

## Original Article

### Oral Health Status amongst Children of Government and Private School- A Comparative Survey

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#### ABSTRACT:

**Background:** Due to lack of awareness there is not much importance given to oral health and therefore it gets neglected. The school oral health programs are an efficient way of providing and promoting oral health amongst the children of developed nations. The present study was conducted with the aim to evaluate the oral health status amongst children of the district. **Materials and methods:** This cross-sectional study included 520 subjects reporting to the hospital of the district. Complete aseptic conditions were followed for the examination of the subjects. Oral hygiene of the subjects was also estimated using simplified oral hygiene index by Loe and silness. Chi square test and student t test were used for the analysis of the data. Probability value of less than 0.05 was regarded as significant. **Results:** The present study included 520 subjects, out of which 260 were government school students and 260 were private school students. There were 312 boys (60%) and rest girls. The mean age of the subjects was 16.36+/- 3.42 years. In group A the mean oral hygiene score amongst government and private school students was 2.9+/-1.5 and 0.8+/- 0.3 respectively. In group B the mean DMFT score was 0.9+/- 1.1 and 0.7+/-0.5 amongst the government and private school students. **Conclusion:** From the present study it can be concluded that oral health was poor amongst government school students. There is a need to reinforce the dental awareness and education amongst children of both government and private schools.

**Keywords:** Dental, Oral hygiene, Students

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## INTRODUCTION

A developing nation like India faces various hurdles while rendering oral health requirements. A vast majority of Indian subjects are residing in rural suburbs.<sup>1</sup> It is the need of the hour to know the pattern of distribution of oral health issues and know the dental health regimens that are followed by people. This information acts as the basis for formulating the various oral health policies. These policies aid in improving the knowledge and awareness and will promote good oral hygiene practices to meet the needs of the subjects who are in need of oral hygiene.<sup>2</sup> Due to lack of awareness there is not much importance given to oral health and therefore it gets neglected.<sup>3</sup> During the last 2 decades there has been an enormous improvement in the oral health especially the caries status amongst children and adolescents of industrialized nations.<sup>4,5,6</sup> This change is due to changes in the dietary habits, oral hygiene protocol, use of fluorides and preventive programs initiated at school level.<sup>7,8</sup> On the contrast there has been a dramatic rise in the oral health

diseases in the developing and underdeveloped nations. About 40% of the population of India consists of children under 18 years of age.<sup>9,10</sup> The school oral health programs are an efficient way of providing and promoting oral health amongst the children of developed nations.<sup>11,12</sup> Children at a younger age are moldable and if good habits are inculcated in them they remain throughout their life. Government schools constitute to about 80% of schools of India and providing oral health education in this sector aids to educate a large chunk of rural population.<sup>13</sup> The present study was conducted with the aim to evaluate the oral health status amongst children of the district.

## MATERIALS AND METHODS

This cross sectional study included 520 subjects reporting to the hospital of the district. The study was approved by the institutional ethical committee and all the subjects were informed about the study and a written consent was obtained from the parents. The study was conducted for duration of 6 months. The study sample was divided into

two groups, Group A consisted of subjects between 5-15 years of age and Group B consisted of subjects more than 15 years of age. The decayed missing and filled score (DMFT) was evaluated in all the subjects. All the evaluation was carried in a well illuminated room with probe, mirror and tweezer. Complete aseptic conditions were followed for the examination of the subjects. Oral hygiene of the subjects was also estimated using simplified oral hygiene index by Loe and silness. All the subjects were made aware about the brushing and flossing techniques. They were educated about the oral hygiene practices. All the subjects were examined by a single practitioner to avoid any human error. The data obtained was arranged in a tabulated form and analyzed using SPSS software. Chi square test and student t test were used for the analysis of the data. Probability value of less than 0.05 was regarded as significant.

**RESULTS**

The present study included 520 subjects, out of which 260 were government school students and 260 were private school students. There were 312 boys (60%) and rest girls. The mean age of the subjects was 16.36+/- 3.42 years.

Table 1 shows the mean oral hygiene scores amongst both the groups. In group A the mean oral hygiene score amongst government and private school students was 2.9+/-1.5 and 0.8+/- 0.3 respectively. In group B the mean oral hygiene score was 2.9+/- 1.2 and 0.9+/-0.4 amongst the government and private school students. On applying student t test there was a significant difference between the two as the p value was less than 0.05.

Table 2 shows the mean oral hygiene scores amongst both the groups. In group A the DMFT amongst government and private school students was 0.8+/-0.5 and 0.3+/- 0.2 respectively. In group B the mean DMFT score was 0.9+/- 1.1 and 0.7+/-0.5 amongst the government and private school students. On applying student t test there was a significant difference between the two as the p value was less than 0.05.

Table 3 shows the distribution of subjects according to oral hygiene status. There were 60% of the government school students with fair oral hygiene and 40% (n=104) with poor oral hygiene. There were 11.9%(n=31) of the private school students with fair oral hygiene and 10.3% (n=27) with poor oral hygiene. Majority of the private school students had good oral hygiene. There was a significant difference between the government and private school students.

**Table 1:** Mean oral hygiene scores amongst the subjects

Variable	Group A	Group B
Government School	2.9+/-1.5	2.9+/- 1.2
Private School	0.8+/- 0.3	0.9+/-0.4
Total	1.8+/-1.2	1.7+/-0.9
P value	<0.05	<0.05

**Table 2:** distribution of subjects according to DMFT

Variable	Group A	Group B
Government School	0.8+/-0.5	0.9+/-1.1
Private School	0.3+/-0.2	0.7+/-0.5
Total	0.7+/-0.5	0.6+/-0.1
P value	<0.05	<0.05

**Table 3:** Distribution of subjects according to oral hygiene status

Variable	Good	Fair	Poor	Total
Government School	0	60%(n=156)	40%(104)	100%(260)
Private School	77.6%(202)	11.9%(31)	10.3%(27)	100%(260)
P value	<0.05	<0.05	<0.05	

**DISCUSSION**

For eating and socializing without any discomfort or embarrassment a healthy oral cavity is necessary.<sup>14</sup> Schools are a platform for promoting general health and oral health not only amongst the students, but also amongst the staff members, their families, and other members of the society as a whole.<sup>15</sup> Oral health is an important part of general health but not much importance has been given to it in national health policies or during the national health programs initiated in different developing countries.<sup>16</sup> The present study was done to evaluate the oral health status of various students of the country. According to the present study, the oral hygiene status of subjects was better amongst the private school subjects compared to government school children. The oral health practices<sup>17,18,19</sup> and the utilization of dental care faculties<sup>20</sup> are better amongst the children from private schools when compared to government school students. In the present study, in group A the mean oral hygiene score amongst government and private school students was 2.9+/-1.5 and 0.8+/- 0.3 respectively. In

group B the mean oral hygiene score was 2.9+/- 1.2 and 0.9+/-0.4 amongst the government and private school students. On applying student t test there was a significant difference between the two as the p value was less than 0.05.

According to a study by Lateefat *et al.*,<sup>21</sup> found the percentage of students of private school having good oral hygiene were 61.4% compared to 21% of public school students. According to Batwala *et al.*<sup>22</sup> found a lesser odds for plaque amongst private school children. The government school children had poor oral hygiene habits and health compared to private school children. The present study showed similar results as well as with other studies.<sup>23</sup> As per the study by Shailee *et al.*<sup>17</sup> healthy periodontium was seen amongst 16.6% of government school children while it was 83.4% amongst private school children. In a similar way there was more bleeding on probing and calculus amongst government school children compared to private school students. They came to the conclusion that this difference may be due to lower socioeconomic status and lesser utilization of dental care facilities by the government school students. According to the present study, there were 60% of the government school students with fair oral hygiene and 40% (n=104) with poor oral hygiene. There were 11.9%(n=31) of the private school students with fair oral hygiene and 10.3% (n=27) with poor oral hygiene. Majority of the private school students had good oral hygiene. There was a significant difference between the government and private school students.

## CONCLUSION

From the present study it can be concluded that oral health was poor amongst government school students. There is a need to reinforce the dental awareness and education amongst children of both government and private schools such that they adopt healthy oral hygiene practices. The high risk groups should be given special emphasis during the health care surveys.

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