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Research Article

**FREQUENCY OF KNOWLEDGE, ATTITUDE AND PRACTICE
OF DENTAL HYGIENE AMONG CHILDREN OF AGE 10-14
YEARS**¹Dr. Maryam Mastoor, ²Dr Saiha Muneer, ¹Dr. Maryam Ghazal¹Sharif Medical and Dental College, Lahore²De'Montmorency College of Dentistry, Lahore**Abstract:**

Background: Oral health is fundamental to general health and well-being. Sources of oral health information for adults have been examined but documentation of children's sources is limited.

Objectives: To determine knowledge, attitude and practices of dental hygiene among children visiting Pediatric OPD Punjab Dental Hospital Lahore, Pakistan.

Materials and Method: This cross-sectional study was comprised 120 children who were interviewed. Participants were specifically children of 10-14 years old attended at Punjab Dental Hospital OPD, Lahore. 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.

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INTRODUCTION:

Oral/dental hygiene is science and practice of recognition, treatment and prevention of oral diseases. Good oral hygiene is foundation of healthy mouth and prevention of 80% of all health problems. Oral disease can be considered as a public health problem due to its high prevalence and significant social impact. Severe dental decay in children can result in pain, sleeping problems, trouble eating and behavior problems. It can also influence growth and development of children. 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. Affected population need to receive information. Information means the subject has all the data necessary to understand what oral disease is and how it arises as well as to understand the protective measures that need to be adopted. This will lead to change in attitude which will in turn lead the subject to make changes in daily life.

Aim of study was to assess knowledge, attitude and practice of dental hygiene among the children (10-14years). The area/premises was selected because it covers majority of visiting patients from rural area as well as from urban areas.

Objectives:

*Asses the dental hygiene among children of age 10-14

*Find out frequency of dental health problems among children

*To know knowledge of importance cleaning of teeth among children

*To plan ways to aware community regarding dental hygiene

*To prevent the dental problems by awareness of children

MATERIAL AND METHODS:

Study design: Descriptive cross sectional study design. **Study population:** Children visiting Pediatric OPD. **Study Area:** Pediatric OPD Punjab Dental Hospital, Lahore. **Study Duration:** This study was conducted in 3 months from July 2017 to August 2017. **Sampling Technique:** Non-Probability Convenience sampling technique. **Inclusion Criteria:** Children of age 10-14 year (Male and Female). **Exclusion Criteria:** Children less than age of 10 years and greater than 14 years. **Data collection Procedure:** 120 children from OPD of Punjab Dental Hospital, Lahore were selected by convenience sampling technique. Data was collected by questioning among children to assess the dental hygiene. Total 11 questions 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 was 12 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 about Knowledge of what types of food causes dental carrier among 120 Children (N=120)

| | Frequency | Percentage |
|--------------------------------|-----------|------------|
| Sweets, Junk Food, 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 about Knowledge of mouth rinsing after eating is important for teeth and health among 120 Children (N=120)

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

Table 4: Frequency Distribution Table about Knowledge of dental problems can Effect general health among 120 Children (N=120)

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

Table 5: Frequency Distribution Table of Children visiting 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% |

Table 8: Frequency Distribution Table about Brushing of teeth at nights among 120 children

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

Table 9: Frequency Distribution Table about Remembrance of history of last dental visit among children 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 Types of brushing matter used for cleaning of teeth among children

| | 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 about Cleaning 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:

Present investigation aimed to provide a comprehensive overview of the dental hygiene behavior, knowledge and attitudes among children of 10-14 years old in Punjab Dental Hospital OPD, which can help the planning and evaluation of the dental hygiene promotion program in this region. This survey found that a high percentage of the children in this study brush their teeth at least once daily (50%) or twice daily (14%). There is consensus in literature that meticulous tooth brushing once per day is sufficient to maintain oral health and prevent caries and periodontal diseases. But most of people are not able to achieve optimum plaque removal. Therefore, tooth brushing twice daily is recommended by most dentists in order to improve

plaque control. The use of other recommended oral hygiene methods such as 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.

Earlier it was believed that oral infections were localized to the oral cavity and had no association with other systemic systems except in the case of some associated syndromes and untreated odontogenic abscesses. It is important to lay emphasis on the association between oral health and general health of the rest of the body because this might be helpful in promoting oral health and self-care practice among students as well as the community. 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 approaches 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 10-14 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:

- Healthy life style should be adopted
- Health seminars should be conducted to increase public awareness regarding oral hygiene
- Brush two times daily specially after having a meal and at night
- Avoid unhealthy habits i.e. paan and beera etc.
- Avoid cold and hot drinks i.e. hot tea etc.
- Posters and brochures must be distributed to increase public awareness

LIMITATIONS:

A very limited research has been done regarding the knowledge, aptitude and practice among children at Punjab Dental hospital, Lahore.

The present study had few limitations:

Our sample size was very small consisting of only 120 children

We used non- probability convenient sampling to draw our sample. This method is inferior to method of probability sampling in representation of population and this limits the validity of study. As children were with their parents they were not cooperating fully due to parent's pressure

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