Oral Health Status Of Children Between 10-13 Years In Urban Area

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Abstract-
Oral diseases such as gingival diseases and dental caries affect about 80% of the school students worldwide. The study was taken up with the aim to evaluate the oral health status and treatment need in the school going children. The oral health is now recognized as equally important in relation to general health. The oral cavity is the 'mirror' of general health. In India, the trend indicates an increase in oral health problems especially dental caries, which has been consistently increasing both in prevalence and in severity. Children of all age groups are affected by dental caries, nutritional deficiencies affecting teeth, and other dental problems like pyorrhea, toothache etc. It becomes imperative to collect the data on prevalence of dental caries and treatment needs to provide preventive care to such affected population of students. Homoeopathy offers good role in prevention and treatment of dental caries and other nutritional deficiencies affecting teeth. (1).

Keywords- Dental caries; oral health status; gingivitis

Introduction
Oral health is integral to general health and essential for well-being. Dental caries are most common among the spectrum of oral diseases and are still a major public health burden in developing countries, affecting 60%-90% of school children and a number of adults (2). There is a recent trend of increasing levels of dental caries in most of the developing countries. This reason could be largely due to the increased consumption of sugars and reduced exposure to fluoride. Thus, emphasizing that dental caries is a disease of children has only been reduced to certain extent, and substantial improvement in reduction of the disease is not achieved (2). Dental caries is an irreversible microbial disease of the calcified tissues of teeth, characterized by demineralization of the inorganic portion and destruction of the organic substance of the tooth, which often leads to cavitation. Although dental caries prevalence has declined worldwide in the past few years, it still affects children the most (4). Dental caries is the most common of the oral disease in childhood that is from the first through the twelfth year of life. In this crucial period, the primary teeth erupt, function and are exfoliated, and the permanent teeth, exclusive of third molars, are formed and erupt into a functional pattern. (4)

Procedure
A standardized printed examination proforma was prepared so that oral cavity and dental examination of all children is done as a standardized protocol. Recurrent dental complaints are highly prevalent disorders particularly in early and late childhood. The study was carried out keeping in view the incidence, gravity and probable referral services and auxiliary management that can be provided to the children from the school. It also assessed the age incidence, relation to area of residence, causative factors, and predominating symptoms by observing the various parameters. The aim of this survey was to describe the trends in oral hygiene, gingival condition and dental caries prevalence.
Materials And Methods

One hundred and sixty five male and female children under age group between 10-13 years were screened as per detailed proforma of oral cavity and dental examination. All children between 10-13 years of age were examined. All children requiring further assessment and counseling or rehabilitation were guided to referral Homoeopathic hospital for further follow up, investigations and expert guidance.

Inclusion criteria
1. Students age group between 10-13 years of age were examined
2. Both sexes were examined.

Exclusion criteria
1. Students age group above 13 years and below 10 years were excluded.
2. Students suffering from metabolic diseases,
3. Children suffering from congenital anomalies
4. Children suffering from HIV, HbsAg will be excluded.

Results-

1) Figure-1 - Out of 165 children who were examined 12 students suffered from bleeding gums. (7% approx) Common Causes of bleeding gums are hard toothbrushes, certain blood thinners, vitamin C deficiency, inflammation like gingivitis, periodontitis, dental calculus etc.

<table>
<thead>
<tr>
<th>Bleeding Gums</th>
<th></th>
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<tbody>
<tr>
<td>Yes</td>
<td>12</td>
</tr>
<tr>
<td>No</td>
<td>153</td>
</tr>
</tbody>
</table>

2) Figure-2 – In this figure out of 165 children 8 children (approx 4%) were suffering from pyorrhea. Early symptoms of pyorrhea are similar to the symptoms of gingivitis, and include visible changes in the gums. The onset of the disease is marked by bleeding of the gums. As it progresses, the gums recede from the teeth, loosening of the teeth occurs, and the bone structure that supports the teeth can begin to erode. As gum pockets deepen and the jawbone recedes away from the roots of the teeth, the pockets will begin to discharge pus as their infections worsen. The condition can be made worse by increased stress, poor nutrition, and poor oral hygiene.

<table>
<thead>
<tr>
<th>Pyorrhoea</th>
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<tbody>
<tr>
<td>Yes</td>
<td>8</td>
</tr>
<tr>
<td>No</td>
<td>157</td>
</tr>
</tbody>
</table>
3) **Figure no 3**- In this figure 41 students (24%) were found suffering from toothache. A *toothache* is a pain in or around a tooth that may be caused by tooth caries, tooth abscess, fracture of tooth, damaged filling, infected gums, repetitive motion such as chewing gums or grinding of teeth etc.

<table>
<thead>
<tr>
<th>Toothache</th>
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</thead>
<tbody>
<tr>
<td>Present</td>
<td>41</td>
<td></td>
</tr>
<tr>
<td>Absent</td>
<td>124</td>
<td></td>
</tr>
</tbody>
</table>

4) **Figure no 4**- In this figure 77 students (46%) were having discoloration of teeth. The common causes of tooth decay include early tooth decay. Inadequate dental hygiene is a common source of plaque formation and yellowing. Intake of carbonated beverages leads to tooth erosion and stains on teeth. It is also caused by certain medications like antibiotics and antihistamines. When trauma to the tooth reaches the gums, the tooth may turn a permanent grayish color. Abundant consumption of fluoride in tap water or toothpaste may cause some brown spots or white streaking.

<table>
<thead>
<tr>
<th>Discolouration</th>
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<tbody>
<tr>
<td>Present</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>Absent</td>
<td>88</td>
<td></td>
</tr>
</tbody>
</table>

5) **Figure no 5**- Only 3(2%) students out of 165 were suffering from gingivitis. Gums actually attach to the teeth at a lower point than the gum edges. This forms a small space called a sulcus. Food and plaque can get trapped in this space and cause a gum infection or gingivitis. Plaque is a thin film of bacteria. It constantly forms on the surface of your teeth. As plaque advances, it hardens and becomes tartar. Left unchecked, gingivitis can cause the gums to separate from the teeth. This can cause injury to the soft tissue and bone supporting the teeth. The tooth may become loose and unstable.

<table>
<thead>
<tr>
<th>Gingivitis</th>
<th></th>
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<tbody>
<tr>
<td>Present</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Absent</td>
<td>162</td>
<td></td>
</tr>
</tbody>
</table>

6) **Figure no 6**- 40% of students (66 out of 165 students) were suffering dental caries. Dental caries, which is also referred to as tooth decay or cavities, is one of the most common and widespread persistent diseases today and is also one of the most preventable.
7) **Figure no 7-** 40 students out of 165 were suffering from halitosis. There are a number of factors that could contribute to bad breath. Here are some of the most common causes: Poor oral hygiene, dryness of mouth, Mouth breathing, infections in the oral cavity, certain foods. having strong odors like garlic, onions etc, medications, any illness like allergies, a sinus infection, tonsillitis or another condition, bad breath can occur.

**Summary And Conclusion**

The present study revealed the overall prevalence of dental caries among 10-13 year school children in primary teeth was 40%. This was similar to the studies conducted in different parts of India (9, 10-13). The 8-9years old school children had higher caries prevalence in primary teeth, because caries is a cumulative process and children were observed to have preference to caries prone foods available near the school premises. where. The 10-11years age group mainly contributed to this higher overall prevalence, which is a sign of continued negligence of oral health, which was also evident in the caries status of primary teeth as it followed the trend shown in primary teeth. Varying level of prevalence of caries is reported among 12years old children from different places of India 34.3% in Ambala and Bharatpur city around 53%, 41.4% in Hyderabad and 32.6% in Shimla (. This indicates other factors like availability of dental services and awareness level could be the reason for wide variation in level of disease in same age. Dental caries or cavities are largely preventable with a great oral hygiene regimen. This includes regular dental checkups in order to identify pre-existing conditions before they lead to more serious issues down the road. The earlier a dental professional can spot the signs of poor oral hygiene, such as a buildup of plaque, the better your chances at preventing dental caries and gum problems from ever occurring in the first place. A few recommendations include brushing of teeth twice a day for at least two minutes using fluoride rinse, paste, or gel. Flossing regularly after brushing especially if frequently eating or drinking sugary foods or drinks. Certain foods high in sugar can provide a consistent supply of damaging acid to the tooth hard tissues. Homoeopathy offers scope in treating dental complaints like gingivitis, halitosis, nutritional deficiencies,and prevention of dental caries.
Acknowledgement
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Conflicts Of Interests – None.

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