



STATUS OF ORAL HEALTH IN SCHOOL GOING CHILDREN'S OF AGE 5 TO 16 YEARS IN RURAL JAIPUR RAJASTHAN, INDIA

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ABSTRACT

Background: Oral health is an essential component of health throughout life. However, millions of individuals suffer from dental caries and periodontal disease, resulting in unnecessary pain, difficulty in chewing, swallowing and speaking, and increased medical costs; hence, the present study was conducted to evaluate the oral health status of school children which would help us in planning and implementing necessary preventive measures. **Aims and Objectives:** 1. To assess the prevalence of dental caries among school children, using the Dentition Status and Treatment Needs Index. 2. To assess the prevalence of malocclusion among the study population, using the WHO criteria. 3. To assess the prevalence of dental calculus among the study population using the criteria of Community Periodontal Index of Treatment Needs. **Materials and Methods:** The study was conducted at schools in Jaipur (Rural) city. Data was collected by clinical examination and interview. The study population comprised of school children of two age groups 5 and 16 years. A total of 313 subjects of both the sexes will be surveyed. **Results and Conclusion:** -The high prevalence of dental caries 47% and less number of filled teeth 28% indicate lack of proper attention oral health. Only 1% twice and 72% once a day brushes their teeth. Around 37% students had habit of chewing areca nut which is considered as a major cause of oral sub mucous fibrosis, a pre-cancerous condition.

Keywords: Dental Caries, Malocclusion, Brushing, Gingivitis, Periodontitis, Prevalence.

Introduction:-

Oral health touches every aspect of our lives but is often taken for granted. Your mouth is a window into the health of your body. It can show signs of nutritional deficiencies or general infection. Systemic diseases, those that affect the entire body, may first become apparent because of mouth lesions or other oral problems. Dental caries is an irreversible disease, with a likelihood of new lesions that continue to affect humanity. Dental caries or tooth decay is an acquired chronic infective disease process caused by the acidic products of bacteria inhabiting organized dental plaque or oral bio-film that, if left undisturbed, can dissolve or demineralize the enamel surfaces of the teeth.

Oral health is an essential component of health throughout life. However, millions of individuals suffer from dental caries and periodontal disease, resulting in unnecessary pain, difficulty in chewing, swallowing and speaking, and increased medical costs; hence, the present study was conducted to evaluate the oral health status of school children which would help us in planning and implementing necessary preventive measures.

Materials and Methods:-

We conducted dental health survey in Jaipur rural (south) which has 3 major secondary schools and the same will be taken for study purposes. Necessary approval from school authorities was taken. For assessing the oral health status of school going children's, the students were examined by dental surgeon. The clinical examination

was performed on simple, straight chairs, using plane mouth mirrors and community periodontal index (CPI) probe under natural day light. Total 313 students were examined by dental surgeon and public health trainee and the data was collected. Oral health education was given to the school children in each school. Descriptive analysis was performed using statistics to report means and standard deviations for the continuous variables and frequency distribution for the categorical variables.

Results :-

Total 313 students were examined of age 5 to 16 years.

Table 1: Caries assessment index, DMFT index

	Score	Percentage
Decayed teeth	825	47
Missing teeth	438	25
Filled Teeth	493	28
DMFT mean	5.61	100

The percentage of students having one or more decayed teeth (Deciduous/Primary) were found to be 47%, missing were around 25% and filled (Restored) were 28%.

Table 2: Gingival assessment index, OHIS index

Score	Grade	No. of students	Percentage
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Score 1 (0.1-1.2)	Good	274	88
Score 2 (1.3-3.0)	Fair	39	12
Score 3 (3.1-6.0)	Poor	0	0
Total		313	100

Table 2 shows that 88% students were having good oral hygiene, 12% students were having 12% oral hygiene and 0% students were having poor oral hygiene.

Table 3: Prevalence of Malocclusion

Malocclusion	No. of Students	Percentage
Normal occlusion	255	81
Crowding	24	8
Spacing	22	7
Maxillary irregularities	7	2
Mandibular Irregularities	6	2
Total	313	100

Out of 313 students 81% were having normal occlusion, 8% were having Crowding, 7% were having Spacing and maxillary and mandibular irregularities were 2% and 2% respectively.

Table 4: Frequency of Brushing (Oral hygiene practice)

Method	No of students	Percentage
Never	4	1
Irregular	81	26
Once a day	224	72
Twice a day	4	1
Total	313	100

Table shows that 72% students were brushed once a day, 1% were twice a day, while 26% were Irregular and 1% were not brushed their teeth.

Table 5: Habit of Areca nut/Supari Pan Masala chewing

Habit	No. of students	Percentage
Never	198	63.25
Randomly	112	35.78
Everyday	3	0.95
Total	313	100

Table shows 63.25% students didn't have Habit of Areca nut/Supari Pan masala chewing ,while 35.78% students

randomly chew Areca nut/Supari Pan masala and 0.95% were had Habit of Areca nut/Supari Pan masala chewing Daily.

Discussion:-

To improve oral health worldwide, promoting oral health through health promoting schools has been prioritized by the World Health Organization (WHO). Preventive strategies have been particularly advised for students because of high prevalence of caries.

The high prevalence of dental caries 47% and less number of filled teeth 28% indicate lack of proper attention oral health. Oral hygiene status can reflect the tooth brushing practices of the participants. Tooth brushing once/twice a day has been advised for good oral health. Only 1% twice and 72% once a day brushes their teeth. A need to focus on instructions on correct oral hygiene practices for effective behaviour has been recommended. This survey shows significant number of students around 37% had habit of chewing areca nut which is considered as a major cause of oral sub mucous fibrosis, a pre-cancerous condition.

Conclusion:-

Oral hygiene knowledge, status, and eating patterns were inversely associated with the school grade. The role of self-perception of health status, especially in early schooling years, may need to be explored further as those with more positive perceptions were seen to have more correct oral hygiene practices, and lower caries, debris and calculus accumulation. This warrants a multipronged, multilevel intervention integrating oral health into the school curriculum beginning early schooling is needed. A national policy is needed to incorporate oral health and hygiene in the educational curriculum at early levels of schooling.

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