

The Role of Social Economic Status on Dental Caries and its Prevention among Outpatients Visiting Private Dental College Hospital

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Abstract

Background: Dental caries is one of the main oral diseases in childhood and adolescence. Numerous studies carried out in different countries over the world have shown that the application of preventive measures and improvement of social environment considerably reduce dental caries rates. Therefore, the aim of this study was to disclose preventive measures used for dental caries as well as to evaluate their associations with socioeconomic status.

Aim: The aim of the present study was to assess the dental caries experience and its relationship with occupation and socio economic status among adults

Materials and method: A total sample of 250 subjects were Included in the study. Socioeconomic status of adults was obtained through a questionnaire, while the prevalence of dental caries among adults was assessed by clinical examination following DMFT index.

Results: In our study 125 subjects were males and 125 subjects were females. The social economic status was 11 subject were in upper class, 21 subject were under status of upper middle class, 92 subject were in lower middle class, In upper lower class there were 95 subject, and in Lower class there were 31 subjects. The mean DMFT value which was greater than 2.9 was found in upper middle, lower middle, upper lower, lower and the value less than 2.9 is in upper class.

Conclusion: The study concluded that the prevalence of DMFT was found more in lower economic status when compared to upper economic status. There is a relationship between existence person's socio-economic status and the oral health condition.

Keywords: Dental, Caries, Economic, College, DMFT.

INTRODUCTION

The preservation of healthy teeth is one of the key health issues. Dental caries is one of the main oral diseases in childhood and adolescence. Numerous studies carried out in different countries over the world have shown that the application of preventive measures and improvement of social environment considerably reduce dental caries rates [1]. Dental caries-caused pain, discomfort, and costly treatment procedures are the main factors associated with stress and unpleasant experiences among adults [2]. Family creates an environment necessary for healthy lifestyle, increases self-confidence, and helps habit formation. Skills and attitudes toward oral hygiene may have an impact on the formation of oral hygiene habits and the prevalence of oral diseases [3]. Although imparting oral health education begins from the footsteps of awareness, evaluation of its implementation is an important indicator of the success of the education imparted [4]. In contrast, increasing levels of dental caries have been observed in developing countries especially in those countries where preventive programs have not been implemented [5]. Therefore, the aim of this study was to disclose preventive measures used for dental caries as well as to evaluate their associations with socioeconomic status.

MATERIALS AND METHOD

A cross sectional study was carried out using a pre tested self-administered questionnaire. A self-constructed 14 -item close -ended questionnaire was distributed to 250 patients visiting private dental college hospital in Chennai. The questionnaire included information related to patients name, age, gender, education and occupation. It was further categorized to evaluate the knowledge, practices and behaviour pattern related to oral

health. The completed questionnaire was then analyzed statistically to obtain the results in terms of percentage. The clinical examination included an evaluation of dental caries, by using dental mirror and dental probe under light source. The dental caries was assessed using the decayed missing filled teeth (DMFT) Index according to the criteria and recommendations of the Klein, Palmer, Knutson 1938.

RESULTS:

The demographic distribution of study subject in which 125 subjects were males and 125 subjects were females. The age was further categorized from 25-74yrs in which 51 study subject were under the age group of 25-34yrs, 90 subjects were under 35-44yrs of age groups, 35 subjects were under 45-54yrs, 52subjects were under 55-64yrs age groups, 22 study subject were under 65-74yrs age group (Table I).

Table I: Demographic Distribution of Study Subject

Age	Male	Male	Female	Female	N	%
25-34	14	11.2	37	29.6	51	20.4
35-44	48	38.4	42	33.6	90	36
45-54	07	5.6	28	22.4	35	14
55-64	38	30.4	14	11.2	52	20.8
65-74	18	14.4	04	3.2	22	8.9

The social economic status of study subject was, 11 subjects were in upper class, 21 subjects were under status of upper middle class, 92 subjects were in lower middle class. In upper lower class there were 95 subjects, and in Lower class there were 31 subjects (Table II).

The Mean DMFT value which is greater than 2.9 was found in upper middle, lower middle, upper lower, lower and the value less than 2.9 is in upper class (Table III).

The mean value of DMFT score among female study subject in which the mean DMFT value was greater than 2.9 was in lower middle, upper lower class and in upper class, upper middle class the mean DMFT value was less than 2.9 (Table IV).

The most common source of information on dental care for adults was 69% of them were aware from television and the Internet and 18% of subjects were aware from print media and 13% aware from other sources (Figure 1). 63% don't know that fluoride will prevent dental caries, 30% of the population are fair about fluoride will prevent dental caries. 7% has good knowledge that fluoride will prevent dental caries.

Table II: Social Economic Status among Study Subject

Social Economic Status	Male	Male	Female	Female	N	%
Upper	09	7.2	02	1.6	11	44
Upper Middle	14	11.2	07	5.6	21	8.4
Lower Middle	57	45.6	35	28	92	36.8
Upper lower	42	33.6	53	42.4	95	38
Lower	03	2.4	28	22.4	31	12.4

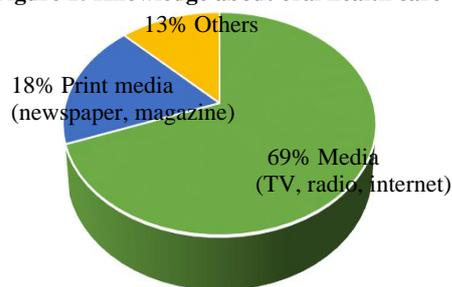
Table III: The Table Shows the Mean Value of DMFT Score among Male Study Subject

Social Economic Status	No Of Study Subject	Mean Value Of DMFT <2.9	Mean Value Of DMFT >2.9
Upper	09	1.9	
Upper middle	14	-	3.3
Lower middle	57	-	3.6
Upper lower	42	-	4.9
Lower	3	-	3.1

Table IV: The Mean Value of DMFT Score among FEMALE Study Subject

Social economic Status	No of Study Subject	Mean Value Of DMFT <2.9	Mean Value Of DMFT >2.9
Upper	02	1.8	
Upper middle	07	2.6	
Lower middle	35	-	6.2
Upper lower	53	-	6.8
Lower	28	-	4.1

Figure 1: Knowledge about oral health care



DISCUSSION

Attitudes toward oral health depend on their social economic status. In the presence of high-socio economic status, better oral health is experienced, and lower dental caries rates are achieved. Susan et al in 2001 state that SES and caries risk in the United States are needed, particularly among adults, in order to assess how SES influences the incidence of disease. Interestingly, the effects of SES on caries risk seem to be reduced in fluoridated community. Low SES may serve as a marker for increased risk of caries. Moreover, oral health was better in those adults who had

regular dental check-ups. The dental visits are important as oral diseases can be diagnosed, managed, and even avoided on time, and personal oral hygiene guidelines can be constantly reminded to dental practice visitors [7-14]. Some studies have highlighted that low-socioeconomic status families visit a dentist more frequently due to pain or discomfort [15-18]. This is confirmed by the finding of our study as well. Adult from lower social status have worse oral hygiene habits [19-20]. This is confirmed by the results of our questionnaire-based survey, which showed that adults with a higher educational level and higher income knew more about the preventive dental caries program aiming to keep one's teeth healthy. It has been reported that from low-income families were less likely to have dental visits to a dental care specialist [21-23]. Topaloglu-Ak et al. state that a first step to prevent dental caries is the implementation of a national health program involving promotional, preventive, and minimally interventional approaches [24]. The present Study has shown that socioeconomic status play an important role in dental care, therefore, the priority should be given to low-socioeconomic status families.

CONCLUSION

The study concluded that the prevalence of DMFT was found more in lower economic status when compared to upper economic status. There is a relationship between existence person's socio-economic status and the oral health condition. The application of preventive dental caries programs should be focused on their oral hygiene habits, and lifestyles, and complex prevention programs being implemented and being targeted at lower socio-economic status families could achieve this.

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