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# A CROSS-SECTIONAL STUDY REGARDING KNOWLEDGE, ATTITUDE AND PRACTICE OF DENTAL HYGIENE AMONG CHILDREN OF AGE 7-15YRS

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### ABSTRACT

**Background:** Oral health is key to general health and well-being. Sources of oral health info for adults are examined however documentation of children's sources is restricted. An honest oral health is that the state of mouth freed from any sickness affecting the mouth and its close structures. Oral health has remained as an integral a part of an individual's general health and overall well-being. **Objectives:** To determine knowledge, attitude and practices of Dental hygiene among Children visiting OPD of Nishtar Institute of Dentistry. **Materials and Method:** This cross-sectional study was comprised 120 children who were interviewed. Participants were specifically children of 7-15 years old attended at Nishtar Institute of Dentistry. Frequency analysis of demographics knowledge, attitude and practice behavior regarding dental hygiene was done using descriptive statistics. Data analysis was done using SPSS V20. **Results:** Survey revealed that only 32% subjects brushed twice daily. About 4% reported use of neem stick and 89% used brush + tooth paste. A total of 82% had knowledge that infrequent brushing, sweets and soft drinks led to dental caries, staining of teeth, dental plaque and bleeding from gums. Only 21% visited dentist regularly after every 6-12 months. **Conclusion:** Study findings underscore the need for more hand washing and hygiene education in children. The overall level of Dental health knowledge among the surveyed children was low.

**KEYWORDS:** Dental health, Education, Questionnaire, Survey.

# INTRODUCTION

Dental hygiene is a science and practice of recognition, treatment, and prevention of oral diseases. Smart oral hygiene is the foundation of healthy mouth and bar of 80 percent of all health issues. Dental health care is that the maintenance of teeth so as to stay the teeth clean and forestall dental disorders. Basic dental or oral care involves regular brushing and flossing the teeth, eating a mouth-healthy diet and regular dental checkups as per schedule. Thence the dental health care is crucial for general health, quality of life and bar of oral diseases. The causes of dental diseases are primarily frozen in socioeconomic and physical environment; poor unhealthy lifestyles and oral health-related behavior. Dental diseases and periodontal diseases have affected majority of Pakistani children with increased incidence of decayed missing or filled teeth. Studies have shown decline in diseases in some developed countries attributed to increasingly better dental hygiene, aware practices and preventive measures. In order to obtain similar results, primitive and preventive measures in Pakistan are required, where dental caries is single most chronic childhood disease 5 times more than Asthma and 7 times more than Hay fever. Measures for improvement of oral health requires understanding of individual's

knowledge and perception of dental hygiene. To minimize negative impacts of chronic oral disease, there is need to reduce harmful oral health hazards which can be achieved through appropriate health education. In spite of the great triumphs in oral health, burden of oral health diseases remains high all over the world. This could be mainly because of the lack of acceptance of healthy oral habits that are crucial in controlling the most common oral diseases like, dental caries and periodontal disease.<sup>[7]</sup> Countries where the oral disease preventive programs have not been implemented still remain in the shadow of high prevalence of dental caries.

# MATERIAL AND METHODS

Study design: Descriptive cross sectional study design.

**Study area and population:** Children visiting NID Multan.

**Study Duration:** This study was conducted in 3 months from July 2016 to August 2016.

Sampling Technique: Random sampling technique.

**Inclusion Criteria:** Children of age 7-15 year (Male and Female).

**Exclusion Criteria:** Children less than age of 7 years and greater than 15 years.

**Data collection Procedure:** 120 children from OPD of NID Multan, were selected. Data was collected by questioning among children to assess the dental hygiene. Total 11 question were asked about dental hygiene.

**Data Analysis:** The data was entered and analyzed in a computer program SPSS v20 and reports were generated accordingly.

### RESULTS

We enrolled a total of 120 children to the study. 74 (61%) were males and 46 (38%) were females. The mean age of respondents' was12 year. Survey revealed that only 32% subjects brushed twice daily. About 4% reported use of neem stick and 89% used brush + tooth paste. A total of 69% had knowledge that infrequent brushing, sweets and soft drinks lead to dental caries, staining of teeth, dental plaque and bleeding from gums. Only 21% visited dentist regularly after every 6-12 months.

Table 1: Frequency Distribution Table aboutKnowledge of what types of food causes dentalcarrier among 120 Children (N=120).

|                                   | Frequency | Percentage |
|-----------------------------------|-----------|------------|
| Sweets, Junk Food,<br>Cold Drinks | 98        | 81.67%     |
| Do not know                       | 22        | 18.33%     |

Table 2: Frequency Distribution Table about knowledge of necessity to clean teeth before going to bed among 120 Children (N=120).

|     | Frequency | Percentage |
|-----|-----------|------------|
| Yes | 104       | 86.67%     |
| No  | 16        | 13.33%     |

Table 3: Frequency Distribution Table aboutKnowledge of mouth rinsing after eating is importantfor teeth and health among 120 Children (N=120).

|     | Frequency | Percentage |
|-----|-----------|------------|
| Yes | 82        | 68.33%     |
| No  | 32        | 26.67%     |

Table4:FrequencyDistributionTableaboutKnowledgeofdentalproblemscanEffectgeneralhealthamong120Children (N=120).

|     | Frequency | percentage |
|-----|-----------|------------|
| Yes | 52        | 43.33%     |
| No  | 68        | 56.67%     |

Table 5: Frequency Distribution Table of Childrenvisiting a dentist.

|             | Frequency | Percentage |
|-------------|-----------|------------|
| Regularly   | 17        | 14.17%     |
| Dental pain | 63        | 52.50%     |
| Never       | 40        | 33.33%     |

 Table 6: Frequency Distribution Table about Time

 Children spent for cleaning their teeth.

|                      | Frequency | Percentage |
|----------------------|-----------|------------|
| Less than one minute | 40        | 33.33%     |
| 1-2 minutes          | 58        | 48.33%     |
| Don't know           | 22        | 18.33%     |

Table 7: Frequency of brushing of teeth.

|              | Frequency | Percentage |
|--------------|-----------|------------|
| Once a day   | 61        | 50.83%     |
| Twice a day  | 39        | 32.50%     |
| Occasionally | 17        | 14.17%     |
| Never        | 3         | 2.50%      |

Table8:FrequencyDistributionTableaboutBrushing of teeth at nights among 120 children.

|     | Frequency | Percentage |
|-----|-----------|------------|
| Yes | 50        | 41.67%     |
| No  | 70        | 58.33%     |

Table 9: Frequency Distribution Table aboutRemembrance of history of last dental visit amongchildren Among Children.

|                   | Frequency | Percentage |
|-------------------|-----------|------------|
| Less than 6 month | 29        | 24.17%     |
| 6-12 month        | 26        | 21.67%     |
| More than 1 year  | 21        | 17.50%     |
| No                | 44        | 36.67%     |

Table 10: Frequency Distribution Table about Typesof brushing matter used for cleaning of teeth amongchildren.

|                          | Frequency | Percentage |
|--------------------------|-----------|------------|
| Brush with tooth paste   | 107       | 89.17%     |
| Neem stick               | 5         | 4.17%      |
| Finger with tooth powder | 8         | 6.67%      |

Table 11: Frequency Distribution Table aboutCleaning Of teeth after eating Among Children.

|     | Frequency | Percentage |
|-----|-----------|------------|
| Yes | 42        | 35.00%     |
| No  | 78        | 65.00%     |

 Table 12: Frequency of Gender distribution among children.

|        | Frequency | Percentage |
|--------|-----------|------------|
| Male   | 74        | 61.67%     |
| Female | 46        | 38.33%     |

#### DISCUSSION

The present investigation aimed to produce a comprehensive summary of the dental hygiene behavior, knowledge, and attitudes among youngsters of 7-15

years recent in NID Multan, which may facilitate the design and analysis of the dental hygiene promotion program during this region. This survey found that a high proportion of the kids during this study brush their teeth a minimum of once daily (50%) or double daily (14%). there's accord in literature that meticulous tooth brushing once per day is decent to keep up oral health and forestall cavity and dental medicine diseases. however most of individuals aren't able to attain optimum plaque removal. Therefore, tooth brushing double daily is usually recommended by most dentists so as to boost plaque management. The utilization of different counseled oral hygiene strategies like dental floss and mouthwashes was found to be rare. On the knowledge on how the teeth should be properly brushed, majority of the respondents used a non-directed brushing method with a combination of brushing strokes. Thus there is need to educate school children on the correct motion for teeth brushing to ensure that the teeth are thoroughly brushed which will reduce or eliminate the chance of oral diseases. There was lack of awareness regarding periodontal diseases as compared to dental caries as, almost half of the respondents did not know the significance of bleeding from gums and were unaware of the term "dental plaque". Most of the respondents were aware of detrimental effects of sweets, smoking, and pan/tobacco on dental health though there was not as much awareness regarding adverse effects of various oral habits. More enlightenment activities need to be done in this area as much of the damage could be prevented by intercepting these habits at young age.

Good oral health practice can be accomplished mainly through self-induced habits like maintenance of dental hygiene, restriction of diet especially reduced sugar intake, use of fluoridated products and also with the help of available dental services, which includes, regular dental checkup, utilization of primary and preventive care and dental health education.<sup>[30-33]</sup> It is important to prevent dental problems before they start. The easiest way is to practice daily brushing and flossing that in turn will reduce the dental diseases. Most of the study subject reported irregular dental attendance (24%), an astounding finding in this regard was that most participants were unaware of importance of regular dental attendance (36%). Some findings in this study might offer an explanation for the irregular dental attendance among the participants. Oral disease has a slow path which can be detected on time by the dentist hence, educating the students in this regard is vital. Frequency of visiting dentist is also determined by the parents of these children and dental attitudes displayed by parents might also offer an explanation of the lack of regular attendance. Thus, parents too should be made to understand why it is important to take the children for routine dental check-up.

Better oral hygiene knowledge and practices were found in students who visited dentists regularly which might be due to individual level oral health education and motivation received by them. Thus, key to an informed and motivated public lies in the hands of the profession, as well as the authorities.

Health promotion, with its core ideas of equity and equality, empowerment and advocacy, provides a novel though a complex approach to improve not only general health but oral health also. It shifts the responsibility for health from the formal health care system to individuals, communities and decision- makers at all levels of society. Dental health education should be incorporated into the existing school curriculum. The program for dental health education and various didactic activities should be structured in such a manner as to gain the student's interest and obtain a high priority of social acceptance. The objective should be to maintain that level of acceptance throughout the student's lifetime. The education programs should thus be motivating, vibrant, and closely matched to the learning aptitude established by the child at each educational level. Community group effort can also reinforce interventions to endorse improved oral health. Efforts should be synchronized between school personnel, dental health care professionals, as well as parents to make certain long-term remuneration. In future more surveys on larger scale like that on state level or national surveys should be carried out and the data obtained be used to formulate better dental health programs for our country.

# CONCLUSION

This survey furnishes the background data to get insight into the status of awareness of children of 7-15 years old regarding dental hygiene. Study findings underscore the need for more hand washing and hygiene education in children. The overall level of Dental health knowledge among the surveyed children was low.

# RECOMMENDATIONS

Following recommendations are made

- 1. Healthy life vogue ought to be adopted
- 2. Health seminars ought to be conducted to extend public awareness relating to oral hygiene
- 3. Brush twofold daily especially once having a meal and at midnight
- 4. Avoid unhealthy habits i.e. paan and beera etc.
- 5. Avoid cold and hot drinks i.e. hot tea etc.
- 6. Posters and brochures should be distributed to extend public awareness.

### LIMITATIONS

A very restricted analysis has been done relating to the information, ability and follows among kids at Nishtar Institute of Dentistry OPD Multan.

### The present study had few limitations

Our sample size was terribly little consisting of solely one hundred twenty kids.

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