

Dental Caries And Oral Hygiene Status Of 8 To 12 Year School Children Of Rohtak: A Brief Report

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Citation

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Abstract

Dental caries and periodontal diseases are most common oral diseases showing striking geographic variations, socio-economic patterns and severity of distribution all over the world.^{1,2,3} Though many studies are conducted in different parts of the world, the review of literature indicates that there is a great deficiency in baseline data concerning the oral health of Indian school children. There is paucity of information regarding the frequency and prevalence of dental caries and oral hygiene status in many parts of India. Hence an attempt has been made to determine the oral hygiene status and dental caries experience of 9, 10, 11 and 12 year old school children from Rohtak (Haryana), INDIA.

INTRODUCTION

Dental caries and periodontal diseases are most common oral diseases showing striking geographic variations, socio-economic patterns and severity of distribution all over the world.^{1,2,3} Though many studies are conducted in different parts of the world, the review of literature indicates that there is a great deficiency in baseline data concerning the oral health of Indian school children. There is paucity of information regarding the frequency and prevalence of dental caries and oral hygiene status in many parts of India. Hence an attempt has been made to determine the oral hygiene status and dental caries experience of 9, 10, 11 and 12 year old school children from Rohtak (Haryana), INDIA.

2304 children of 9, 10, 11 and 12 years age (males: females, 1290: 1014) were included in the study during preventive and community dentistry school program by Dental College. The children were examined in the classroom with sufficient natural day light or an ordinary chair. The data regarding the oral health status oral hygiene status and general information was filled as per performa provided by W.H.O. for programmes. Oral hygiene status was assessed by using oral hygiene index simplified (OHI-S), decayed missing filled (DMF), caries index was used to assess the caries status.

RESULTS

Figure 1

Table 1: MEAN±STANDARD DEVIATION OF DMFT, DMFS and OHI-S BY AGE

Age (years)	No. of Cases	DMFT	DMFS	OHI-S
9	500	2.82± 2.27	3.82± 3.71	1.42±0.87
10	567	2.87± 2.31	3.87± 2.94	1.43±0.97
11	624	3.40± 2.94	3.76± 3.82	1.45±0.86
12	613	3.15± 2.94	4.26± 3.72	1.43±0.92
Significance p value		<0.02	<0.02	NS

The mean DFMT was found to be 2.82, 2.87, 3.40, 3.15 in 9, 10, 11 and 12 year olds while the mean DMFS was found to be 3.82, 3.87, 3.76, 4.26 in 9, 10, 11 and 12 year old respectively. (table I)

Figure 2

Table 2: MEAN±STANDARD DEVIATION OF DMFT, DMFS AND OHI-S BY SEX

Sex	No. of Cases	DMFT	DMFS	OHI-S
Male	1290	3.95± 2.67	4.28± 4.32	1.48±0.82
Female	1014	3.27± 2.65	4.29± 4.28	1.32±0.89
Significance p value		<0.001	NS	<0.01

The mean DMFT for males was 3.95, while for females 3.27. Though higher DMFS was recorded in female than males i.e. 4.12, the results were not statistically significant. The lowest mean, 1.32, was recorded in females and the

highest mean, 1.48 was recorded in males, the results were statistically significant ($p < 0.02$). (table II)

Oral health affects the total well-being of individuals' assessment and is important in deciding a treatment plan or dental public health programme₁. In the present study, an attempt was made to determine the oral hygiene status and dental caries experience of school children from Rohtak (Haryana).

In the present study females exhibited a higher mean DMFT and DMFS than males studies. Our findings are in agreement with those reported in literature (table II)_{1,2}. In the present study, higher DMFT/DMFS index, the main components were observed in males as compared to females and 12 year old children as compared to other age groups. High caries experience seen in females could be because of the earlier eruption of teeth in females. This contrast to reported (table I) by Sogi G et al, where mean missing component in 14 year olds were found to be higher than that in 13 year old children₁.

It has been reported that oral hygiene index and its components increase within age. But in the present study, the mean calculus index simplified (CI-S) were higher in 14 year olds. The OHI-S and its components showed a higher mean value for males, where females showed reduced values. The probable reason for lower scores for less OHI-S

and its components in females was perhaps the increased grooming habits of girls in this age group₂.

CONCLUSION

Thus we concluded that caries experience and occurrence of untreated lesions in paramount teeth with age and oral hygiene status worsens as age advanced. Also females experienced more decay as compared to males though oral hygiene status was poorer in males. Exploring these links between clinical conditions and their personal and social outcomes not only promotes a more complex appreciation of oral health, it also provides the opportunity to identify interventions to minimize the consequences of oral diseases by school dental health programmes. Knowledge imparted through these programmes would go to long way in maintenance of oral health.

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