who came to the conclusion that while it is more suitable apparel for children. According to their findings, 78% of the youngsters chose white coats while just 22% favoured coloured coats²⁰. Vivek Padmanabhan conducted a similar survey and discovered that the surgical gown was the least popular dress among adolescents (13.04%), while scrubs were the most popular 34.78%, followed by lab coats and casual clothing, which were both chosen by 26.09%¹⁸.

In this study a significant difference has seen in selection of clinics by kids. Data in table 3 shows that 86.9% of the kids preferred cartoon on clinic walls. Among them 50(54.3%) were boys liked clinic that has cartoon paintings on walls and 30(32.6%) of the girls liked clinics that have cartoon walls. while only 2% of the boys and 11% girls preferred clinics without cartoon on walls.

Research by Jayakaran et al. et al, explained that 76% of the kids prefer clinics that have cartoon on their walls while 16% prefer natural sceneries on walls and only 8% does not care about clinic looks. One part of this strategy is to create a child-friendly environment in the clinic. It has been shown that children's dental anxiety can be alleviated by the use of cartoon-painted walls, toys, and a perfumed atmosphere¹⁹.

A study by Vivek et al, concluded that children likely to visit pedo clinics more easily compare to normal clinics. Significant data shows that 64% boy and 60% girls prefer pedo clinic compared to 9% boys and 10% girls prefer normal clinic.¹⁸ Similar study by Asiri et al, also mentioned that decorated clinics are more preferred by children compare to conventional clinics. Data shows that 51.2% of the kids liked decorated clinics while 48.8% choose normal clinics. In this study there is not much difference for choosing decorated and normal clinics²¹.

According to this study, the attractiveness of the dental operator's physical environment has been found to have a substantial impact on the patient's perceptions of quality, contentment, and staff contact. Rather than having adults choose the dental environment for children, it is better to let children choose what they like as patients. As a result, this study was done to find out what kids like and do not like in a paediatric dentistry setting.

CONCLUSION

The findings of this study will assist the dental team in determining the most appropriate design for the paediatric dental operator and in creating a comfortable dental environment for children, thereby

reducing anxiety in children and improving the overall quality of treatment provided to them.

Conflict of interest: Nil

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