

Common chief complaints of patients seeking treatment in the government dental institution of Puducherry, India

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ABSTRACT

Objective: To explore the common chief complaints (CCs) of patients seeking treatment in the government dental hospital of Puducherry, India. **Materials and Methods:** The age, gender, and the CC or the main reason for the visit were recorded for each consecutive patient of the 1,014 patients attending the dental hospital. The chi-square test was used to find any statistical association between the variables. **Results:** The mean age of the study group was 28.1 years with age ranging 1-80 years. "Toothache" is found to be most common CC reported by 33% of the patients. "Decayed tooth" is reported as the CC by 19% of the patients. CCs were found to vary across the different age groups and to some extent gender differences were also noted. **Conclusion:** CC denotes the demand for dental care and thus, helps in proper planning of the public dental health care system.

Key words: Chief complaints, normative need, perceived need, toothache

INTRODUCTION

The chief complaints (CCs) of the patients represent the demand for dental care.^[1] It is usually recorded in the patient's own words to know the patient's perception of the problem.^[2] Demand for dental care is the expression by a patient or the public of a desire to receive dental care to attend to their felt need. Felt need, also called perceived need or subjective need, is the need for dental care as determined by the patient or the public. Data from epidemiological studies are used to assess the extent

and severity of dental diseases within populations, from which estimates of need can be made. These estimates of normative need to tell us how much care is required if we are to treat active disease of the population today.^[3] Demand for dental care may differ from normative need, which is professionally determined.^[1] The problem that brings the patient to the dentist is obviously a treatment priority; otherwise, the patient will seek treatment elsewhere.^[4] It was found that only very few studies were made on the CCs of dental patients and there was no published report about the Indian scenario. Hence, this study was undertaken to determine the common CCs of dental patients among the semi-urban community in South India.

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MATERIALS AND METHODS

A prospective epidemiological study was conducted among 1,014 subjects who sought treatment on an outpatient basis in the Mahatma Gandhi Postgraduate Institute of Dental Sciences, Puducherry during the first week of January 2005. The age and sex of the patients and the CC or the main reason for the visit were recorded for each consecutive patient of the 1,014 patients. The chi-square test was used to find any statistical association between the CCs with the age or gender of patients.

RESULTS

The age of the study group ranged 1-80 years with mean age of 28.1 years. Table 1 shows the percentage distribution of subjects according to age group and gender. A higher percentage of females sought treatment compared to males. Those demanding treatment mostly belonged to the age group of 21-30 years in both the sexes. Among the age group of 31-40 years, significantly ($P < 0.05$) more females sought treatment, whereas significantly ($P < 0.05$) more males sought treatment among the age group of >60 years.

Table 2 shows the percentage distribution of the CCs according to gender. Overall, the most common CC reported was “toothache,” reported by 32.5% of the subjects. The second and third most common CCs reported were “decayed tooth” reported by 19% of the subjects and “wants to remove the tooth” reported by 9.4% of the subjects. When we compared sex differences, significantly more females sought treatment for “decayed tooth” ($P < 0.01$) and for “wants to wear clip” ($P < 0.01$), whereas significantly more males sought treatment for “wants to replace missing teeth” ($P < 0.05$).

Table 3 shows percentage distribution of the CCs according to age group. When the age groups were considered separately, “toothache” was the most common CC reported by all age groups except for the age group of 1-10 years, in which “decayed tooth” was the most common CC reported. “Decayed tooth” was the second most common CC reported by 11-20 years, 21-30 years, 31-40 years, and 41-50 years age groups. “Wants to remove the tooth” was the second most common CC reported by 51-60 years and >60 years age groups.

When we compared differences among the age groups, significantly more subjects complained of “decayed tooth” ($P < 0.001$) and “unerupted upper front teeth” ($P < 0.001$), whereas fewer subjects complained of “toothache” ($P < 0.05$), “wants to remove the tooth” ($P < 0.001$), and “wants to fill decayed tooth” ($P < 0.01$) in the age group of 1-10 years.

In the age group of 11-20 years, significantly more subjects complained of “wants to wear clip” ($P < 0.001$),

Table 1: Percentage distribution of subjects according to age group and gender

Age group in years	Male (n = 480)	Female (n = 534)	Total (n = 1014)
0-10	15.42	13.86	14.60
11-20	21.25	20.41	20.81
21-30	25.83	28.84	27.42
31-40	15.00	20.79	18.05
41-50	10.00	7.68	8.78
51-60	6.67	5.62	6.11
Above 60	5.83	2.81	4.24

Table 2: Percentage distribution of the chief complaints according to gender

Chief complaint	Male (n = 480)	Female (n = 534)	Total (n = 1014)
Toothache	30.2	34.6	32.5
Decayed tooth	15.4	22.3	19.0
Wants to remove the tooth	9.8	9.0	9.4
Wants to clean the teeth	6.9	4.1	5.4
Wants to fill the decayed tooth	4.6	5.1	4.8
Wants to replace the missing tooth	5.2	2.2	3.6
Wants to wear clip	1.7	4.7	3.3
Mobile tooth	2.7	3.2	3.0
Sensitivity	2.5	1.9	2.2
Forwardly placed front teeth	1.9	2.2	2.1
Bleeding gum	2.3	1.7	2.0
Pain in the gum	2.1	0.6	1.3
Unerupted upper front teeth	2.1	0.4	1.2
Broken filling	1.3	0.7	1.0
Irregularly placed front teeth	1.0	0.7	0.9
Dental check up	1.0	0.6	0.8
Swollen gum	1.3	0.4	0.8
Bad breath	0.8	0.6	0.7
Deposits in the teeth	0.8	0.6	0.7
Others	6.5	4.5	5.4

“forwardly placed front teeth” ($P < 0.001$), “irregularly placed front teeth” ($P < 0.005$), and “wants to fill decayed tooth” ($P < 0.01$), whereas fewer subjects complained of “toothache” ($P < 0.001$) and “wants to remove the tooth” ($P < 0.005$).

In the age group of 21-30 years, significantly more subjects complained of “wants to fill decayed tooth” ($P < 0.05$), whereas fewer subjects complained of “mobile tooth” ($P < 0.005$). Among the age group of 31-40 years, significantly more subjects complained of “toothache” ($P < 0.05$) and “wants to remove the tooth” ($P < 0.05$), whereas fewer subjects complained of “wants to wear clip” ($P < 0.05$). In the age group of 41-50 years, significantly more subjects complained of “wants to replace the missing teeth” ($P < 0.001$), whereas fewer subjects complained of “decayed tooth” ($P < 0.05$).

In the age group of 51-60 years, significantly more subjects complained of “mobile tooth” ($P < 0.005$) and “wants to remove the tooth” ($P < 0.05$), whereas fewer subjects complained of “decayed tooth” ($P < 0.005$). In the age

Table 3: Percentage distribution of the chief complaints according to age group

Chief complaint	Age group in years							All Ages (n = 1014)
	0-10 (n = 148)	11-20 (n = 211)	21-30 (n = 278)	31-40 (n = 183)	41-50 (n = 89)	51-60 (n = 62)	>60 (n = 43)	
Toothache	23.6	21.8	36.0	38.8	41.6	43.5	32.6	32.5
Decayed tooth	41.9	20.9	16.9	15.3	10.1	4.8	0.0	19.0
Wants to remove the tooth	1.4	4.3	10.1	14.2	10.1	17.7	23.3	9.4
Wants to clean the teeth	2.7	8.1	6.8	6.0	3.4	1.6	0.0	5.4
Wants to fill the decayed tooth	0.0	8.5	7.6	3.3	3.4	1.6	0.0	4.8
Wants to replace the missing teeth	0.7	1.9	3.6	3.3	10.1	4.8	9.3	3.6
Wants to wear clip	2.7	9.5	2.9	0.5	0.0	0.0	0.0	3.3
Mobile tooth	3.4	0.9	0.0	3.3	3.4	9.7	18.6	3.0
Sensitivity	0.0	1.4	3.2	2.2	3.4	4.8	0.0	2.2
Forwardly placed front teeth	4.1	5.7	0.7	0.5	0.0	0.0	0.0	2.1
Bleeding gum	0.7	2.8	1.8	3.3	1.1	1.6	0.0	2.0
Pain in the gum	0.0	0.9	1.1	1.1	3.4	1.6	4.7	1.3
Unerupted upper front teeth	7.4	0.5	0.0	0.0	0.0	0.0	0.0	1.2
Broken filling	0.0	1.4	1.8	0.5	0.0	1.6	0.0	1.0
Irregularly placed front teeth	2.0	2.4	0.4	0.0	0.0	0.0	0.0	0.9
Dental checkup	0.7	0.5	1.4	0.5	1.1	0.0	0.0	0.8
Swollen gum	0.0	0.9	1.1	0.0	3.4	0.0	0.0	0.8
Bad breath	0.0	1.4	0.4	1.1	1.1	0.0	0.0	0.7
Deposits in the teeth	1.4	0.9	0.0	1.1	1.1	0.0	0.0	0.7
Others	7.4	5.2	4.3	4.9	3.4	6.5	11.6	5.4
Total	100	100	100	100	100	100	100	100

group of >60 years, significantly more subjects complained of “mobile tooth ($P < 0.001$)” and “wants to remove the tooth” ($P < 0.005$), whereas fewer subjects complained of “decayed tooth” ($P < 0.005$).

DISCUSSION

The result of our study revealed that the most common reason for demanding dental treatment was “toothache,” which was in line with the previous studies from Sri Lanka in 1985,^[5] Malaysia in 1987,^[6] Tanzania in 1990,^[7] Australia in 1991,^[8] Tanzania in 1993,^[9] Nigeria in 2004,^[10] and Iraq in 2007.^[4] An investigation from Sri Lanka in 2001^[11] reported that decayed tooth was the main reason for demanding dental treatment. However, in the age group of 11-20 years, patients have presented themselves relatively earlier for the treatment of “decayed tooth” before the acute symptoms such as pain developed. Like the patients seeking dental treatment at the University of Mosul, demand for orthodontic treatment is relatively very high among the age group of 11-20 years, especially by females.^[4] In the urban population of Malaysia, the attendance behavior of the women is more preventively oriented than man.^[6] This is in line with our study where more females sought treatment for “decayed tooth” than males.

In the age group of 21-30 years, there is more demand for restorative care. In the age group of 41-50 years, there is relatively more demand for prosthetics. In the age groups of 51-60 years and >60 years, there is more demand for extractions. Similarly, among the patients seeking treatment at the dental hospital at Nigeria, more people requested for extraction in the age group >65 years.^[10] In the University

of Nairobi dental hospital, the most common complaint among the pediatric dental patients is found to be “pain” and “orthodontic related complaints” as reported by 32% and 25% of the patients, respectively.^[12] These findings show that the motivation for seeking dental care varies relatively among different age group and genders.

Only 8 out of the 1,014 (0.8%) subjects reported “dental checkup” as the main reason for the dental visit. This indicates the need to make people aware of the importance of regular checkups and preventive care. Poor knowledge on the importance of dental check-ups and attendance for treatment only is a frequently cited concern in other developing countries.^[13] CCs such as “wants to remove the tooth,” “wants to clean the teeth,” “wants to fill decayed tooth,” “wants to replace the missing teeth,” and “wants to wear clip” shows that some patients approach the dentist with self-determined specific treatments. This kind of patient is found to be around 28% in our study who made self-diagnosis of their dental problems and may not accept the ideal treatment advised by the dentist. It is the obligation of a dentist to not only provide care for the presenting complaint of the patients but also to make them aware of and provide treatment for any other condition that is diagnosed during a routine dental examination. This is necessary because the patients are unable to assess their dental treatment needs accurately.^[14]

Findings of this study reveal that most people appear to seek treatment only when acute disturbing symptoms such as pain is apparent. Demanding treatment at late stages may relate to several psychosocial factors such as dental anxiety states, financial costs, perceptions of need, and lack of

access.^[15] Even in the developed countries such as the United States, performance of the general economy is reported to affect the demand for dental care.^[3] Data collected among 427 patients at Udaipur, Rajasthan, India revealed that the reason for not visiting the dentist in the past was “I did not have any problems with my teeth” followed by lack of time and fear of painful dental procedures.^[16] A similar investigation among 246 patients at Bangalore, Karnataka, India reported that high cost was the main barrier in the utilization of dental care.^[17] Further studies are needed to identify the specific factors for delay in seeking dental treatment in this government institution where treatment is provided free of cost.

One of the limitations of this study is that it is conducted only in one public dental hospital without collecting socioeconomic details of the patients. So caution is necessary before drawing conclusions. Also, the actual dental treatment needs of the patients and the underlying cause for the CCs were not assessed. So the perceived need could not be compared with the normative need of the study population. Accurate and consistent documentation of hospital records may facilitate complete data retrieval for large scale hospital-based retrospective studies.^[12]

CONCLUSION

The reason for dental visit varies across different age groups and to some extent, gender differences are also noted. Multicentric studies about CC will give an idea about the actual demand for dental care. This would be helpful for proper planning of the dental health care system at the national level with limited financial resources.

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Conflicts of interest

There are no conflicts of interest.

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