Children's preferences toward dentist attire in Al Madinah Al Munawarah

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Background and aim: Children make judgments about the dentist on the basis of dentists' attire and talking gestures during dental visits. It is important to focus on dentists' attire as they can adjust their attire according to a child's preference. This study aims to assess the preferences of children regarding dentist attire in Al-Madinah Munawarah.

Methods: A cross-sectional study design has been incorporated by recruiting 202 patients aged between 9 and 12 years of age from Taibah University Hospital. The study was carried out from March to June 2018 through a questionnaire that consists of 15 questions to assess the attire preference of the dentist. The data obtained through the questionnaire was analyzed through Microsoft Excel and imported to SPSS Statistical Software version 21.

Results: The majority of the children (59.9%) specified that the attire of the dentist was important for them and 45.5% of them preferred the dentist to wear perfume. The majority of the children (57.4%) preferred that the dentist did not wear any jewelry. Moreover, the majority of the children (49.5%) preferred that dentists wore a white coat with white scarf. was preferred by the majority of the children (49.5%). Closed-toe shoes were preferred by most of the children (68.8%) and 56.9% of the children preferred the dentist to wear flat shoes. The attitude of dentists towards wearing shoes, jewelry, goggles, watches, badges, and face mask was found to have significant difference at 5% confidence interval; whereas, the children did not prefer traditional outfit worn by the dentists on their visit to the dental clinic. Conclusion: There is a significant impact of dentist attire on the child's acceptance of the

dental procedure.

Keywords: children, preferences, dentist attire, Al Madinah Al Munawarah

Introduction

The dental visit is not an enjoyable experience for the majority of the children. It prevents regular follow up and consequently delays the treatment. It is difficult to manage children at the dental clinic as the majority of them do not cooperate during the dental treatment. The difficulties faced in managing these patients at the clinic is not only associated with the involvement of technical procedures, rather they include various emotional factors.1 The major reason for the limitation in dental visits is the fear of the dentists. Anxiety and fear are the common emotional factors during the dental procedure from previous traumatic experience in the dentist clinic. Around 16% of school-age children have fear of dentist.²

As compared to the normal children, the children with active caries get more afraid about visiting the dentist because of their previous negative experience. It is important to reduce the child's fear and anxiety toward dental procedures as much as possible. To overcome the fear, the pediatric dentist must make efforts to establish an

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individual relationship with these children ie, to bond at a personal level. This practice of developing interpersonal relationship assists in overcoming their existing fear and helps in creating a pleasant environment.³ Before any verbal communication with the dentist during the first visit at the dental clinic, the impression of the dentist is based on the grooming, cleanliness, and attire of the dentist.⁴ Few studies have highlighted the significance of dentist's appearance on the development of interpersonal relationships between the dentist and the child.^{4,5} Dentist's attire is an interesting and important subject to focus on because it could be easily adjusted to the child's preference.

The use of the white coat has been symbolized for medical staff in the past 100 years that helps in reflecting the scientific validity of treatments conducted by them. However, the attire of health professional has changed over the years that have given medical professionals a less formal look. Majority of the children preferred the dentist to wear formal attire along with safety glasses and face masks. A study conducted by Almutairi and Al-Essa⁴ has clearly shown that the majority of the children and their parents preferred the dentist to be worn a traditional dental tunic.

The dentist attire should be clean to believe visiting patients that the professional is qualified enough to treat them. During dental visits, the children make judgments about the dentist on the basis of their attire, way of talking, gestures, and movements. Some of the children prefer white coat, while others prefer professional attire or scrubs. Although previous studies have observed the patient's attitude toward professional attire such studies concerning priorities of children are lacking. Therefore, the aim of the study is to assess the children preference for dental attire in Al Madinah Al Munawarah.

Research question

Research question 1: What type of attire is preferred by the children to be worn by the dentist while undergoing a dental procedure?

Hypotheses

H₀: The children prefer the dentist to wear a traditional outfit with a white lab coat.

H₁: The children do not prefer the dentist to wear a traditional outfit with a white lab coat.

H₀: The children prefer the dentist to wear proper badges, face masks, and goggles.

H₂: The children do not prefer the dentist to wear proper badges, face masks, and goggles.

H₀: The children prefer the dentist to wear watches, shoes, and perfumes, and jewellery.

H₃: The children do not prefer the dentist to wear watches, shoes, and perfumes, and jewellery.

Material & methods

Study design

The study has incorporated cross-sectional design by selecting 202 patients, aged between 9 and 12 years.

Study participants

Sample size calculation gave an estimate of 202 patients (type 1 error of 5% and at 95% of interval). The study has targeted children from 9 to 12 years old, who visit Taibah University Hospital for treatment at the pediatric department or accompanied by the patients; such as patients' relatives, sibling or friends.

Inclusion and exclusion criteria

The individuals, who fall in the age group of 9–11 years, and have visited the dentist previously were included in this study. The participants, who were siblings of the child participants were not included in the study to avoid the attrition of the parent's group.

Study setting

This age group was chosen as too young children would be difficult to rely on their response because their cognitive ability is not appropriate to complete a questionnaire. Nine years of age is expected to be the cut off for social development. The study has been carried over a period of 4 months from March to June 2018. It is believed that the age group of 9–11 years can self-report their preference and relatively reflect the children preference.

Data collection

The data have been collected through questionnaire consisted of 15 questions mainly assessing the attire preference of the dentist. Subjects were asked to choose the preferred attire of the dentist. Proper instructions were given to the participants for completing the questionnaire before going through dental treatment. Moreover, the children who found difficulty in completing the questionnaire were guided. Such

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as they were thoroughly explained the questions and about their outfits. This assistance allowed the children to easily answer the questions. The dataset has been collected and recorded in Microsoft Excel file and imported to Statistical Software for Social Sciences (SPSS) version 21. The testing procedure was used to generate frequencies that have been represented in the form of tables and figures.

Ethical consideration

The purpose of the study was explained to the parents verbally as well as in writing. A written form of consent was obtained from parents of each participant before administrating the questionnaire to the children.

Results

A total of 202 patients were recruited in this study, aged between 9 and 12 years. Out of 202 participants, 74.8% of children were males whereas 25.2% of children were females. All of the recruited children had visited the dentist and majority of them (58.9%) found the dental procedures to be unpleasant. However, 41.1% of the children found the procedure to be a pleasant one. Majority of the children (59.9%) stated that the attire of dentist was "important" for them; whereas, 17.8% and 22.3% stated that dentist attire was "not important" and "very important", respectively. It was observed that 45.5% of the children preferred the dentist to be worn perfume, while the majority of them (57.4%) did not prefer the dentist to wear any jewelry. Mostly, the dentist wearing a white coat with a white scarf was preferred by the children (49.5%) (Table 1).

Figure 1 has presented the results about attire preferences of the children. Majority of the children (45.5%) preferred the dentist using perfumes and 60.4% preferred the dentist to be wearing hand watches. Figure 2 has shown the preferences of children regarding the type of shoes worn by the dentist. The most preferred shoes among the children were closed toe shoes (68.8%); whereas, flat shoes were preferred by 56.9% of the children. Figure 3 presents the preferences of children regarding wearing a badge, face masks, and goggles among the dentists. An increased percentage of children preferred that the dentist should wear proper badges (89.6%), face masks (75.2%), and goggles (64.4%) while treating them.

One-way ANOVA has been used to examine the differences between the preferences of children participated regarding the dentist attire. In this regard, three hypotheses have been developed, which helps the researcher to identify the differences (Table 2). According to the results, there was an insignificant difference between the preferences of children towardthe outfit of dentists. This shows

Table I Demographics

Measure	Items	Frequency	Percentage	
Gender	Male	151	74.8	
	Female	51	25.2	
Dental procedure	Pleasant	83	41.1	
	Unpleasant	119	58.9	
Dress of the dentist	Not important	36	17.8	
	Important	121	59.9	
	Very	45	22.3	
	important			
Prefer perfumes	Yes	92	45.5	
	No	40	19.8	
	No opinion	70	34.7	
Prefer wearing jewellery	Yes	32	15.8	
,	No	116	57.4	
	No opinion	54	26.7	
Outfit	White coat and white scarf	100	49.5	
	White coat and black scarf	60	29.7	
	White coat and colorful scarf	15	7.4	
	Surgical scrubs	18	8.9	
	Professional outfit	9	4.5	

that children did not prefer that dentists wear white lab coat as their outfits. This finding has accepted the alternative hypothesis that "children do not prefer the dentist to wear a traditional outfit with a white lab coat" (H₁). Similarly, the findings have shown significant differences between the preferences of children toward the badges, goggles, and face masks during their treatment. This finding has accepted the alternative hypothesis that "children do not prefer the dentist to wear badges, face masks, and goggles" (H₂). In addition, the findings have shown significant differences for dentists wearing shoes, watches, perfumes, and jewelry and accepted H₃.

Discussion

The present cross-sectional study has been conducted for determining the preferences of children toward the Bahammam Dovepress

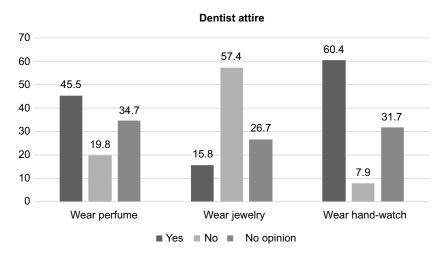


Figure I Preferences of children regarding dentist attire.

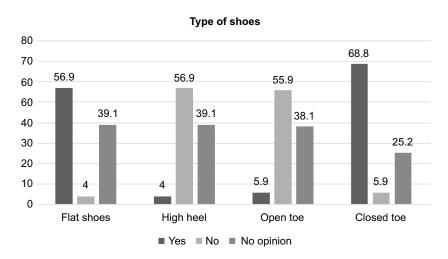


Figure 2 Preferences of children regarding the type of shoes worn by a dentist.

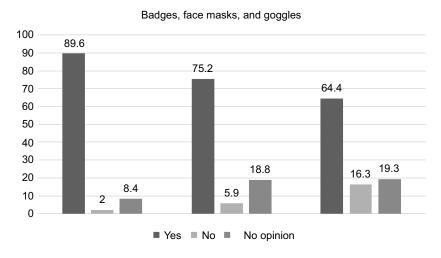


Figure 3 Preferences of children regarding dentists attire of badges, face masks, and goggles.

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Table 2 One-way ANOVA for preference

		Sum of squares	df	Mean square	F	Sig
The procedure	Between groups Within groups Total	12.747 36.149 48.896	1 200 201	12.747 0.181	70.524	0.000
Dentist's overall attire	Between groups Within groups Total	0.078 80.521 80.599	1 200 201	0.078 0.403	0.194	0.660
Perfume	Between groups Within groups Total	3.502 156.102 159.604	1 200 201	3.502 0.781	4.487	0.035
Wear jewelry	Between groups Within groups Total	2.340 81.264 83.604	1 200 201	2.340 0.406	5.760	0.017
Wear watch	Between groups Within groups Total	0.498 168.849 169.347	1 200 201	0.498 0.844	0.590	0.043
Wear flat shoes	Between groups Within Groups Total	10.399 177.185 187.584	1 200 201	10.399 0.886	11.738	0.001
Wear high heels	Between groups Within groups Total	1.258 60.786 62.045	1 200 201	1.258 0.304	4.140	0.043
Open-toe shoes	Between groups Within Groups Total	1.441 66.644 68.084	1 200 201	1.441 0.333	4.323	0.039
Closed-toe shoes	Between groups Within groups Total	21.730 129.934 151.663	1 200 201	21.730 0.650	33.447	0.000
Wear badge	Between groups Within groups Total	21.165 43.686 64.851	1 200 201	21.165 0.218	96.896	0.000
Face mask	Between groups Within groups Total	2.739 122.925 125.663	1 200 201	2.739 0.615	4.456	0.036
Googles	Between groups Within groups Total	2.610 125.395 128.005	1 200 201	2.610 0.627	4.163	0.043
Overall effect of dentist attire	Between groups Within groups Total	0.518 265.086 265.604	1 200 201	0.518 1.325	0.391	0.532

attire of the pediatric dentist. The study results have shown that a majority of the children prefer the dentist to dress in a traditional attire wearing a white coat with a white scarf. Moreover, they prefer the use of plain masks, white gloves, with closed toe shoes, and no jewelry. It has been clearly shown that the earliest judgment about dentist by the children based on their appearance and attire. Therefore, it is important for the

dentists to make positive adjustments and changes to look acceptable for the child. Similar to the present study, another study conducted by Alsarheed² stated that children preferred dentist wearing a traditional dress with a white coat.

Attaining information about the anxiety level among the children would assist the dentists to make the children comfortable with their pleasant preferences and appealing attire. In the present study, 49.5% of the children preferred their dentist to wear a white coat as it looks professional and increases their confidence.⁶ These results are consistent with the study conducted by Ravikumar et al,7 in which 42.6% of the children preferred their dentist to be worn a white coat while treating them. It is because the children associate the white coat with as a symbol of healing as indicated in the study of Patir Münevveroğlu, Ballı Akgöl, & Erol.⁸ The surgical scrubs were least preferred by the children (8.9%) as they seemed to be scary. A study conducted by Ellore et al,³ also stated that surgical scrubs were least preferred by the dentist as they seemed scary to them.

The present study has shown mixed responses from the children about their preferences toward the dentist attire; however, the majority of the children preferred the dentist to wear a traditional white coat. Child dental anxiety is not an extraordinary event, and it has remained a major barrier to dental care among the children. The pediatric fear can be reduced and overcome by developing an interpersonal relationship, and positive interaction with the child as it helps to create a positive and pleasant environment. Moreover, developing a good doctor-patient relationship set a string base for trust and allows the proper provision of care. The concept of child-friendly attire was considered suitable for anxious children for the better first impression of the dentist. A study conducted by Obu et al, 10 also revealed that majority of the children prefer doctors wearing a white coat and positively reacted to the dentists who wore white coats as compared to doctors with no white coat. Another study conducted by Asokan et al. 11 showed that utilizing child-friendly colors in the dentist's attire would help to relieve the dental anxiety and result in better communication and bonding between the dentist and the patient.

It is believed that the dentists, who are dressed in a professional outfit tend to inspire more confidence among the patients as well as their parents.¹² A study

conducted by Jafarzadeh et al, 13 showed that majority of the children were comfortable if the dentist wore formal attire with a name label, gloves, and jewelry. However, these results were consistent with the present study as the majority of the children (89.6%) stated that they preferred that the dentist wear a proper badge, face masks (75.3%), and goggles (64.4%). On the contrary, a study conducted by Mistry and Tahmassebi¹⁴ showed a majority of the children preferred their dentist to wear colorful clothes, whereas their parents' preferred doctors wearing formal white coats. The results of the present study have clarified the misconception of white coat syndrome that has resulted in many dentists to avoid wearing their white coats to establish an interpersonal patient-doctor relationship. The description of dentist attire preferred by the majority of the children would help the dentist to improve the child's perception regarding the care they receive.

Conclusion

The study results have clearly demonstrated that the dentists' attire has a significant impact on the children's acceptance of dental treatment. However, the children favored the dentist to be presented in a traditional outfit with a white lab coat. The study results would help the dentist to change their style of dressing on the basis of the patients' preferences. These changes are likely to improve their perception of the care they receive from the dentist. The study results are limited as it has not distinguished between the preferences of male and female children. The study has not evaluated the impact of other factors like age and gender on the acceptance of dental treatment provided by the dentist. Another limitation of the study is that the study was based on the attires of female dentist while attires of male dentist preferred by the children have not been considered. However, a better understanding of the children preferences can be developed by conducting future studies on a larger sample among different age groups and children should be recruited from different socio-economic backgrounds.

Ethics statement

This study was approved by the Research Ethics Committee (TUCD.REC) of the College of Dentistry, Taibah University, Saudi Arabia (Study reference number: TUCDREC/2OI 80302/Bahammamll). Informed consent was obtained from

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all of the participants and from the parent/guardian of each of the participating children before starting the procedures.

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Disclosure

The author reports no conflict of interest in this work.

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