

Dental treatment needs and treatment achieved for children attending the clinic of pedodontics, College of Dentistry, University of Mosul

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ABSTRACT

The aim of this study was to investigate the reason for seeking dental treatment and the type of treatment carried out for the children attending clinic of pedodontics, College of Dentistry, University of Mosul.

The study included (1850) case sheets which represent the total number of children that attend to the pedodontic clinic, during the academic year of 1997 – 1998.

The result show that children with age (9 – 10) years have higher percent in attending the pedodontic clinic than other age groups.

The result indicate that children attended to the clinic seeking treatment for painful condition have higher percentage (36.11%) than other cases. then check up, esthetic problem, preventive therapy, trauma come in a lower percentage than the pain.

The study reveal that the higher percentage of treatment done is extraction (29.06%) followed by scaling and polishing (20.27%), amalgam filling, preventive program, other type of treatment done in a lower percentage.

Key Words: Dental treatment need, case sheet.

الخلاصة

الهدف من هذه الدراسة هو لمعرفة سبب قدوم المراجعين لطلب الخدمات العلاجية وكذلك نوع العلاجات المقدمة للمراجعين من الأطفال الذين يراجعون قسم الأطفال وطب الأسنان الوقائي في كلية طب الأسنان، بجامعة الموصل.

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أجريت الدراسة على (١٨٥٠) استمارة حالة، والتي تمثل العدد الكلي للأطفال الذين لديهم استمارات علاجية من خلال مراجعتهم لعيادة الأطفال وطب الأسنان الوقائي خلال السنة الأكاديمية ١٩٩٧ - ١٩٩٨.

أظهرت النتائج أن الأطفال الذين أعمارهم بين (٩ - ١٠) سنوات يمثلون نسبة أعلى من حيث حضورهم لطلب الخدمات العلاجية.

تبين من خلال الدراسة بأن من أهم أسباب زيارة الأطفال للعيادة وطلبهم للخدمات العلاجية هو الألم الذي يشكل نسبة (١١, ٣٦%) بينما كانت الأسباب الأخرى المتمثلة في الفحص العام للأسنان، والمشاكل الجمالية، وطلب الخدمات الوقائية، وصدمة الأسنان بنسب أقل من ألم الأسنان.

أظهرت النتائج بأن أعلى نسبة للخدمات العلاجية المقدمة من قبل طلاب الكلية للأطفال هي قلع الأسنان (٠,٦, ٢٩%) تليها تنظيف الأسنان بنسبة (٢٧, ٢٠%)، كما كانت بقية أنواع العلاجات المقدمة بضمنها الحشوات الدائمة، والعلاجات الوقائية بنسب أقل.

INTRODUCTION

The demand for dental treatment is considered to be an important parameter in the assessment of the requirement of the dental services and training of manpower⁽¹⁾.

Patient attending the pedodontic clinic seeking dental treatment for their complaint without any differentiation of the correct cause of pain.

Most of the epidemiological studies in our country, especially those involving children were directed to the estimation of the prevalence and severity of oral problems rather than dental treatment demands and needs^(2, 3, 4).

The aim of the present study was to investigate the reason for seeking dental treatment, and the dental treatment carried out for the children attending clinic of pedodontics, College of Dentistry, University of Mosul.

MATERIALS AND METHODS

The study included (1850) case sheets which represent the total number of children that attend to the pedodontic clinic during the academic year of 1997 - 1998 with varying age of few months to (14) years old.

The case sheet recorded include different type of information about the examined child. Fifth class students examined the patients under the

supervision of senior staff. The examination results recorded in a case sheets which included the name, age, sex, the chief complaint, condition of soft tissue & DMFS. Then the students write a treatment plan for this patient, and treatment done after they finish the visit for the child.

Chief complaints of all patients were divided into five categories that include: 1. Patient come for routine check up. 2. Patient complaint from pain. 3. Patient suffering from traumatized anterior teeth. 4. Patient with esthetic problem like (staining, crowded teeth, disharmony of eruption, caries of anterior teeth). 5. Patient seeking for preventive measures as fluoride therapy and fissure sealant.

The treatment achieved for children is also studied which include (extraction, scaling & polishing, fluoride application, preventive filling, amalgam filling, light cure filling, root canal, and others which mainly include x – ray, drug treatment, emergency treatment after trauma).

Other items studied are the number of visits that the patient attended to the college to continue and complete the treatment plan of the child.

The data obtained from the patients case sheets were gathered, grouped and analyzed, then the mean and percentage were used to analyze the results.

RESULTS

Table (1) shows the distribution of children by age and sex. The results show that boys and girls attended the clinic nearly in equal percentage with slightly higher percentage for boys (53.08%) than girls (46.92%).

Table (1): Distribution of children according to age & sex

Age (Years)	Boys		Girls		Total	
	No.	%	No.	%	No.	%
0 – 2	71	3.83	65	3.51	136	7.35
3 – 4	95	5.13	72	3.89	167	9.02
5 – 6	159	8.59	136	7.35	295	15.9
7 – 8	203	10.97	168	9.08	371	20.05
9 – 10	215	11.62	227	12.27	442	23.89
11 – 12	196	10.59	169	9.13	365	19.72
13 – 14	43	2.32	31	1.67	74	4.0
All Ages	982	53.08	868	46.92	1850	100

The sample was divided into seven age groups. Results show that the higher number of the attenders is at age (9 – 10) years followed (7 – 8), (11 – 12) years respectively, and those of (0 – 2) years is also attended but in a lesser number.

Table (2) represent the distribution of children according to their chief complaints in both sexes. The results show that the most frequent dental complaint were pain (36.11%) with different causes. The second complaint was check up. Esthetic problem was recorded to be the next dental complaint, which included not only missing anterior teeth, but also staining, malposition teeth, delay of eruption of permanent teeth. The next are those who seeking for preventive measure only (11.73%) from the total sample.

Table (2): Distribution of children according to their chief complaint

Chief complaint	Boys		Girls		Total	
	No.	%	No.	%	No.	%
Check up	234	12.65	242	13.08	476	25.72
Pain	352	19.03	316	17.08	668	36.11
Trauma	78	4.21	59	3.19	137	7.4
Esthetic	182	9.83	170	9.19	352	19.03
Preventive Measure	136	7.35	81	4.38	217	11.73

The distribution of children according to the type of treatment achieved for the children are shown in table (3) result revealed that the higher percentage of treatment done for children attending the clinic is the extraction (29.06%) and then the scaling and polishing (20.27%). Amalgam filling, fluoride application, fissure sealant also represents a high part of treatment done.

Table (4) represent the number of visit that the patient attended to the pedodontic clinic in the dental college. The result show that about half the total number (53.24%) attended one time only to seek the treatment, but there are considerable number of children those come more than one time & some of them have continue the follow up procedure of the child.

However, the mean of the number of visit for the total sample is (2.15), which is considered very low in respect to do any preventive and treatment program for the children.

Table (3): Distribution of children according to the type of treatment achieved for them

Type of Treatment	No. of Cases	%
Extraction	1127	29.06
Scaling & polishing	786	20.27
Fluoride application	487	12.56
Fissure sealant	354	9.13
Temporary filling	243	6.26
Amalgam filling	618	15.94
Light care filling	76	1.96
Root canal filling	121	3.12
Others	66	1.7
Total	3878	100

Table (4): Distribution of patient according to the number of visit to the pedodontic clinic

No. of Visit	No. of Patient	% of Cases
1	985	53.24
2	312	16.86
3	245	13.24
4	127	6.86
5	82	4.43
6	43	2.32
7	22	1.19
8	15	0.81
9	8	0.43
10	11	0.59

Mean = 2.15

DISCUSSION

Data of this study show that the number of children attended to the clinic is increased as the age increase, especially at age (9 – 10) years. This finding is due to that children at these age group have mixed dentition, and due to the fact that caries process is irreversible, dental caries prevalence and severity in permanent teeth is increased with increasing age^(5,6,7).

Also the result show that boys and girls attended the clinic nearly in equal percentage with slightly higher percentage for boys than girls. This result is in agreement with result of El-Samarrai⁽⁸⁾ and Salih⁽⁹⁾ in Baghdad University.

Data of this study reflect that patients attended pedodontics clinic to relief pain have higher percentage than other reasons. This finding is in agreement with the work of other researchers^(1,8). While the second cause for visiting the dental clinic is check up, esthetic problem formed another important cause for parents to bring their children to the clinic. This will indicate that parent didn't bring their children to the clinic mainly unless there is painful or necessary condition.

From the distribution of children according to the type of treatment achieved for them, the result reveal that large number attended to clinic for the extraction of painful or badly carious teeth, this is in agreement with many studies carried out in Iraq reported the main reason for attending dental clinic is for extraction of teeth^(10,11). Also a large number in need of restoration but the parents prefer to do extraction especially for primary dentition.

This finding confirms the findings of many studies that reported very low percentage of filling primary teeth, and the main component of the dmft was the decayed portion and when the teeth become badly broken down and/or painful, the parents prefer to extraction^(4,7). This picture indicates that therapeutic dentistry is much restricted, in addition to a negative attitude towards oral health and not knowing the importance of the primary dentition.

There is a far distance between "normative needs" and "demand" for treatment. Health workers are planning to convert normative need of the population into demand for treatment. This can be achieved by the improvement of dental health attitudes and perceptions toward dentistry^(1,12).

Also from the number of teeth that become filled from the total sample it appear very little in comparison with the total number of patient and in respect to the prevalence of dental caries at these age we can

conclude that parents awareness to the dental demands of their children is very poor.

This result is also obvious from the number of visit of children to the clinic to complete the treatment plan, the results show that most patient attended only one time to relief the chief complaint or some time they come two or three times till they finish the necessary complaint, but they haven't any interest to come again to complete the preventive program that is necessary for him; only a small number of the sample attended several times to the clinic (more than 4 – 5 visits) to continue their preventive program of their children.

The preventive measure carried out in the clinic to the children in this study was topical fluoride application (12.56%) and fissure sealant (9.13%) is considerably high especially in our community where very high percentage of population didn't know benefit or uses of fluoride^(7,13). In addition a reasonable number of children (11.73%) reported that the main reason for attending the clinic was for fluoride application.

So improvement of dental health attitudes & perception of parents and children toward dentistry is very essential which may increase the demand for treatment and encourage parents to attend dental clinic with their children regularly.

However, this should be accompanied by improvements of dental health services and organization of manpower in our country.

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