

Prevalence of Dental Caries among Different Socioeconomic Status and their Treatment Needs among 5–15-year-old School-going Children in Maduravoyal Area, Chennai

Amudha S¹, Joyson Moses², Vijayakumar M³, Shankar P⁴

ABSTRACT

Dental cariology is a discipline with history as long as that of human civilization. It has seen numerous growth and decline phases from the epidemiological perspective. Nevertheless, despite huge amounts of funds being allotted by various international agencies to estimate the prevalence and assess the treatment needs, there always exists a gap between collected data and actual scenarios due to the in-availability of feasible approaches to include all people as samples and assess the statistics, especially the rural population of developing countries. To solve this issue, investigators from various geographic denominations should come forward to present the situation in their dominion. This paper is a report on the prevalence of dental caries in school-going children aged 5–15 years, belonging to various socioeconomic strata. These results have testified to the positive correlation between increased westernization and the prevalence of dental caries. It is also seen that lower economic strata have more predilection for a healthier diet and resultant low prevalence in dental caries. Thus, this study has thrown valuable light on epidemiological aspects of dental caries in Maduravoyal, Chennai-based rural population, which can be used for various planning activities.

Keywords: Dental caries, Incidence, Maduravoyal, Pediatric dentistry, Prevalence, Treatment needs.

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INTRODUCTION

Dental caries has been recognized and reported ever since the advent of human civilization. The previous century has seen arguably the most distinct change in its epidemiological scenario, i.e., incidence and prevalence. This has been attributed to sudden and profound changes in diet, lifestyle, and culture of people. It has been shown beyond doubt that preventive prophylactic measures, including regular oral hygiene and diet changes, contribute to reducing dental caries.¹

Being the most common disease in the oral cavity, developed nations show a decline in the prevalence of dental caries while there is a contrasting trend in developing countries, due to change in oral hygiene habits, positive attitude about etiology, and prevention of dental caries.^{2–4} It is also apparent that the prevalence pattern of dental caries shows relation with age, gender, socioeconomic status, race, geography, diet habits, and oral hygiene practices.⁴

In the Asian region, the pediatric caries prevalence was found to be low or moderate (50% in 5-year-olds and 52% in 12-year-olds) when compared with other parts of Asia.⁵ In India, the greater mass of the population dwells in the rural areas, having above 40% constituted by children. Dental caries is the most prevalent dental affliction of childhood and it is reported that 85% of children suffer at some point in time. Even though credible scientific advances have been achieved in the field, dental caries, which is preventable with current care, still continues to be a major public health issue in pediatrics. In India, the prevalence of caries among preschool children was found to be in the range of 40–70%, affecting education for children and economic loss for the parents.^{6,7} Identification and characterization of a high-risk group of children having primary tooth caries would be useful to plan and provide preventive care to such children.⁸

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In India, the involvement of the government in surveying oral health at the national level has been less and the only attempt was the national oral health survey that has been conducted in different states, which showed some disparity in oral health status and behavior between the urban and rural population.⁷

The rise in the prevalence of dental caries has been linked by various investigators to factors such as high refined sugar consumption, westernization of diet, poor socioeconomic status, and urbanization.^{9–13} Furthermore, income and poor education have been reported to influence oral hygiene.^{14,15} Despite reports on the prevalence of dental caries and corresponding treatment needs of various populations in urban regions of India have been

reported, there is a lacuna in such data corresponding to rural areas, which is the dwelling place of the majority of the Indian population. A major cause of limited oral care in rural areas, along with lack of skilled manpower and inadequate planning of resources is the unavailability of baseline data of treatment needs.¹⁶ Even in areas of Chennai district, the capital city of Tamil Nadu, to date, there is a lacuna in the literature pertaining to the information on dental caries prevalence and treatment needs in children especially in the age-group of 5–15 years. Therefore, the objective of the current cross-sectional study is to assess the dental caries prevalence among various socioeconomic strata and their corresponding treatment needs in 5–15-year-old schoolchildren in the Maduravoyal area of Chennai district, Tamil Nadu.

MATERIALS AND METHODS

Study Population and Inclusion Criteria

In the chosen area, seven schools were randomly selected for the study, out of which three were government schools and four were private schools. The study population included schoolchildren of the age of 5–15 years distributed from the first to tenth standard. The age-group of 5–15 years was selected to screen and evaluate not only the primary dentition but also mixed and permanent dentition except the third molars. Before commencing the study, official permission was got from all the concerned authorities, viz. Directorate of Education of Chennai and Head of the concerned school. The study protocol was submitted to and approved by the institutional review board.

Children of 5–8 years of age-group were classified under group I, 9–11 years of age children under group II, and 12–15 years under group III. Physically or mentally challenged children, children with known systemic diseases, and children with apparent factors that directly affect dental caries (deleterious habits) were excluded from the study.

Schedule of the Study

A schedule for data collection was prepared. On average, about 50 schoolchildren were examined and analyzed per day.

Survey Form and Examination Method

A survey form was prepared in accordance with the “WHO” Oral Health Assessment Form (1987). All the examinations were carried out by the investigator, in the school. The examination for dental caries was done according to the dentition status and treatment needs, described by “WHO” (1987).¹⁷ Schoolchildren were examined in the corridor of the school with sufficient natural daylight and were made to sit on a chair or stool. Oral examination was conducted using a plane mouth mirror, explorer, and CPI probe. For socioeconomic status, Kuppuswamy’s scale was used.¹⁸

Manpower for the Study

A dedicated organizing clerk was employed at the examination site to maintain a constant and organized flow of study subjects to the examiner. He/she also entered general descriptive information on the survey form—including the name, age, sex, school, socioeconomic, dentition status, and treatment needs. The age, parent’s education, occupation, and income were obtained from school records and student record books. All other information was collected directly from the children. A recording clerk (trained dental surgeon) was employed to enter the codes on the survey form.

Type of Examination

The type III clinical examination was carried out during the survey according to procedures given by ADA in 1970, using a plane mirror, explorer, and CPI probe.

Statistical Analysis

The acquired data were tabulated and subjected to statistical analysis. Microsoft Excel 2007 data spreadsheet was used. Descriptive and analytical approaches were used for data analysis. The results were computed and tabulated in tables. The statistical data were using SPSS software version 19 (IBM, USA 2010) and analyzed using Chi-square test at a level significant of ($p < 0.05$).

RESULTS

The study population consisted of 2,080 school-going children, out of which 1,074 (51.63%) were males and 1,006 (48.37%) were females. Table 1 shows the gender and age distribution of the sample. The study population consisted of 2,080 subjects, out of which 763 (36.7%) were from government schools and 1,317 (63.3%) were from private schools. The study population consisted of 2,080 subjects. Among them, 133 (6.4%) belong to upper socioeconomic status. A total of 1,107 (53.2%) belong to upper middle-class socioeconomic status. A total of 511 (24.6%) belongs to middle/lower middle socioeconomic status. A total of 320 (15.4%) belongs to lower/upper lower socioeconomic status. A total of 9 (0.4%) belongs to lower socioeconomic status. Table 2 shows the prevalence rate in the sample population. Tables 3 and 4 show caries prevalence according to age. When caries prevalence was compared between different age-groups, the difference was highly significant in DMFT and dmft (p value 0.001).

To summarize preventive care, it can be seen that the highest requirement of preventive care among the study population was seen in group III (12–15 years). In group III, preventive care was required for 32 (8.21%) males and 41 (11.08%) females. The highest requirement of pit and fissure sealant among the study population was seen in group III (12–15 years). In group III, pit and fissure sealant was required for 41 (10.5%) males and 43 (11.62%) females. Among all the groups and treatment needs, one surface restoration was the maximum treatment requirement, on which maximum requirement was among males 278 (66.83%) in group I, followed by females 228 (61.62%) in group I. Among males, two or more surface restoration requirement was 137 (32.93%) in group I, 89 (33.21%) in group II, and 111 (28.46%) in group III, respectively. Among females, two or more surface restoration requirement was 128 (31.68%) in group I, 87 (37.50%) in group II, and 129 (34.86%) in group III, respectively.

Table 1: Gender-wise distribution of study population in three different age groups

	Age categorized			Total
	5–8 years (group I)	9–11 years (group II)	12–15 years (group III)	
Male	416 50.73%	268 53.60%	390 51.32%	1,074 51.63%
Female	404 49.27%	232 46.40%	370 48.68%	1,006 48.37%
Total	820 100.00%	500 100.00%	760 100.00%	2,080 100.00%

Among all the age-groups, the crown requirement was highest in 38 males (9.13%) in group I and a minimum of 17 females (4.21%) in group I. Pulp care was required maximum in 35 males (8.41%) in group I and minimum of 17 females (4.21%) in group II. Extraction was required maximum in 41 males (9.86%) in group I and a minimum of 8 males (2.05%) in group III. Other care requirements were maximum in 17 females (4.6%) in group II and a minimum of 3 males (1.1%) in group II (Tables 5 and 6).

Among group I and group II, preventive care was required maximum among the upper class. Among group III, preventive care was required maximum in the middle class. Among all the age-groups, maximum preventive care is required in the middle class. Pit and fissure sealant requirement is highest among the upper class of group II. One surface restoration was required maximum in the lower class of group III, followed by middle class among group I. Two or more surface restorations were required maximum among

Table 2: Caries prevalence among the study population according to different age groups

Age categorized	DMFT			dmft		
	Absent	Present	Total	Absent	Present	Total
5–8 years (group I)	759 92.6%	61 7.4%	820 100.0%	213 26.0%	607 74.0%	820 100.0%
9–11 years (group II)	373 74.6%	127 25.4%	500 100.0%	226 45.2%	274 54.8%	500 100.0%
12–15 years (group III)	249 32.8%	511 67.2%	760 100.0%	Nil	Nil	Nil
Total	1,381 66.4%	699 33.6%	2,080 100.0%	439 33.26%	881 66.74%	1,320 100.0%
Chi-square	651.98, <i>p</i> value 0.001*					

Table 3: Caries prevalence among the study population according to different age groups among different socioeconomic status

Age categorized		DMFT			dmft			
		Absent	Present	Total	Absent	Present	Total	
5–8 years (group I)	SES class	Upper	51 91.1%	5 8.9%	56 100.0%	7 12.5%	49 87.5%	56 100.0%
		Upper middle	397 90.2%	43 9.8%	440 100.0%	128 29.1%	312 70.9%	440 100.0%
		Middle/lower middle	193 95.1%	10 4.9%	203 100.0%	54 26.6%	149 73.4%	203 100.0%
		Lower/upper lower	116 97.5%	3 2.5%	119 100.0%	22 18.5%	97 81.5%	119 100.0%
		Lower	2 100.0%	0 0%	2 100.0%	2 100.0%	0 0%	2 100.0%
		Total	759 92.6%	61 7.4%	820 100.0%	213 26.0%	607 74.0%	820 100.0%
			Chi-square 9.863, <i>p</i> value 0.043*			Chi-square 18.721, <i>p</i> value 0.002*		
9–11 years (group II)	SES class	Upper	28 71.8%	11 28.2%	39 100.0%	21 53.8%	18 46.2%	39 100.0%
		Upper middle	197 74.9%	66 25.1%	263 100.0%	138 52.5%	125 47.5%	263 100.0%
		Middle/lower middle	93 75.6%	30 24.4%	123 100.0%	43 35.0%	80 65.0%	123 100.0%
		Lower/upper lower	55 76.4%	17 23.6%	72 100.0%	22 30.6%	50 69.4%	72 100.0%
		Lower	0 0%	3 100.0%	3 100.0%	2 66.7%	1 33.3%	3 100.0%
		Total	373 74.6%	127 25.4%	500 100.0%	226 45.2%	274 54.8%	500 100.0%
			Chi-square 9.174, <i>p</i> value 0.057			Chi-square 18.791, <i>p</i> value 0.001*		

upper class under group II. Crown requirement and pulp care were highest among the upper class in group II. Extraction was required maximum among upper lower class among group I. Other care was required maximum among the lower middle class in group III.

DISCUSSION

In the Pan-Indian National Health Survey conducted in 2004, to evaluate the oral health status in representative age-groups, the prevalence of dental caries for both coronal and root surfaces was reported to be 51.9% (5-year-old children), 53.8% (12-year-old children), 63.1% (15-year-old teenagers), 80.2% (35–44 years), and 85.0% (65–74 years). The report highlighted the need for preventive dentistry programs at the national level.¹⁹

The index age-group for oral health surveys according to WHO is 5 years for primary teeth and 12, 15, 35–44, and 65–74 years for permanent teeth. The age-group of 5 to 15 years was selected as per the index age-groups of the WHO to assess the caries prevalence in primary and permanent dentition.²⁰

The difference in the epidemiology of oral health problems between individuals of various socioeconomic strata is discussed.²¹ These may be due to variations in the accessibility to the oral health services also. This makes the collection of data regarding socioeconomic status an important part of the study. Important indicators of such socioeconomic variables are occupational status, income, and level of education. Each indicator addresses a unique aspect of social stratification, making it preferable to use all three instead of only one.²²

The prevalence of dental caries in the present study was 33.6% in permanent dentition and 45.4% in the primary dentition. It was observed that the caries prevalence of group I and group II was lower compared with group III in permanent dentition and the caries prevalence of group II and group III was lower compared with group I in the primary dentition. The study done by Downer reported a decline in dental caries by 55% in the deciduous dentition of 5-year-old, 75 and 74% among 12- and 14-year-old children, respectively.²³ It was observed from the surveys after the 1980s that caries levels have leveled out and may even have started to rise in younger children. Other studies have reported the prevalence proportion rates of dental caries were 46.9% in 6-year-old and 52.9% in 12-year-old.²⁴ In the present study, there was an increase in caries prevalence among group I 74%, group II 54.8%,

and group III 8.4%. The increase in caries prevalence rate among the group I show the change in diet pattern and the increase in consumption of sugar substitutes in the diet (Figs 1 to 4).

The dmft scores declined whereas DMFT scores increased from group I in the present study. This corresponds to a study done in Mangaluru city, on the prevalence of dental caries among 5–13-year-old children.²⁵ They observed the dmft scores declined whereas DMFT scores increased from 5–13 years. Saravanan et al. studied caries prevalence and treatment needs and reported that among 5–6-year-old children the caries prevalence was 70.2%.²⁶ Subsequent studies have reported that among various age-groups, the total caries prevalence in the age-group of 6–7 years was 51.53% when compared with 66.44% in the age-group of 8–10 years and found the difference was statistically highly significant.¹⁶ Moses et al. reported among the 5–8, 9–11, and 12–15 years, the prevalence of caries was observed more in the age-group of 9–11 years.²⁷ Caries prevalence in the age-group of 5–7 was 20.7%, 8–10 years group was 48.2%, and 11–14 years was 52.46% as seen in a report.¹ Few investigators do report the prevalence of caries in a pattern of occurrence that consistently increased from 5–7 to 8–10 years of age-group and subsequently decreased at 11–14 years of age group.²⁰

The prevalence of dental caries among various socioeconomic statuses was assessed in the current study. The prevalence of dental caries in permanent dentition shows a statistically significant difference among group I. The prevalence of caries in primary dentition in group I also showed statistically significant differences among socioeconomic status with maximum prevalence among lower/upper lower class and upper class. This result shows that there is an increase in the prevalence of dental caries among upper class subjects in primary dentition which might be due to increased frequency of dietary sugar intake and frequent snacking among upper socioeconomic status. This study shows a statistically significant difference in caries prevalence in group II among different socioeconomic statuses. There is no statistically significant difference in caries prevalence in primary and permanent dentition in group III among different socioeconomic statuses. This is relevant to the study done by Witt who showed that no statistically significant differences were observed in DMFT between the rich and the poor whereas when DMFS was taken into consideration significant differences were observed.²⁸ Major part of the overall DMFS among rich children was contributed by the filled component while it was the decayed component among the poor ones. Filled

Table 4: Caries prevalence in group III (12–15 years) among different socioeconomic status

12–15 years (group III)	SES class	Upper	6	32	38
			15.8%	84.2%	100.0%
	Upper middle	136	33.7%	268	404
				66.3%	100.0%
	Middle/lower middle	59	31.9%	126	185
				68.1%	100.0%
	Lower/upper lower	46	35.7%	83	129
				64.3%	100.0%
	Lower	2	50.0%	2	4
				50.0%	100.0%
	Total	249	32.8%	511	760
				67.2%	100.0%
			Chi-square 6.213 p value 0.184		

*Denotes statistically significant

Table 5: Distribution of treatment needs among males and females among different age groups

Treatment needs	Males						Females					
	Group I		Group II		Group III		Group I		Group II		Group III	
	N	%	N	%	N	%	N	%	N	%	N	%
Preventive care	16	3.85	17	6.34	32	8.21	21	5.20	9	3.88	41	11.08
Pit and fissure	12	2.88	21	7.84	41	10.51	15	3.71	15	6.47	43	11.62
One surface restoration	278	66.83	154	57.46	210	53.85	268	66.34	137	59.05	228	61.62
Two or more surfaces restoration	137	32.93	89	33.21	111	28.46	128	31.68	87	37.50	129	34.86
Crown required	38	9.13	20	7.46	21	5.38	17	4.21	13	5.60	17	4.59
Pulp care	35	8.41	22	8.21	20	5.13	17	4.21	13	5.60	18	4.86
Extraction	41	9.86	16	5.97	8	2.05	31	7.67	13	5.60	13	3.51
Other care	6	1.4	3	1.1	12	3.1	6	1.5	6	2.6	17	4.6
Children requiring treatment	414	99.5	266	99.3	389	99.7	404	100	232	100	370	100
No treatment	2	0.48	2	0.75	1	0.26	0	0.00	0	0.00	0	0.00
Total children	416		268		390		404		232		370	

Table 6: Distribution of treatment needs among different socioeconomic status and different age groups

Age groups	SES	Preventive care		Pit and fissure sealants		One surface restoration		Two or more surfaces restoration		Crown		Pulp care		Extraction		Other care		No treatment	
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
5-8 years (group I)	Upper	5	6.02	0	0.00	36	43.37	29	34.93	5	6.02	5	6.02	3	3.61	0	0.00	0	0.00
	Upper middle	17	3.29	13	2.51	296	57.25	114	22.05	21	4.06	21	4.06	30	5.80	4	0.77	1	0.19
	Middle/lower middle	7	2.7	7	2.7	133	51.35	70	27.02	10	3.86	8	3.08	20	7.72	3	1.16	1	0.38
9-11 years (group II)	Lower/upper lower	8	3.82	7	3.34	81	38.75	52	24.88	19	9.09	18	8.61	19	9.09	5	2.39	0	0.00
	Lower	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
	Upper	4	7.84	7	13.72	18	35.29	18	35.29	1	1.96	1	1.96	2	3.92	0	0.00	0	0.00
12-15 years (group III)	Upper middle	11	3.58	17	5.53	147	47.88	74	24.10	18	5.86	19	6.18	14	4.56	7	2.28	0	0.00
	Middle/lower middle	6	2.11	6	2.11	79	27.81	47	16.54	9	3.16	10	3.52	5	1.76	1	0.35	121	42.60
	Lower/upper lower	5	4.54	6	5.45	44	40.0	36	32.72	5	4.54	5	4.54	8	7.27	1	0.90	0	0.00
12-15 years (group III)	Lower	0	0.00	0	0.00	0	0.00	1	100	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
	Upper	2	3.12	6	9.37	22	34.37	19	29.68	7	10.93	7	10.93	0	0.00	1	1.56	0	0.00
	Upper middle	36	7.11	38	7.50	247	48.81	125	24.70	14	2.76	14	2.76	15	2.96	16	3.16	1	0.19
12-15 years (group III)	Middle/lower middle	22	9.56	21	9.13	106	46.08	54	23.47	6	2.60	7	3.04	5	2.17	9	3.91	0	0.00
	Lower/upper lower	13	8.22	19	12.02	60	37.97	41	25.94	11	6.96	10	6.32	1	0.63	3	1.89	0	0.00
	Lower	0	0.00	0	0.00	3	75.00	1	25.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00

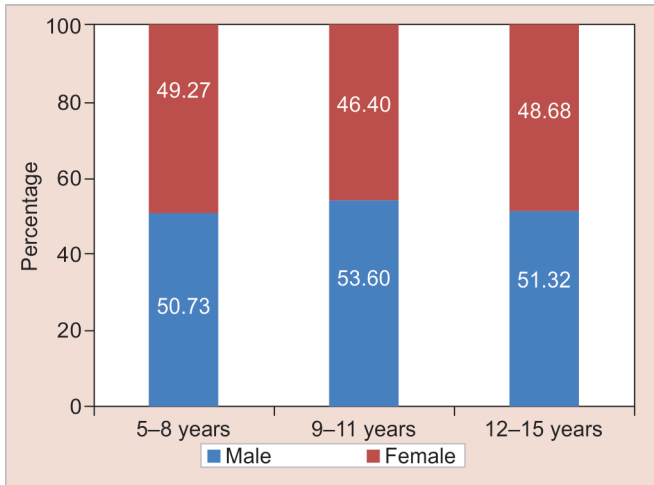


Fig. 1: Gender-wise distribution of study population in three different age groups

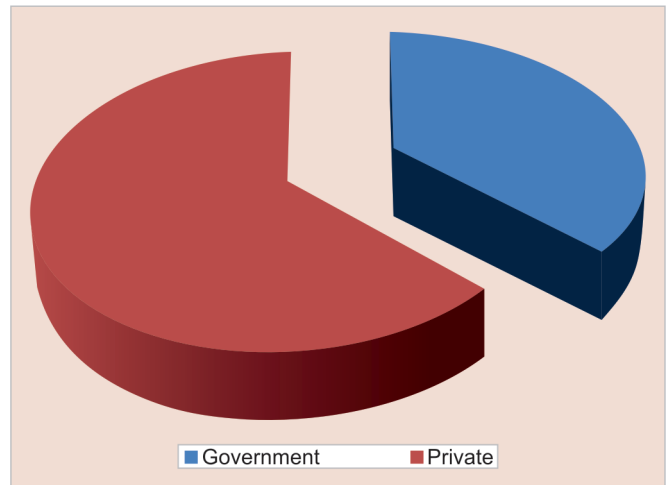


Fig. 2: Distribution of study population in government and private schools

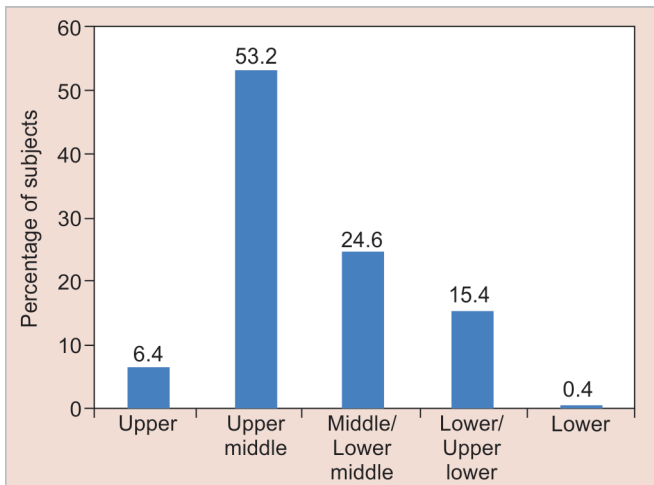


Fig. 3: Distribution of subjects according to different socioeconomic status

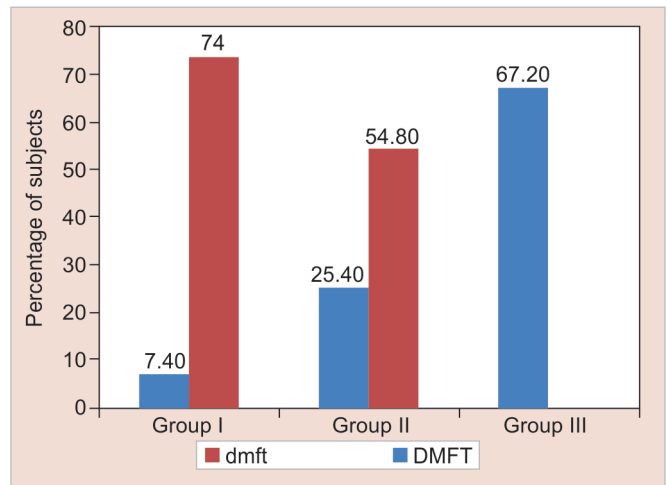


Fig. 4: Caries prevalence among the study population according to different age groups

surfaces comprised 96 and 50% of the DMFS values in rich and poor children, respectively.

Caries experience was worse in a study conducted among children of lower socioeconomic groups.²³ Interestingly, few reports do show that there was no significant difference for the caries level in different socioeconomic status.^{14,29} Reisine and Psoter have done a systematic review for evaluating the evidence regarding the association of incidence and prevalence of dental caries with socioeconomic status and reported a strong evidence for an inverse relationship of socioeconomic status and caries prevalence among children aged below 12 years of age was observed. Also, this relationship was weaker for older children and adults.³⁰ Literature shows that highly significant differences emerged across the nation, grouped by stages of development on several variables which correspond to the present study.³¹

Research in industrialized countries has shown that children of high social-economic strata had lower caries. This relationship is *vice versa* in developing countries. These phenomena are usually explained by variations in oral habits and hygiene practices, the quantum of processed sugar consumption, the use of fluorides,

and the utilization of oral health services. In Brazil, it was reported that children from low socioeconomic status groups do not receive regular care through school dental services.¹⁵

In this study, since the sample population was children attending schools, children not attending schools are not evaluated and may have a different caries epidemiology. The socioeconomic condition of children who do not attend schools may more likely to be poor and might have different caries rates as a result of less exposure to processed sugars and poor oral hygiene. In addition, differences in the methods across various reports and a lack of randomness in the sampling may account for the differences in the results.

The treatment needs were compared between males and females among different agegroups. In group I, 66.83% of males and 66.34% of females require one surface restoration. In group II, 57.46% of males and 59.05% of females require one surface restoration. In group III, 53.85% of males and 61.62% of females require one surface restoration.

In group I, 32.93% of males and 31.68% of females require two or more surface restoration. In group II, 33.21% of males and

37.50% of females require two or more surface restorations. In group III, 28.46% of males and 34.86% of females require two surface restorations.

Schier and Cleaton-Jones showed that one surface filling was needed by 24% of subjects while 10% needed two surface fillings among 12 years of age group which is corroborating with the present study.³² More number of children in both urban and rural areas required one surface restoration than other needs, which agrees with the present study in which one surface restoration is the treatment required by more number of children in all the age-groups.³³

In the present study, preventive care was required 8.21% among males and 11.08% among females in group II. Pit and fissure sealant requirement was 10.51% among males and 11.62% among females in group II. A similar scenario was reported earlier.³⁴ Numerous reports confirm that one surface restoration is the most required treatment in the considered groups of the population.^{26,27,35,36} Extractions were required maximum in group I 9.86% of males and 7.67% of females, respectively. Pulp treatment and the crown requirement were maximum among group I males.

In the present study, the treatment requirement in group I, group II, and group III children were 99.5, 99.3, and 99.7% among males and 100% treatment requirements in females in all the age-groups. This is in support of earlier investigations at various locations.^{1,20}

In the present study, the treatment requirement among different socioeconomic statuses in different age-groups the most required treatment need was one surface restoration followed by two or more surface restorations. In the present study, the distribution of socioeconomic status 0.4% present among the lower class and 6.4% present among upper class among the total population of the study which is very minimal compared with 53.2, 24.6, and 15.4% in upper middle, middle/lower middle, and lower/upper lower class. There was an uneven distribution of socioeconomic status in the present study which might cause variations in treatment needs. In overall treatment needs among different socioeconomic statuses, the need for restorations was more, followed by pulp care and preventive care and pit and fissure sealants. Hence, future health education programs should be targeted toward parents and school teachers who significantly influence children's oral health behavior.

Substantial proportions of schoolchildren of the Maduravoyal area did not perform regular oral hygiene. This variation in treatment needs with the location has been observed in many of the previous studies that can be ascribed to the socioeconomic levels, lack of dental information, and the cultural differences among the people. The consumption of sweets and sugary drinks might be the reason for high treatment needs as restorations which indicates the caries prevalence in all the age-groups. The consumption of sweets and sugary drinks was increased in developing countries could be attributed to changing living conditions due to urbanization and the adoption of western lifestyles in developing countries in recent years. Furthermore, children with more siblings have a higher prevalence of caries, owing to sharing of parental attention among children.^{37,38}

The result of this study shows that still there exists a substantial amount of the population who are ignorant about the negative effects of poor oral health and the benefits of good oral health. There is also a part of our population, who even if they are aware of the ill effect of poor oral health cannot avail the facilities of dental

care because of the inaccessibility to the healthcare center or as in the case more often because of severe financial constraints.

CONCLUSION

In the present study, the treatment requirement among different socioeconomic statuses in different age-groups the most required treatment need was one surface restoration followed by two or more surface restorations.

The lack of baseline data made us carry out this study to find out the prevalence of dental caries and treatment needs among school-going children of the Maduravoyal area, Chennai. Although the prevalence and treatment needs among different age-groups and socioeconomic status were observed, further long-term longitudinal studies should be carried out to keep a timely check on the progression of dental caries and also to improve the awareness about the advantage of caries prevention among children population. In the future, similar studies should be conducted by investigators around the country to fill the lacuna in the knowledge of the epidemiology of dental caries in rural India.

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