

**TO ASSESS THE KNOWLEDGE OF SCHOOL CHILDREN REGARDING PREVENTION OF DENTAL CARIES**Archana Singh^{1*} and Prabhakar S Bais²¹Department of Food & Nutrition (Biochemistry), Institute of Home Science, Dr. B.R. Ambedkar University, AGRA, U.P., India²Department of Biochemistry, M.L.B. Medical College & Hospital, Jhansi, U.P., INDIA

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Abstract: Dental caries is the single most common chronic childhood disease which affects children. Prevalence of dental caries is five times more common than asthma and seven times common than hay fever and it is very high in developing countries. The study was carried out to assess the knowledge of school children regarding prevention of dental caries. In this study we found that urban school children have more knowledge on dental caries than rural school children and significant association between the knowledge of children in urban and rural school.

Key Words: Dental caries, School Children,

INTRODUCTION

It is a well-known fact that while a majority of dental diseases can be prevented by proper dental care, the lack of it can lead to major dental problems especially in children and ultimately it affect their proper growth and development. Among oral diseases, dental caries and periodontal disease are highly prevalent problems in children (W.H.O.1992)⁵. Dental caries result in tooth loss at adulthood and old age (W.H.O.1994). According to different report on oral health, dental caries are chronic childhood disease that affects children aged between 5 to 17 years. Prevalence of dental caries is five times more common than asthma and seven times common than hay fever and it is very high in developing countries. Trends in dental caries have demonstrated that the children who come from the parents having at least college education have fewer caries than children where parents below the college education. Some workers conducted a study to assess the prevalence and oral hygienic method used by the children in rural and urban areas^{3,6}. The prevalence of dental caries in pre-school and school going children was high and having increasing trend⁷. Hence, the prevalence of dental caries indicates that the oral health of the children was not adequate, which indicate urgent need to increase dental and oral hygiene educational programs in schools⁴. The present study helps in increasing awareness regarding dental caries among children and reduces the prevalence the dental caries.

MATERIALS AND METHODS

The study is carried out in 80 children aged between 10-12 years suffering from dental caries in Agra City. Multistage stratified random sampling technique was used in the selection of the sample. Two schools were selected to assess the knowledge regarding dental caries.

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The main objectives of the study are

1. To assess the knowledge of school children on dental caries
2. To compare and identify the association between the knowledge with the selected demographic variables.

RESULTS AND DISCUSSION**Objective 1**

To assess the knowledge of school children regarding dental caries.

Table 1: Assessment of knowledge of dental caries and their category among children

Category	Knowledge of dental caries		Respondents	
	Mean	SD	Numbers	%
Low (<mean-SD)	35.23	14.85	16	20.0
Average (mean-SD to mean + SD)	49.75	13.76	50	62.5
High (>mean+SD)	65.92	11.15	14	17.5
Total	57.04	16.0	80	100.00

Above Table reveals the knowledge of dental caries and their category among children selected for the present study. Mean score of knowledge of dental caries was found to be 57.04 with SD of 16.00. All the children were divided into 3 categories on the basis of the scores obtained by them. Children who scored less than (mean-SD) come in low category. The score obtained between (mean-SD to mean+SD) comes in average category and the score obtained more than (mean+SD) comes in high category.

Mean score of high, average and low categories were 65.92, 49.75 and 35.23 respectively. Majority of the children (62.50%) were found in average category of knowledge, followed by 20.00% of low



category and the minimum (17.50%) were of high category of knowledge⁸.

Objective 2

To compare and identify the association between the knowledge with the selected demographic variables.

Table 2.1: Impact of sex on knowledge of children in prevention of dental caries.

Sex	Respondents No.	Knowledge		Statistical values	
		Mean	SD	t	P
Male	40	56.16	14.9	0.489	>0.05
Female	40	57.92	17.2		
Total	80	57.04	16.0		

The Table 2.1 shows the impact of sex on knowledge of children in prevention of dental caries. The analysis reveals that the mean knowledge of female respondents on prevention of dental caries found to be slightly higher (57.92) as compared to male respondents (56.16). The data subjected for statistical test indicate the difference in mean knowledge score in prevention of dental caries between male and female found to be non-significant.

Table 2.2: Impact of age on knowledge of children in prevention of dental caries.

Age in years	Respondents No.	Knowledge		Statistical values		
		Mean	SD	t ₁	t ₂	t ₃
10	26	57.82	17.10	1.569	0.925	1.703
11	26	51.02	14.20			
12	28	61.90	15.30			
Total	80	57.04	16.0			

*p<.05

The impact of age on knowledge of children in prevention of dental caries is indicated in Table-2.2. The mean knowledge on the aspect found with 57.82 among 10 years of age, 51.02 among 11 years of age and 61.09 found in 12 years of age. The statistical test establishes that the difference to the mean knowledge on prevention of dental caries among different age group under study found to be significant.²

Table 2.3: Impact of area (Residence) on knowledge of children in prevention of dental caries.

Residence	Respondents No.	Knowledge		Statistical values	
		Mean	SD	t	P
Rural	40	43.83	7.10	13.178	<0.05
Urban	40	70.24	10.50		
Total	80	57.04	16.0		

Table 2.3 depicts the impact of residence on knowledge of children in prevention of dental caries. It is evident from the findings that respondents of urban family showed higher mean knowledge (70.24) as compared to rural respondents (43.83). The data

subjected for statistical test indicate that the impact on residence is significant at 5% level¹.

CONCLUSION

On the basis of the findings of the study, the conclusions were drawn that the knowledge of school children regarding prevention of dental caries was inadequate. Urban school children had more knowledge on dental caries than rural school children. There was a significant association between the knowledge of children in urban and rural schools. There was a significant association between the age of children and the knowledge. Overall findings reveal that the knowledge of school children were not adequate for the prevention of dental caries and it is concluded that continuous educational program, awareness programme should be carried out in all schools and whole community regarding prevention of dental caries. Many dental problems can be prevented if children and parents are well informed of the causes of dental diseases, prevention and awareness of the importance of regular dental care.

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