

Dental caries among schoolchildren of Baksa district, Assam, India

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Abstract : The present study is a part of the school health survey carried out to assess the dental health status of schoolchildren of different schools in Baksa district of Assam. A total number 6,975 schoolchildren from 89 schools were examined of whom (51.4%; n=3584) were males. The children belonged to standard one to tenth and were in the age group of 5 to 15 years. Verbal consent was obtained from the head of the school prior to examination of the children. Clinical examination was conducted by a single investigator and Decayed /Filled Teeth. " status was considered to evaluate dental caries. The overall prevalence of caries was found to be 7.4 % (n=516). The prevalence of dental caries among the different schools varied from less than 10% to 50%. Most affected were those belonging the 7 to 10 years age group (45.5%). Males (8.1%) had a higher prevalence as compared to females (7.8%). The present data reveals that dental caries is prevalent among schoolchildren in this region. Further investigation into the type of dental hygiene practiced is required. Creation of oral health hygiene through school based programme would be helpful.

Keywords: Dental caries, schoolchildren, Baksa, Assam

I. Introduction

Dental caries has been reported to be high among schoolchildren in India. Indian authors have reported varying rate prevalence of the same among them [1-6].

Since improvement of oral health can improve overall health, surveying the oral health status in a given population could be helpful in addressing their oral health needs. To best of our knowledge no previous report on prevalence of the same among schoolchildren from Assam exist hence this study is an attempt to evaluate the same.

II. Materials And Methods

This study is a part of the school health survey carried out under the National Health Mission to assess the dental health status of schoolchildren of different schools in Baksa district of Assam.

The survey conducted included all children upto tenth standard in the age group of 5-15 years attending schools in the district. Verbal consent was obtained from the head of the school prior to examination of the children.

The children were examined in an upright position on a chair in natural light as described by others [2]. All children present on the day of examination were included in the study. Clinical examination was conducted by a single investigator. "Decayed (Caries was regarded as present when a cavity was seen in a pit, fissure or smooth surface of a tooth) /Filled Teeth (Teeth which showed evidence of permanent restoration along with one or more areas that are decayed)." present, according to the WHO oral health survey 1999 was considered to evaluate dental caries [7]. Missing teeth was not included considering the age group as done by others [6]. Demographic information of the children was recorded.

III. Results And Discussion

A total number 6975 schoolchildren from 89 schools were examined of whom (51.4%; n=3584) were males. The children belonged to standard one to tenth and were in the age group of 5 to 15 years. The distribution of the children with dental caries is shown in Tables 1, 2 and 3.

The overall prevalence of caries was found to be 7.4 % (n=516). Even though majority of the schools surveyed had shown a prevalence of caries below 10%, a few of them also had a high prevalence (Table 3). Among those affected most of them belonged to the 7 to 10 years age group (45.5%). Males (8.1%) had a higher prevalence as compared to females (7.8%).

Table 1: Age wise distribution of children with dental caries

	Children having dental caries (n=516)	
	Total Number	Percentage
5-7 years	155	30%
7-10 years	235	45.5%
10-13 years	103	20%
13-15 years	23	4.5%

Table 2: Gender wise distribution of children with dental caries

Gender of the children	Total number of children examined	Children having dental caries	
		Total Number	Percentage
Male	3314	270	8.1%
Female	3145	246	7.8%

Table 3: Distribution of percentage of children with dental caries among different schools surveyed in Baksa, Assam

S.No	Percentage of children with dental caries	Schools (n=89)	
		Total numbers	Percentage
1	≤ 10%	60	67.4
2	10-20%	14	15.7
3	20-30%	8	9
4	30-40%	2	2.25
5	40-50%	3	3.4
6	50-60%	2	2.25

Even though a very low overall prevalence (7.4%) of dental caries was seen among the schoolchildren in the district of Baksa about 40% of the schools had prevalence above 10%. A study carried out among children in Kamrup district of the same state found a prevalence of 23.75%. [8] A higher prevalence among males was seen in the present study. Similar observations were made by other Indian authors [1].

As compared to other Indian studies lower prevalence was also observed in a study carried out in rural area of Jammu where they found a prevalence of 18.01%. A much lower prevalence of 7.2% was found by the same authors among children whose mother were literate. Thus different factors may play a role in the difference in the prevalence rates. Investigation into brushing habits, dietary habits, socio-economic conditions and education status of parents would be useful for planning future prevention strategies.

IV. Conclusion

In conclusion, the present data reveals that dental caries is prevalent among schoolchildren in this region. Further investigation into the type of dental hygiene practised is required. Creation of oral health hygiene through school based programme would be helpful.

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