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Research Article

**A CROSS-SECTIONAL STUDY ON THE FREQUENCY OF
DENTAL CARRIES IN CHILDREN OF 6-10 YEARS OF AGE**¹Dr. Umiah Gohar, ²Dr. Naila Ameen, ³Summaya Ibrahim¹Fatima Memorial Hospital, Lahore²Punjab Dental Hospital Lahore³Nishtar Institute of Dentistry Multan**Abstract:**

Objective: A research was conducted to determine the level of caries in between 6-10 years of children in the suburban areas of Multan.

Study design: A cross-sectional study.

Place and duration: In Punjab Dental Hospital Lahore for six-month period from July 2017 to December 2017.

Methods: 400 total children was selected between 7-11 years of age. These children were included from the OPD of Nishtar Hospital, Multan and Department of Pediatric Dentistry. The dentist records all dental examinations to avoid bias for the entire sample and the decay level in the teeth, including bruising due to tooth decay. The clinical analysis was done by the questionnaire completion by all volunteers including information such as name, age, address and gender. With SPSS version 17.0, data analysis was done and selected in descriptive statistics such as cross tabulation and distribution frequency.

Results: While there was no significant relationship with dmft in males (62.5%) and females (37.5%), age was a statistically significant factor for dmft ($p = 0.04$). Mean STDD was 4.94 for the whole sample, while the mean age for the ACDD was 6, 7, 8, 9, and 10 respectively for 5.8, 4.9, 4.9, 3.6, 3.2. The dmft distribution curve showed a 3.37 standard deviation, representing a slight change in the left.

Conclusion: The sample distribution curve proves efficacy in decay tendency.

Key words: Frequency, Tooth decay, DMFT, DMFT.

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INTRODUCTION:

Oral health is a fundamental part of good health throughout life. According to Horowitz et al., Oral cavity is usually linked with the evolution of a pleasant personality, perception and experience. The ability to chewable and swallow as required by the American Dietetic Association in 1986 to obtain the necessary nutrients for the body, which are the main components of good health. However, millions of people suffer from tooth decay and disease. Periodontal, unnecessary, swallowing, speaking problems, chewing and higher medical expense. Oral diseases in untreated condition of children often results in serious general health issues, severe pain, dietary intervention and school time disturbance. When thinking of the necessary amendments in dental care one of the determined factors is the dental diseases prevalence and the need for treatment in the community. Tooth decay is the main effect of oral health and affects 60-90% of patients in developing countries. Most school children and adults. The incidence of dental caries in India is about 55% to 60%. Poor oral hygiene may have a harmful effect on the performance of school going Children and their in later life with their success. It has a major effect on the style of life, causes embarrassment and pain, limits the function and the cost of treatment is high. Children with inadequate oral health problems have 12 times more limited activities during the day, including inadequate class, including those who do not take courses. Globally, above 50 million hours per year are lost in school due to poor oral hygiene. Therefore, in the suburb of Multan is necessary to

know the actual incidence of dental caries, so it can do more improvement in the health sector if necessary.

MATERIALS AND METHODS:

This cross sectional study was held in Punjab Dental Hospital Lahore for six month period from July 2017 to December 2017. 400 was the total sample size in children aged 6-10 years. From the OPD of the Department of Pediatric Dentistry, Multan Nishter Hospital these children were included. The dentist performed a complete dental examination of the all patients to avoid prejudices and record the grade of tooth decay. Only among children of six to 10 years of age were selected and the grading of caries was determined only by clinical assessment. X-rays were not obtained for purpose of diagnosis. Due to the lack of teeth and teeth due to tooth decay, there were also bruises. The questionnaire was filled after clinical assessment of all patients, including information such as name, age, address and gender. Data collection pages were assessed for deficiencies and errors and corrected if compulsory. The analysis was performed using version 17.0 of SPSS. Data analysis included descriptive statistics such as cross tabulation and frequency distribution.

RESULTS:

400 total patients was the sample size and much higher consisted of men than women (62.5%) (38.05%). The largest group was in the 9-year group (33.05%) and the smallest group was 10-year group (3%) (Table 1, 2).

TABLE 1: DISTRIBUTION OF AGE AND GENDER (n=400)

Age of student	Sex of Student		Total
	Male	Female	
6	44	26	70
7	62	32	94
8	78	52	130
9	58	40	98
10	8	0	8
Total	250	150	400

TABLE 2: FREQUENCY DISTRIBUTION OF GENDER AND AGE (n=400)

Variable	Frequency (n)	Valid Frequency (%)
GENDER		
Male	250	62.5
Female	150	37.5
Total	400	100
AGE		
6 y	70	17.5
7 y	94	23.5
8 y	130	32.5
9 y	98	24.5
10 y	8	2.0
Total	400	100

It was observed that the mean dmft decreased with age and the dmft mean of the total sample was recorded as 5.04. The dmft mean was 6.08, 5.01, 5.09, 4.06, 30.2 for the ages of 7, 8, 9, 10 and 11, respectively.

TABLE 3: FREQUENCY DISTRIBUTION OF DMFT AND MEAN DMFT TO AGE OF THE CHILD (n=400)

DMFT	AGE OF CHILD					TOTAL
	6	7	8	9	10	
Less than 3	18	38	48	48	6	158
More than 3	52	56	81	50	2	241
22	0	0	1	0	0	1
Total	70	94	130	98	8	400
Mean dmft	5.8	4.9	4.9	3.6	3.2	4.94 [^]

p-value for Chi-square test=0.04 (P<0.05)

[^] Mean dmft of whole sample

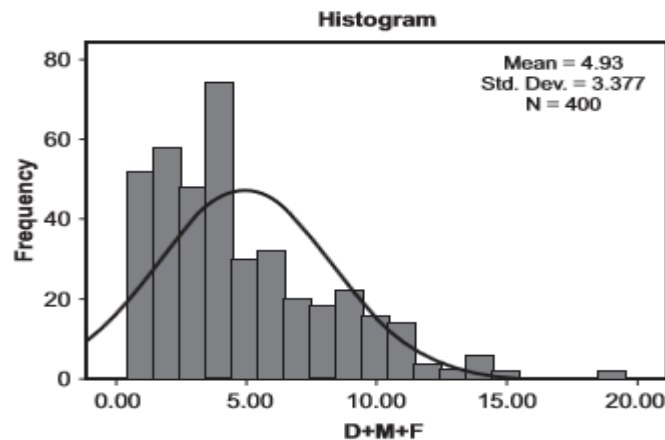
Chi-square analysis showed a significant statistically association between dmft and age (p = 0.04) (Table 3), the relationship with gender was not static (p = 0.47) (Table 4).

TABLE 4: FREQUENCY DISTRIBUTION OF DMFT TO GENDER OF THE CHILD (n=400)

DMFT	Gender of Child		Total
	Male	Female	
Less than 3	94	64	158
More than 3	155	86	241
22	1	0	1
Total	250	150	400

p-value for Chi-square test= 0.46

When plotted for the Dmft variable, the normal distribution curve showed a standard deviation of 3,467; this is a mild shift to the left. (Figure 1)



DISCUSSION:

Oral health is very important for general health and well-being. The individual is defined as the standard of mouth and related tissues to cook, talk and socialize without active disease, shame or discomfort, and to contribute to general well-being. Most studies focus on schoolchildren for the same reason, so children can have a life with good oral health and fewer lectures. Although the CFDD was higher than the average CFDD distribution of Uganda, Trinidad and Tobago, Portugal, Scotland, Scandinavia and the United Kingdom, this study showed a slight decrease

in the curve of the curve, although there was an improvement in the reduction of the decline. Despite the great success in improving the oral health of societies around the world, there are still problems among disadvantaged groups in many societies around the world, especially in developing countries. Periodontal diseases and Dental caries have historically been seen as an important part of the disease global burden. Both can be prevented effectively and managed by a combination of professional, individual actions and community. Early diagnosis of the disease is, in majority of the

cases, very important for the well being the oral health. A complete oral assessment with sufficient light can reveal many verbal conditions at an early stage. This will provide a greater shift to the left in the normal distribution of cases and means good oral hygiene for every one.

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