Knowledge, attitude and practice on oral hygiene measures among students in rural areas: Kanchipuram

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Abstract
Aim: To assess the knowledge oral hygiene practice among students residing in rural areas - Kanchipuram.

Background: Poor oral health can have a profound effect on the quality of life. The experience of pain, endurance of dental abscesses, problems with eating and chewing, embarrassment about the shape of teeth or about missing, discoloured or damaged teeth can adversely affect people's daily lives and well-being. Oral hygiene knowledge contributes to good oral health, but unless attitudes and habits are developed and put into practice, little will be gained. It is important to review the knowledge, attitude, and practices of the oral health of children, even though they are educated, with the objectives of inculcating healthy life style practices to last for a lifetime.

Methodology: A descriptive cross sectional survey was conducted in the self administered questionnaire that assessed the knowledge, attitude and practice on oral hygiene measures among 100 young students residing in rural areas of Kanchipuram.

Results: Most of the students residing in rural areas have knowledge about cleaning their teeth and tongues except the knowledge about interdental aids and in the use of mouthwash. And most of them cleaned their teeth using tooth brush and tooth paste.

Conclusion: The toothbrush with toothpaste is the most common oral hygiene aid used for cleaning teeth, it was observed that a greater number of students brushed their teeth twice daily.

Keywords: Knowledge, attitude, oral hygiene, among students, Kanchipuram

Introduction
Hygiene is a science concerned with the investigations of environmental factors that affect human health. It studies how the human body responds to them [1]. Dental hygiene is the science and practice of the recognition, treatment, and prevention of oral diseases. Good oral hygiene is the foundation for a healthy mouth and prevents 80% of all dental problems [2].

Obeying the rules of proper oral hygiene is of primary importance in the prevention of dental caries and periodontal diseases. Unfortunately, oral hygiene practice is very low in our society. A survey in Kanchipuram suggested that there was an insufficient degree of education about oral health and that some children in the district did not even use a toothbrush, instead relied on traditional methods to keep their teeth clean.

Oral health is a state of being free from chronic mouth and facial pain, oral and throat cancer, oral sores, birth defects such as cleft lip and palate, periodontal (gum) disease, tooth decay and tooth loss, and other diseases and disorders that affect the oral cavity [3, 4]. Oral health affects the general health, well-being, education and development of children and their families [5].

India, sixth biggest country by area is the second most populous country. Factors contributing to the steady rise in prevalence of periodontal disease include poor oral health awareness. Oral health knowledge is considered to be an essential prerequisite for health-related behaviour. Although only a weak association exists between knowledge and behaviour in cross-sectional studies, there are studies that establish an association between knowledge and better oral health [6].

Oral health is significantly related to oral health behaviours and their knowledge. Oral health knowledge contributes to good oral health, but unless attitudes and habits are developed and put into practice, little will be gained. It is important to review the knowledge, attitude, and practices of the oral health of children, even though they are educated, with the objectives of inculcating healthy lifestyles practices to last for a lifetime. Individuals who hold favourable oral health related beliefs over time have better oral health in their later years than those who
do not. This implies that changing beliefs should result in changes in behaviours [7].

**Methodology**

A descriptive research design was employed in the study to assess the knowledge and oral hygiene practices among school going children in Kanchipuram. A questionnaire was distributed among the students residing in Kanchipuram and was asked to fill it and return. A total of 100 school going students were selected for data collection. The question contains 12 questions which included regarding the oral health practices among the students were explained whenever necessary, and the participants were given assurance regarding confidentiality of their responses and were requested to mark their answers and complete it individually. The tools were developed through review of reveal an expert and validated by the experts in dentistry. Data was collected after getting permission from the principal of Govt. Middle School Kanchipuram. The purpose of data collection was explained and ensured that data will be kept confidential and used for research purpose only.

Knowledge, attitude and practices were assessed by using a questionnaire which includes the following:

- Do you clean your teeth?
- How often do you clean your teeth?
- What type of brush do you use?
- Which technique do you use for brushing?
- When do you change your tooth brush?
- Do you rinse your mouth after eating?
- Do you use a mouth wash?
- Do you use floss to clean your teeth in between?
- Have you ever noticed bleeding in your gums?
- How often do you visit a dentist to clean your mouth?

**Result**

The first question was to check the people's knowledge that whether dental problem can effect general health or not and around eighty five out 100 had an idea about it and only 15 didn't know about it. The next question was how many of them cleaned their tooth daily, 100% that is everyone brushed their tooth daily. Then the next question was how many of them cleaned their tongue, 74% cleaned their tongue and 26% didn't have the habit of cleaning their tongue. The percentage of students who used mouthwash daily was 48% and 52% didn't use. 92% of them used toothpaste with fluoride. The number of students who used mouth wash was 48% while 52% didn't use mouthwash. Only 44% of the students cleaned their teeth twice daily.

<table>
<thead>
<tr>
<th></th>
<th>No. of students who clean their teeth daily</th>
<th>No. of students who clean their tongue</th>
<th>No. of students using mouth wash</th>
<th>No. of students who rinse their mouth after eating</th>
<th>No. of people using fluoride containing tooth paste</th>
<th>Knowledge about dental health</th>
<th>Knowledge about inter dental aids</th>
<th>No. of students who noticed bleeding on their gums</th>
<th>Those who got their teeth cleaned professionally</th>
<th>Those who cleaned their teeth twice daily</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
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<td>48</td>
<td>65</td>
<td>92</td>
<td>83</td>
<td>52</td>
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<td>44</td>
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<td>No</td>
<td>0</td>
<td>26</td>
<td>52</td>
<td>35</td>
<td>8</td>
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Knowledge about dental health was seen in 83% of them while only 52% knew about interdental aids. 32% of the students experienced bleeding gums, only 51% visited the dentist for dental check up a study done in Benin-City, Nigeria, showed that 41% of the subjects visited the dentist for dental check up. And 44% of the students brushed their teeth twice daily.

![Region 1](image_url)

What type of brush they used?

51% of the students used soft type brush, medium type brush was used by 30% and 19% of the students used hard brush.
Discussion

Previously diseases of the oral cavity have been viewed separately from those of the rest of the body. However now the oral is an integral part of health [16]. Poor oral health have negative effect on children’s education and also in later life. Over the past 20 years a significant amount of emphasis has been made on prevention of disease rather than the treatment aspect. Healthy teeth can last us a lifetime with the proper preventive dental care. Preventive oral health Knowledge, Behaviour, and its Practice are more important ways of keeping our teeth healthy.

In this study attempts were made to evaluate Knowledge, Attitude and Practice on oral hygiene measures on the population of Kanchipuram.

32% of the students experienced bleeding gums, only 51% visited the dentist for dental check up, a study done in Benin-City, Nigeria, showed that 41% of the subjects visited the dentist for dental check up.

And 44% of the students brushed their teeth twice daily. This study showed that Knowledge about dental health was seen in 83% of them while only 52% knew about interdental aids. These findings were consistent with the findings of a study done by Lorna Carnerio [16] also with a study done in Punjab [17].

100% of the students brushed their teeth daily so it can be refers to as dental practices were good among the school going children in Kanchipuram. The findings were consistent to a similar study done in Miyun County, Beijing, China the children over there too brush their tooth twice a day.

Some other factors like family type, parental education also had an impact on oral hygiene.

A Knowledge, Attitude and Practices (KAP) survey is a quantitative method (predefined questions formatted in standardised questionnaires) that provides access to quantitative and qualitative information. KAP surveys reveal misconceptions or misunderstandings that may represent obstacles to the activities that we would like to implement and potential barriers to behavior change. Note that a KAP survey essentially records an “opinion” and is based on the “declarative” (i.e., statements). In other words, the KAP survey reveals what was said, but there may be considerable gaps between what is said and what is done.

Uses: A KAP survey can

- Establish the baseline (reference value) for use in future assessments and help measure the effectiveness of health education activities ability to change health-related behaviours.
- Suggest an intervention strategy that reflects specific local circumstances and the cultural factors that influence them; plan activities that are suited to the respective population involved.
- Good oral hygiene keeps teeth free from dental plaque buildup, staves off cavities and fights bad breath. A healthy diet that's low in sugary foods is also an essential part of good oral hygiene. Regular dental visits every six months allow your dentist or dental hygienist to provide oral hygiene instructions. Your dentist may recommend oral hygiene products that cater to your mouth's unique needs.

As awareness of oral hygiene in rural areas are less as compared to the urban areas, there is a need to provide awareness at an early age about basic knowledge on oral hygiene and practices. This will prevent them from further oral diseases and any other health related problem.

The limitation of this research was that it was evaluated on self reported data and also the other limitation was that the survey was done only in a single school therefore the findings cannot be generalised.

Based on the study we recommend establishing oral health programs under school health that addresses oral health promotion and diseases.

In addition the notation of oral hygiene is an integral part of school health services which need to be stressed.

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