



## Oral health of children in the selected anganwadi

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### Abstract

The World Health Organization global strategy of promoting oral health have shown vast improvements in developed countries but the scenario is glum among underprivileged communities due to lacunae in implementation of these promotional programs. Oral disease is a major health problem worldwide, and in India there is very little research done in this field in recent times. This study was carried out to provide baseline information on the oral health status among Anganwadi school children.

**Methodology:** A non-probability convenience sampling technique was used for the study. The content validity of the tool was done by the experts in the field of nursing. The tool consisted of demographical and oral assessment scale. Data analysis was done by using descriptive statistics.

**Results:** 55% of children were having healthy lips, 43% of them were suffering from dry lips and 2% of children had ulcerated lips. 42% of the children were having healthy tongue, 55% children were having patchy tongue, 3% of them were having white coated tongue. 34% children were having healthy gums and tissues, 63% were having swollen gums and ulcers, 3% were suffering from bleeding gums and ulcers. 61% children were having less saliva, 2% having patched tissues. 13% were having healthy teeth, 76% of them were having one to three broken teeth, 11% of the children were having four or more broken teeth. No children were having dentures. 11% children were having oral cleanliness, 79% were having food particles/tartar in some parts of the mouth, 10% were having plaque and severe oral malodae. 16% of them had no dental pain, 28% were having behavioural signs of pain, 4% were having physical signs of pain.

**Conclusion:** As per scoring most of children that is about 76% of children required preventive and routing treatment, about 22% children need prompt treatment. Only 2% of children were having good oral health. During assessment, it was found that the prevalence of dental carries is high, about 76% of children are suffering from dental carries and 11% are having severe condition. Next to dental carries 79% of children are having poor oral cleanliness and about 10% are having unhealthy oral health. As per scoring most of children that is about 76% of children required preventive and routing treatment, about 22% children need prompt treatment. Only 2% of children were having good oral health.

**Keywords:** world health organization, oral health, children, anganwadi

### Introduction

Oral health is the practices of keeping once mouth clean & free of diseases & other problems by regular brushing and cleaning between the teeth. It is important that oral health be carried out on a regular basis to enable prevention of dental disease. The most common type of dental diseases are tooth delay (cavities, dental caries) & gum disease including gingivitis, and periodontitis. Regular brushing consists of brushing twice a day before breakfast & before going to bed.

We are taught from our early age that proper oral health is maintaining healthy teeth. The simple act of brushing & flossing are instilled in us so that we maintain our "pearly whites." Yet, oral health is much more than clean teeth. It involves gums & their supporting tissues, the palate, the lining of the mouth & throat, the tongue, the lips, salivary glands, the chewing muscles, the nerves, the bones of the upper & lower jaws. Recent research has indicated possible association between chronic oral infection & diabetes, heart & lungs diseases, stroke & low birth weight or premature births in the

other words Oral Health refers to the health of our mouth & ultimately supports & reflects the health of entire body. The health disparities surrounding access to proper dental care add another layer of complexity. The silent epidemic of oral diseases disproportionately affects disadvantaged communities, especially children, the elderly & racial minority groups. Oral health problems are exacerbated by the fact that a cavity continues to enlarge & become more difficult to repair the longer it remains untreated. Only one in five schools aged children from low- income families receive dental sealants to prevent dental caries.

Although largely preventable, dental caries & periodontal diseases are two biggest threats to oral health, & are among the most common chronic diseases in the children. It is about five times as common as asthma & seven times as common as hay fever. The most common cause of tooth loss among adults is untreated periodontal disease. Fifty three million people live with untreated tooth decay in their permanent teeth. Strictly, one- quarter of adults aged 65 years & older have lost all of

their teeth due to untreated oral disease, Oral problems are emerging as one of the main public health concerns in India. Oral problems are not only causing pain agony, functional and aesthetic problems but also leads to loss of working man hours. Hence in the long run they are bound to have a significant impact on our economy. It estimated that about 50% of school children are suffering from dental caries and more than 90% of adult population is affected by periodontal disease. According to a survey the prevalence of dental carries in children aged 5 years was 50%, 52.5% in 12year old, 61.4% in 15year old, 79.2% in 35 – 44 year old and 84.7% in 65 – 74 year old. The World Dental Federation estimate that 83% children age 6-9 year have dental carries.

In developing countries like India, the incidence of dental caries is increasing due to the changing lifestyle & dietary patterns. The Government of the India initiated a National Scheme known as the Integrated Child Development Services which aims at the delivery of a package of basic health services through various functionaries. Anganwadi worker is the most periphery functionary of the ICDS scheme. She delivers services to mainly children below the age of 6 years which mainly include non-formal, preschool education, children belonging to low socioeconomic status attend Anganwadi schools. The prevalence of dental caries in India among preschool children varies from 19.2% to 71.1 %. However, average prevalence of 40.5 % in Karnataka state & 40%- 60% in the country. An important first step in combating the two leading causes of poor oral health-dentals caries and periodontal disease or injury, rather than an inevitable consequence of aging. Educational programs emphasizing the importance of oral health promotion/ disease prevention are also necessary to raise awareness and discourage the lack of concern regarding oral health. Proper oral health is vital to a productive and healthy life. Messages that encourage lowering sucrose intake reducing acidic beverage consumption and routinely brushing and flossing teeth should be incorporated into the education. Bhole committee (1946) & Mudliar committee (1961) also had strongly advocated expansion of dental health services & health education. So investigator felt that as an important member of health team. Health education must be given at earlier stage. Children of age group 3 to 6 years can be educated or moulded for inculcation of good hygienic habits.so if good habits are inculcated at this age it will be beneficial for them and indirectly for nation to get healthy citizens.

**Methodology**

Non experimental descriptive research design was used to assess the oral health of the children from the selected Anganwadi of the Pune district. The target population who fulfils the inclusion criteria are selected for this study. A non-probability convenient sampling technique was used to select 100 Sample. The oral health assessment tool was prepared which include demographic characteristics (age, gender) & main observation checklist including interventional scorings.

Each child was assessed, observations were scored as per findings & interventional scorings done.

**Table 1**

Scoring	Intervention
0	Healthy
1 -6	Preventive or routine treatment needed
7-11	Prompt treatment needed
12-16	Immediate treatment needed

The tool was validated by 5 experts from community department & pediatric department. Valuable suggestions were incorporated & tool was finalized. Permission was obtained from research monitoring committee & institute ethical committee.

The data collection was done in the selected Anganwadi of the Pune district. First the ethical consent was taken from the Bal Vikas Prkalp Adhikari Office. The researcher introduced about the study to the Anganwadi workers & consent was taken. Then each child was observed for any abnormal oral health & scored as per scoring in the observation checklist. Approximately 5 minutes was required to assess the oral health of each child.

**Major Findings of the Study**

**Table 2:** Demographical Data Description n =100

Sr. no	Data	Frequency	Percentage
1.1	Male	44	44%
	Female	56	56%
1.2	3-4 years		
	Male	41	41%
	Female	40	40%
	4-5 years		
	Male	03	3%
	Female	16	16%

Table 2 shows that out of 100 children, majority (56%) children were female & 44% were male

Table 3 shows that out of 100 children, 81% samples were between the age group of 3-4 years.

**Table 3:** Description of Oral Health among Anganwadi Children N = 100

Sr. no.	Category	Healthy	Changes	Unhealthy
2.1	Lips	55%	43%	02%
2.2	Tongue	42%	55%	03%
2.3	Gums & tissue	34%	63%	03%
2.4	Saliva	37%	61%	02%
2.5	Natural teeth	13%	76%	11%
2.6	Dentures	100%	0%	0%
2.7	Oral cleanliness	11%	79%	10%
2.8	Dental pain	16%	28%	04%

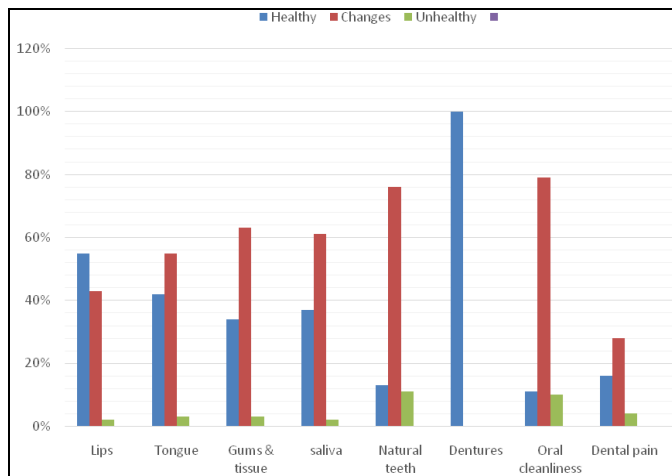


Fig 1: Description of oral health among the Aanganwadi children

The data in the table no 3 & Figure no 1 shows the following interpretation

- Lips:** 55% children were having healthy lips, 43% of them were suffering from dry lips, & 2% of children had ulcerated lips.
- Tongue:** 42% children were having healthy tongue, 55% children were having patchy tongue, 3% of them were having white coated tongue.
- Gums & tissues:** 34% children were having healthy gums & tissues, 63 % were having swollen gums & ulcers, 3% were suffering from bleeding gums& ulcers.
- Saliva:** 61% children were having less saliva, 2% were having patched tissues.
- Natural teeth:** 13% were having healthy teeth, 76% of them were having one to three broken teeth, 11% children were having four or more broken teeth.
- Dentures:** No children was having dentures.
- Oral cleanliness:** 11% children were having oral cleanliness, 79% were having food particle / tartar in some parts of mouth, 10% were having plaque & severe oral malodor.
- Dental pain:** 16% of them had no dental pain, 28% were having behavioral signs of pain, 4% were having physical signs of pain. n=100.

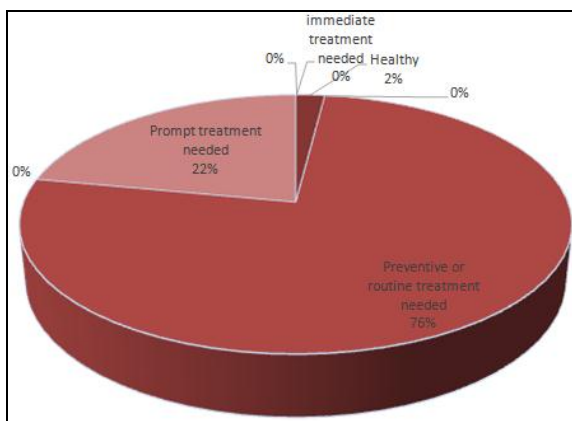


Fig 2: Total distribution of oral health assessment findings as per the treatment needed

Figure no 2 shows: there are about 22% children who were having poor oral health & require prompt treatment, about 76% children need preventive or routine treatment & only 2% children are having healthy oral cavity.

### Conclusion

The conclusion drawn from the findings of the study are as follows:

- As per scoring most of children that is about 76% of children required preventive and outing treatment, about 22% children need prompt treatment. Only 2% of children were having good oral health.
- During assessment, it was found that the prevalence of dental carries is high, about 76% of children are suffering from dental carries and 11% are having severe condition.
- Next to dental carries 79% of children are having poor oral cleanliness and about 10% are having unhealthy oral health. As per scoring most of children that is about 76% of children required preventive and routing treatment, about 22% children need prompt treatment. Only 2% of children were having good oral health.

### Ethical Clearance

The topic of the study was approved by the Institutional Research Committee. The permission for conducting the study was obtained formally from the Bal Vikas Prkalp Adhikari office, Market Yard, Pune which is responsible for Anganwadi of Upper Bibwewadi area. The nature of the study, aims & objectives were explained to them. Written consent was obtained from the Anganwadi workers after assuring that the information collected would be kept confidential & used for the research purpose only. Correspondence & letter of ethical committee approval are enclosed.

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