

## Chief Complaint of Dental Pediatric Patients Attending Pediatric Dental Clinic, Dentistry Faculty, Tishk International University

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**Abstract:** Purpose: to assess the common Chief Complaint CC of patients attending the Pedodontics Department, Dental Faculty. Materials and Methods: A retrospective study was carried out, including 300 records of children attending the Pedodontics Department. The patients included in the study range from (1 – 13) years. The various CCs were categorized as follows pain, decay, checkup, extraction, and others. The common CC and the average patient attendance were assessed according to the age group, gender, and types of CC at their first dental visit. The statistical package for the social sciences program (SPSS, version 25) using frequency distribution and Chi-square was recording the data. Results: The most common CC was “Pain” (56.7%). Patients attending the dental clinic were significantly different regarding the gender Male (53.3%) and female (46.7). The relation between CCs and various age groups were significant, with a relative (P-Value = 0.01). Conclusion: Children’s averaged for their first dental visit mostly at (6 - 9) years, complaining of “Pain” as being defined as the most common CCs all over the age groups included in the study. Parents need education on the subject of the importance of early child’s visit to the dentist.

**Keywords:** Chief Complaint, Dental Pediatric Patient, Dental Clinic, Dental Recording Files, Pain.

### 1. Introduction

The first dental attendance is an essential event in the child’s life, and regular visits should have a positive influence on the child’s overall health care. The quality and future of precautionary dental care could be determined from the child’s age of first dental appointment. Twelve months of age has been defined as a relevant age of dental attendance of children, which has been advised by several investigations and recommended by the American Academy of Pediatric Dentistry (AAPD), which is strictly encouraged by the American Dental Association (ADA) (Widmer, 2003; Rayner, 2003; Nainar, 2003; American Academy of Pediatric Dentistry, 2004; Douglass, 2004). AAPD also has advised oral health risk estimation with a demonstration of oral home care for infants at the age of (6 - 12) months (Haupt, 2003). Dental attendance of children prior to the 12 months of age helps the dentist identify early lesions, evaluate craniofacial and dental development, provide anticipatory guidance, parent counseling, diet counseling, and motivate parents towards prevention-oriented interventions. Within the early dental visits, parents could be educated for effective preventive oral health care, identification of white spot lesions could be detected, which could help avoid serious and common oral health problems faced in children such as early childhood caries (ECC). A shift in the viewpoint, from identifying dental care from the therapeutic phase to its preventive and informative phase, will promote patient compliance.

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Oral health programs, which in turn affect the child's oral health well-being. Besides, the child's attendance to dental practice at initial ages, this has a positive prospective correlation with adaptation and acceptance concerning the dental practice. From many Investigations, Socioeconomic state has been defined as an apparent determinant of early dental treatment, awareness, education concerning infant oral health amongst general dentists and pediatricians, while affecting health insurance coverage, and parent's perspective towards initial dental treatment ( Waldman, 2001; Furze, 2003; Hamasha, 2006; Brickhouse, 2008).

The importance of this study was to identify the common concerns children's experience for attendance of dental clinic and understanding of the population's concern about their oral health. In addition, pidemiological studies can be used to evaluate the magnitude and severity of dental disease for a particular population. The aim of this study was to assess the common CCs of patients attending the Pedodontics Department.

## **2. Materials and Methods**

### **2.1 Ethical Approval**

Researchers obtained the ethical approval from the Dentistry Faculty, before beginning this retrospective study. In addition, the approval of the Pedodontics Department was gained to use the record files of children patients.

### **2.2 Study Plan**

This retrospective study performed at Pedodontics Department, Dentistry Faculty. The study started by reviewing the file records of pediatric patients aged (1-13) years who have attended the Pedodontics clinic from 2017 until 2020. We checked six hundred files of pediatric patients who visited the clinic for the first time. For standardization, the researchers included the complete record files reviewed by the Pedodontics clinic staff. We chose files, which contained the gender, age, the patient's visit for the first time and with recorded CC.

### **2.3 Inclusion Criteria**

Recording files of children visited the dentist for the first time with complete recording files signed by the department's staff of pedodontic. Exclusion criteria was case sheet files lacking the "inclusion criteria". The researchers reviewed the chosen recording files and the data obtained from the files included CC, gender, age, and number of visits.

### **2.4 Sample**

The sample included 300 recording file, which contain all the inclusion criteria out of 600 files checked. The sample was divided into three age groups, which were  $\leq 5$  years, 6-9 years, and 10-13 years according to WHO (Petersen, 2003). The researchers registered CC according to the type of CC and age groups. The type of CC that were registered included pain, extraction, decay, check-up, and others. Others included bleeding gums, discoloration of teeth, gum harm, and trauma. Then all the data case she was being recorded to (Microsoft Excel) for being analyzed.

## 2.5 Statistical Analysis

Statistical analysis began by entering the data on the computer using Microsoft Excel worksheet (Excel 2017). The statistical package for the social sciences program (SPSS, version 25) was used for data analysis. The data then analyzed using frequency distribution and Chi-square. P-values  $\leq 0.05$  were considered as statistically significant

## 3. Results

### 3.1 Sample Description

The sample included 300 recording files. The study groups included patients their ages ranging from one to 13 years with a mean age of  $7.22 \pm 7.569$  years (Table 1).

Table 1: Patients age range included in the study

N	Range	Minimum	Maximum	Mean	SD
300	12	1	13	7.22	2.569±0.38

SD= Standard Deviation

Approximately 85 patients (%28.3), who have attended dental clinic aged below 5 years, while 155 patients range between (6 – 9) years making (51.7 %), also 60 patients age ranged between (10 – 13) years (%20) of patients included in the study (Table 2).

Table 2: Percentage Distribution of Patients According to Age Groups.

Age groups	Frequency	Percent
$\leq 5$ years	85	28.3
6 – 9 years	155	51.7
10 – 13 years	60	20
Total	300	100

Table (3) illustrates that 160 patients included in the study were Male (53.3 %), while 140 patients were Female (46.7 %).

Table 3: Percentage Distribution of Patients According to gender.

Gender	Frequency	Percent
Male	160	53.3
Female	140	46.7
Total	300	100

### 3.2 Types of Chief Complain in The Sample

Table (4) shows the percentage distribution of Types of chief complaint perceived from patients. The first most common chief complaint 170 patients were “Pain” (56.7 %), while the second most common chief complaint reported as “Tooth Decay” by 67 patients (22.3%). Twelve percent of patients have been attended for routine “Check Up” (n=36). The minority of patients n=12 (4%) complained about “Extraction”, and the remaining 5% (n=15) complained of some other problems such as (Fluoride, non-erupting tooth .... Etc).

Table 4: Percentage Distribution of Chief Complain Types

Chief Complain	Frequency	Percent
Pain	170	56.7
Decay	67	22.3
Check up	36	12
Extraction	12	4
Others	15	5
Total	300	100

### 3.3 Distribution of Chief Complain in The Sample

Table (5) reveals the percentage distribution of the CC according to “Gender”. Overall the most common CC has been reported by both female and male was “Pain” (58.8% and 54.3% respectively) was. “Decay” was reported for males as (23.1%) and (21.4%) for females. It can be recognized that the same number of patients complaining for “Check-Up” and “Extraction” which are (18 and 6) patients but with different percentage distribution of (11.2% for male and 12.9% for female) for “Check-up” and (3.8% M and 4.3% F) for “Extraction”. The minority of patients were reported with some other complaints making of (3.1%) of males and (7.1%) females. The distribution of CCs, according to gender, was of no significant difference at  $p \leq 0.05$ .

Table 5: Percentage Distribution of CCs in relation to Gender

Chief Complaint	Male (no.=160)		Female (no.=140)		p-value	Total
	No.	%	No.	%		
Pain	94	58.8	76	54.30%	0.56	170
Decay	37	23.1	30	21.40%	0.41	67
Check up	18	11.2	18	12.90%	0.93	36
Extraction	6	3.8	6	4.30%	0.90	12
Others	5	3.1	10	7.10%	0.10	15
Total	160	100	140	100%		300

### 3.4 Distribution of the CC in relation to Age groups

Table (6) shows the distribution of the CC in relation to age groups. Insignificant difference in distribution of CC among age group in pain  $P=0.06$ , tooth decay  $P=0.07$ , check-up  $P=0.12$ , and others  $P=0.065$ . Whereas, there was significant difference extraction CC between age groups ( $P = 0.01$ ).

Table 6 : percentage distribution of the CC in relation to Age groups

Chief Complain	≤ 5 (no.=85)		6 – 9 years (no.=155)		10 – 13 years (no.=60)		p-value	Total
	No.	%	No.	%	No.	%		
Pain	43	50.6	100	64.5	27	45	0.06	170
Decay	22	25.9	28	18.1	17	28.3	0.07	67
Check up	16	18.8	13	8.3	7	11.7	0.12	46
Extraction	0	0	8	5.2	4	6.7	0.01*	12
Others	4	4.7	6	3.9	5	8.3	0.065	15
Total	85	100	155	100	60	100		300 (100%)

\*significant difference

## 4. Discussion

Many types of research have been concluded; including a wide range of age groups within individuals, while fewer concerns on beginner age groups of individuals. This research is of concern that could reveal many aspects of the cause of the children's visits to the dental clinic. This study mostly focuses on particular initial ages of human beings, aiming to characterize CCs attending the pediatric dental clinic in Erbil and focusing on the significance of CCs within different stages of child life. The study has included age groups ranging from one year to 13 years, aiming to evaluate types of CC in children and its relation to gender and age groups. The evaluation of CC in society will help evaluate children's behaviors toward oral health awareness, which will mirror their parent's oral health awareness of their children (Abdullah, 2007). Children's awareness of oral hygiene measures can be affected by parental concern about their children's oral health and the significance of teeth and oral hygiene measures in children (Rashid, 2019). Knowing the type of CCs can give oral health professionals an idea about the interest of parents in visiting a dental clinic and the extent of their education in oral health care.

The study has divided age groups into ( $\leq 5$ , 6 – 9, 10 – 13) years. Children aged ( $\leq 5$  years) have most commonly attended the dental clinic with a complaint of "Check-up", which illustrates children aged ( $\leq 5$  years) are more controlled by parents valuing their oral hygiene measures which explains a parental concern in this period of child's life as a positive point in our society. The complaint of "Pain" has mostly been reported in children within (6 – 9) years which may reveal decreased parent awareness or control of children at this age and that give the dental health professionals an alert that this age group of children needs more oral health care from the parents. To motivate the parents for good care about teeth of their children needs the help of dental health professionals by performing educational program to the society. Children between (10 – 13) years have complained mostly from "Decay" that may show an increase in children's desire to sweet and negligence of oral hygiene measures and may be permanent teeth caries. This indicates the need for society education regarding the health dietary habits and unhealthy dietary habits to decrease the cases of dental caries in children.

The result of this study reveals that the most common cause of seeking dental treatment was “Pain” that exhibits similar results with other previous research, which has included a wider range of age group in Sri Lanka, Malaysia, Tanzania, Australia, Tanzania, Nigeria and Iraq (Warnakulasuriya, 1985; Razak, 1987; van Palenstein, 1990; Broughton, 1991; Mosh, 1994; Oginni, 2004; Abdullah, 2007)]. Results from 1985 – 2020, regardless of age group, region, and year difference, reveal dental “Pain” as the most common CCs, revealing the majority of individuals not appraising the value of teeth until they get pain. Seeking treatment at late stages may be due to several psychosocial factors such as dental anxiety states, financial costs, perceptions of need, and lack of access (Pekiner, 2010). In addition, in advanced countries such as the United States, the influence of the general economy is reported to affect the need for dental attention (Nainar, 2003). A study among 246 patients at Bangalore, Karnataka, India stated that high prices of dental treatment was the main obstacle in the achieving dental treatment (Kadaluru, 2012). We can have concluded from this study, children’s averaged for their first dental visit mostly at (6 - 9) years, complaining of “Pain” as being defined as the most common CCs all over the age groups included in the study which indicates low education of the parents about the importance of early dental visit.

In conclusion, parents need education on the subject of the importance of early child’s visit to the dentist and educational programs needed for enhancing good oral hygiene and dietary habits. Additional studies are needed to identify the main cause of not attending the dental clinics regularly to preserve oral health before they get diseased and cause aches.

One of the boundaries of this research is that it is conveyed only in one private dental hospital without recording the patient’s socioeconomic status. Therefore, caution is necessary before the conclusion. In addition, the exact dental treatment needs of the patients and the underlying reason for the CCs were not evaluated. So, the anticipated demand could not be compared with the standardizing need of the research population.

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