

## Journal of Advanced Medical and Dental Sciences Research

@Society of Scientific Research and Studies

Journal home page: [www.jamdsr.com](http://www.jamdsr.com)

doi: 10.21276/jamdsr

ICV 2018= 82.06

(e) ISSN Online: 2321-9599;

(p) ISSN Print: 2348-6805

### Original Research

#### Assessment of dental anxiety and fear among 5-14 years old children

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#### ABSTRACT

**Background:** Dental fear and dental anxiety (DFA) refer to the strong negative feelings associated with dental treatment. The present study was conducted to determine dent anxiety and fear among 5-14 years old children. **Materials & Methods:** The present study was conducted on 238 children 5-14 years of both genders. The Children's Fear Survey Schedule – Dental Subscale (CFSS-DS) questionnaire was administered to evaluate dental fear in pediatric patients. **Results:** Age group 5 years comprised of 30, 6 years had 27, age 7 had 34, 8 years had 30, 9 years had 10, 10 years had 14, 11 years had 23, 12 years had 35, 13 years had 20 and 14 years had 15 subjects. The difference was significant ( $P < 0.05$ ). Possible triggers in subjects was injection in 168 subjects, people in white uniform in 120, choking in 65, having the dentist clean your teeth in 134, having somebody look at you in 35, having to open your mouth in 47 and dentists in 110 subjects. Dental far score 38 was seen in 8 years old subjects, 40 in 7 years subject, 45 in 6 years old and 50 in 5 years old subject. The difference was significant ( $P < 0.05$ ). **Conclusion:** Maximum fear was seen among 5 and 6 years old children. Injections and having the dentist clean your teeth were major fear factors.

**Key words:** Anxiety, fear, Children

Received: 26 October, 2019

Revised: 21 November, 2019

Accepted: 23 November, 2019

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**This article may be cited as:** Srivastava SK, Verma S, Pandey N, Dureja A, Kaur G, Azad V. Assessment of dental anxiety and fear among 5-14 years old children. J Adv Med Dent Sci Res 2020;8(1):100-103.

#### INTRODUCTION

Dental fear and dental anxiety (DFA) refer to the strong negative feelings associated with dental treatment, whether or not the criteria for a diagnosis of dental phobia are met. The reported prevalence of DFA among children and adolescents in different countries ranged from 5 to 33%.<sup>1</sup> Children with DFA often try all means to avoid or delay dental treatment, resulting in deterioration of their oral health. They also demonstrate poor cooperation during dental visits, which compromises the treatment outcomes, creates

occupational stress on dental staff, and causes discord between dental professionals and their parents.<sup>2</sup>

Dental fear is a pervasive problem and can lead to deliberate avoidance of dental treatment, thereby having an adverse effect on the patient's orofacial and psychological health.<sup>3</sup> The term 'dental fear' can be defined as a specific anxiety that predisposes an individual to a negative or uncomfortable experience during dental procedures. It may cause occasional and sometimes

serious problems for both patient and dentist. There are varied and multiple causes of dental fear in children that can be correlated to personality, general fear, previous painful dental experiences, dental fear in parents, age, and gender. Boys and older children report being less fearful than do girls and younger children.<sup>4</sup>

It was speculated that parents' DFA might exerts an influence on their children's DFA through modeling and information. Many adults with DFA may verbalize their fearful feelings in front of their children, creating a negative impression on dental treatment.<sup>5</sup> The present study was conducted to determine dent anxiety and fear among 5-14 years old children.

**MATERIALS & METHODS**

The present study comprised of 238 children 5-14 years of both genders. Parents were informed regarding the

study. Study design was approved by the institutional ethical committee.

Data such as name, age, gender etc. was recorded. The Children's Fear Survey Schedule – Dental Subscale (CFSS-DS) questionnaire was administered to evaluate dental fear in pediatric patients. The CFSS-DS is composed of 15 items related to unique aspects of dental care. The scores are rated as follows: not afraid = 1, little afraid = 2, fairly afraid = 3, quite afraid = 4, very afraid = 5. Total scores ranged from 15 to 75. Children with CFSS-DS scores greater than or equal to 38 were defined as dentally anxious. Children with scores greater than 38 were assigned in the group 'with dental fear', while those who scored less than 38 were included in the 'without dental fear' group. Results thus obtained were subjected to statistical analysis. P value less than 0.05 was considered significant.

**RESULTS**

**Table I Distribution of patients**

Age group (Years)	Number	P value
5	30	0.05
6	27	
7	34	
8	30	
9	10	
10	14	
11	23	
12	35	
13	20	
14	15	

Table I shows that age group 5 years comprised of 30, 6 years had 27, age 7 had 34, 8 years had 30, 9 years had 10, 10 years had 14, 11 years had 23, 12 years had 35, 13 years had 20 and 14 years had 15 subjects. The difference was significant (P< 0.05).

**Table II Possible triggers in subjects**

Triggers	Number	P value
Injection	168	0.01
People in white uniform	120	
Choking	65	
Having the dentist clean your teeth	134	
Having somebody look at you	35	
Having to open your mouth	47	
Dentists	110	

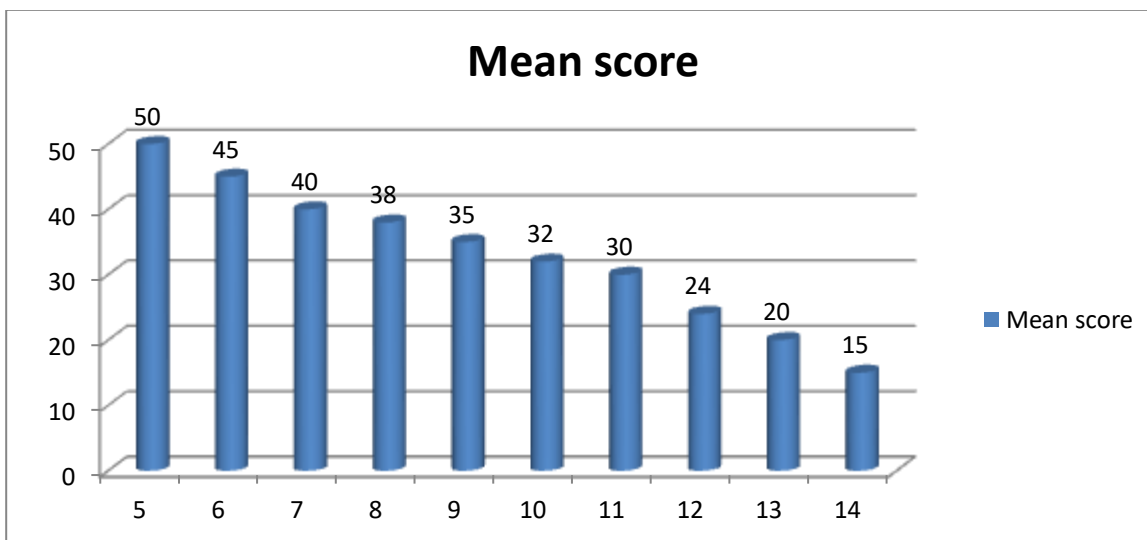
Table II shows that possible triggers in subjects was injection in 168 subjects, people in white uniform in 120, choking in 65, having the dentist clean your teeth in 134, having somebody look at you in 35, having to open your mouth in 47 and dentists in 110 subjects.

**Table III Children’s Fear Survey Schedule – Dental Subscale**

Age group (Years)	Mean score	P value
5	50	0.01
6	45	
7	40	
8	38	
9	35	
10	32	
11	30	
12	24	
13	20	
14	15	

Table III, graph I shows that dental far score 38 was seen in 8 years old subjects, 40 in 7 years subject, 45 in 6 years old and 50 in 5 years old subject. The difference was significant ( $P < 0.05$ ).

**Graph I Children’s Fear Survey Schedule – Dental Subscale**



**DISCUSSION**

Dental treatment has shown to induce and increase dental fear in children. In order to prevent this health threatening anxiety, preferably by means of a suitable pediatric treatment, it is crucial to identify dentally anxious children at the earliest age possible.<sup>6</sup> Of these fears, injections rank highest followed by dentist drills and the feeling of choking. People who are apprehensive about dental care often adopt a “cycle of avoidance” in which they consciously avoid visits to the dentist until they face a dental emergency, which can further strengthen their fear of dentistry.<sup>7</sup>

The present study was conducted to determine dent anxiety and fear among 5-14 years old children.

In this study, we studied 238 subjects. Age group 5 years comprised of 30, 6 years had 27, age 7 had 34, 8 years had 30, 9 years had 10, 10 years had 14, 11 years

had 23, 12 years had 35, 13 years had 20 and 14 years had 15 subjects. Ten et al<sup>8</sup> included 105 children (42%) who experienced dental fear. As CFSS-DS scores increased, scores on the Decayed, Missing and Filled Surfaces Index (DMFS) also increased. Scores were highest on “injections” followed by “dentist drill” and “feeling of choking”. Children were significantly less anxious about items of dental treatment if they had experienced that particular form of treatment. Female participants were found to be more dentally anxious than the male participants.

We found that possible triggers in subjects was injection in 168 subjects, people in white uniform in 120, choking in 65, having the dentist clean your teeth in 134, having somebody look at you in 35, having to open your mouth in 47 and dentists in

110 subjects. Thus injections were the major dental fear factors among children.

Chellappah et al<sup>9</sup> found that DFA was reported by 33.1% of children. The mean (SD) CFSS-DS score was 29.1. Children with siblings tended to report DFA and had a higher CFSS-DS score as compared with their counterpart. Children from single-parent families had lower CFSS-DS score as compared with children from nuclear families. Subgroup analysis showed a higher CFSS-DS score among boys with siblings as compared with their counterpart; girls' from single-parent families had a lower CFSS-DS score as compared with girls from nuclear families. Children's DFA was not associated with parents' DFA or parenting styles ( $p > 0.05$ ).

There is an emerging consensus in the literature that three major quality of life aspects relate to oral health (OHRQoL): clinically assessed disease and impairment, ailment and management specific symptoms, and functional and psychological disability. Numerous subjective oral health indicators have been developed over the years, however, there is a lack of OHRQoL measures designed specifically for children, despite the fact that pediatric oral disorders are numerous and likely to have a negative impact on a child's quality of life. Few attempts have been made to assess the prevalence and determinants of OHRQoL, both generally and specific to dental pain in child populations of non-industrialized countries.<sup>10</sup>

## CONCLUSION

Authors found that maximum fear was seen among 5 and 6 years old children. Injections and having the dentist clean your teeth were major fear factors.

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